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HOUSE OF REPRESENTATIVES

REPORT 115–200

## NATIONAL DEFENSE AUTHORIZATION ACT FOR FISCAL YEAR 2018

## REPORT

OF THE

# COMMITTEE ON ARMED SERVICES HOUSE OF REPRESENTATIVES

ON

H.R. 2810

together with

## ADDITIONAL VIEWS

[Including cost estimate of the Congressional Budget Office]



 ${
m July}$  6, 2017.—Committed to the Committee of the Whole House on the State of the Union and ordered to be printed



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## NATIONAL DEFENSE AUTHORIZATION ACT FOR FISCAL YEAR 2018

JULY 6, 2017.—Committed to the Committee of the Whole House on the State of the Union and ordered to be printed

Mr. Thornberry, from the Committee on Armed Services, submitted the following

## REPORT

together with

#### ADDITIONAL VIEWS

[To accompany H.R. 2810]

[Including cost estimate of the Congressional Budget Office]

The Committee on Armed Services, to whom was referred the bill (H.R. 2810) to authorize appropriations for fiscal year 2018 for military activities of the Department of Defense and for military construction, to prescribe military personnel strengths for such fiscal year, and for other purposes, having considered the same, report favorably thereon with amendments and recommend that the bill as amended do pass.

The amendments are as follows:

The amendment strikes all after the enacting clause of the bill and inserts a new text which appears in italic type in the reported bill.

The title of the bill is amended to reflect the amendment to the text of the bill.

#### PURPOSE OF THE LEGISLATION

The bill would: (1) authorize appropriations for fiscal year 2018 for procurement and for research, development, test, and evaluation (RDT&E); (2) authorize appropriations for fiscal year 2018 for operation and maintenance (O&M) and for working capital funds; (3) authorize for fiscal year 2018 the personnel strength for each Active Duty component of the military departments, and the per-

sonnel strength for the Selected Reserve for each Reserve Component of the Armed Forces; (4) modify various elements of compensation for military personnel and impose certain requirements and limitations on personnel actions in the defense establishment; (5) authorize appropriations for fiscal year 2018 for military construction and family housing; (6) authorize appropriations for Overseas Contingency Operations; (7) authorize appropriations for fiscal year 2018 for the Department of Energy national security programs; and (8) authorize appropriations for fiscal year 2018 for the Maritime Administration.

#### RATIONALE FOR THE COMMITTEE BILL

H.R. 2810, the National Defense Authorization Act for Fiscal Year 2018, is a key mechanism through which Congress fulfills one of its primary responsibilities as mandated in Article I, Section 8, of the Constitution of the United States, which grants Congress the power to provide for the common defense, to raise and support an Army, to provide and maintain a Navy, and to make rules for the government and regulation of the land and naval forces. Rule X of the House of Representatives provides the House Committee on Armed Services with jurisdiction over the Department of Defense generally and over the military application of nuclear energy. The committee bill includes the large majority of the findings and recommendations resulting from its oversight activities, conducted through hearings, briefings, and roundtable discussions with Department of Defense and Department of Energy civilian and military officials, intelligence analysts, outside experts, and industry representatives, and informed by the experience gained over the previous decades of the committee's existence.

The committee believes that America's global military capabilities and commitments have undergirded peace, security, and economic prosperity, and underwritten an international world order and American interests. However, the committee also recognizes that others seek to threaten such security and prosperity. The committee further acknowledges that the U.S. Armed Forces have been under an unrelenting pace of operations. In fact, in testimony given to the committee on June 12, 2017, the Secretary of Defense described forces affecting the readiness of the military, noting "The first force we must recognize is 16 years of war. This period represents the longest continuous stretch of armed conflict in our Nation's history. In more than a quarter century since the end of the Cold War, our country has deployed large-scale forces in active operations for more months than we have been at peace."

The provisions contained in the committee bill reinforce the committee's belief that America's military strength and its global posture and presence will continue to be necessary to deter aggression, to reassure U.S. allies and partners, and to exercise global influence. Further, the committee bill would make much needed and overdue investments in the men and women in uniform as well as their equipment and training, as they face an uncertain a global threat environment.

#### Reforming the Department of Defense

The committee continues to believe that reform of the Department of Defense is needed to improve the military's agility and the

speed at which it can address an increasingly complex security environment and unprecedented technological challenges. Reforms also ensure effective and efficient use of taxpayer dollars. The bill reflects three major reform initiatives undertaken by the committee in H.R. 2810: (1) acquisition reform, (2) data management reform, and (3) statutory streamlining.

Furthermore, in the area of defense healthcare, the committee refines the reforms of the Military Health System initiated in the National Defense Authorization Act for Fiscal Year 2017 (Public Law 114–328) by maintaining emphasis on the readiness of the force. To accomplish this goal, H.R. 2810 builds on the importance of these efforts by focusing on a Military Health System that reduces costs, improves the delivery of health care services at military medical treatment facilities and enhances readiness of health

professionals supporting the war fighter.

In the area of military justice and sexual assault prevention and response, the committee recognizes the significant changes to the Uniform Code of Military Justice contained in last year's bill. Therefore, H.R. 2810 includes limited clarifying and technical amendments designed to refine last year's reforms. In addition, it includes a provision that would prohibit the nonconsensual sharing of intimate images, including cases in which the images were initially obtained with consent. The bill also contains improvements to sexual assault prevention and response, including a provision that would require special victims counsel to receive training on the unique challenges often faced by male sexual assault victims.

#### Readiness of the Force and Rebuilding the Military

The committee recognizes that while the Department's missions and requirements have increased, its resources have decreased and readiness has suffered. The Vice Chief of Staff of the Army testified that, "In total, only about two thirds of the Army's initial critical formations—the formations we would need at the outset of a major conflict—are at acceptable levels of readiness to conduct sustained ground combat in a full spectrum environment against a highly lethal hybrid threat or near-peer adversary. Stated more strategically, based on current readiness levels, the Army can only accomplish Defense Planning Guidance Requirements at high military risk." The Assistant Commandant of the MarineCorps testified, "Current readiness shortfalls require additional operations and maintenance resources, and we have exhausted our internal options. Additional resources would facilitate exercises and training and correct repair parts shortfalls, while specifically addressing aviation specific operations and maintenance funding." The other military service chiefs have expressed similar sentiments. These undeniable readiness shortfalls in the military services led Secretary of Defense James N. Mattis to testify before the committee that, after returning to the Pentagon ". . . I have been shocked by what I've seen with our readiness to fight."

To begin to address the decline in readiness and initiate the rebuilding of the military, the bill would include more than \$2.9 billion in additional funds for ship and aircraft depot maintenance; aviation training and readiness; and long-neglected facilities sustainment, restoration, and modernization accounts, all of which were identified as unfunded requirements by the military services.

The bill would also fully resource U.S. Special Operations Command, provide additional resources for unfunded requirements to counter global terrorism threats, and provide resources to accel-

erate capabilities to support counterterrorism analytic tools.

Procurement of modernized systems is key to addressing the readiness of the force. Many legacy systems can no longer be maintained and adversary systems are increasingly able to challenge such platforms. H.R. 2810 responds to numerous unfunded, yet critical, modernization requirements identified by the military services, including in the areas of air dominance, strike fighter capability gaps, rotorcraft for ground forces, Navy cruiser modernization, surface combatants, shortfalls in war reserves for critical munitions, and accelerating full spectrum capability within the Army's ground forces.

The committee bill authorizes the total budget request funding level for the National Nuclear Security Administration's (NNSA) nuclear weapons activities and defense nuclear nonproliferation program, including critical efforts to modernize the nuclear weapons stockpile and to tackle the multibillion dollar backlog in de-

ferred maintenance of NNSA facilities.

The committee recognizes that the cyber domain of modern warfare continues to grow in scope and sophistication. Therefore, H.R. 2810 fully funds the budget request for cyber operations and prioritizes the readiness of the cyber mission forces. The committee increases funding to U.S. Cyber Command by 16 percent, and enhances the Department's defensive and offensive cyberspace capabilities. The bill also addresses military service unfunded requirements for cyber warfare by providing additional funding to close

these critical gaps.

The committee remains focused on assuring access to space, given the military's dependence on the capabilities provided from satellites. Thus, the bill would authorize funds for the development of a new American engine to replace the Russian-made RD-180 by 2019; ensure the maintenance and modernization of existing national security space launch capabilities; and, ensure funding of national security space-related modifications of commercial launch vehicles, instead of funding the development of new space launch vehicles. In light of the criticality of space as a new warfighting domain, the bill would establish a space corps within the Air Force and elevate U.S. Space Command to a subunified command under U.S. Strategic Command.

In the area of ballistic missile defense, the bill would authorize significant additional resources to meet combatant command shortfalls, and service unfunded requirements for missile defense interceptor inventories around the globe. The bill would also require the Director of the Missile Defense Agency (MDA) to begin the development of a space-based sensor layer for ballistic missile defense; give the U.S. Army a deadline to develop a modernization schedule that acceptably meets warfighter requirements for a replacement to the legacy Patriot air and missile defense radar system; require the Secretary of Defense to transfer acquisition authority for operational missile defense programs from the Director of MDA to a military service by the time the President's budget is submitted for fiscal year 2020; and prevent the Army from retiring GEM-T interceptors from its inventory until the Secretary of the Army submits

an evaluation of the Army's ability to meet warfighter require-

ments and operational needs without such interceptors.

The bill also includes provisions that would advance hypersonic weapons research, development, and transitional efforts within the Department, and require weapons and munitions science and technology roadmaps, including naval energetics, to ensure focused developmental efforts of critical weapon systems.

#### Resources for Warfighters and Families

The committee believes that caring for the troops and their families is the essential foundation of readiness. H.R. 2810 builds upon the bipartisan work of the Subcommittee on Military Personnel in providing the troops the benefits they need, deserve, and have earned. As always, the committee's approach is guided by a determination to maintain the viability and readiness of the All-Volunteer Force while ensuring that the Government does not break faith with U.S. service members, retirees, their family members, and survivors.

H.R. 2810 would authorize a fully funded, by-law pay raise for all U.S. service members at 2.4 percent. The bill would also begin to grow military end strength, by increasing the active duty Army by 10,000 to 486,000, the Army National Guard by 4,000 to 347,000, the Army Reserve by 3,000 to 202,000 in fiscal year 2018.

H.R. 2810 would grant permanency to family support programs within U.S. Special Operations Command. This important and proven pilot program now merits codification and permanency to ensure continued support and care for families of Special Operations Forces.

The bill also contains important provisions that would provide further protection to former service members, including those who have been diagnosed with Post-Traumatic Stress Disorder or Traumatic Brain Injury as a result of combat or sexual assault in the military.

#### National Defense Strategy

The committee remains concerned about the absence of a clear and cohesive strategy concerning national security priorities in places of conflict, including in the Syrian Arab Republic, the Islamic Republic of Afghanistan, the Republic of Yemen, and the Federal Republic of Somalia, and the provisions contained in the committee bill would require the Department of Defense to provide additional details on efforts in those countries. At the same time, the committee notes the importance of disrupting and dismantling terrorist groups that threaten U.S. interests and provides funds necessary to train and equip partner forces, including the Iraqi Security Forces, which combat the Islamic State in Iraq and the Levant and other terrorist groups across the Middle East, Africa, and Central Asia.

The committee remains concerned about the Islamic Republic of Iran's malign military activities, and H.R. 2810 would express the committee's view that the United States should counter such activities, ensure that the U.S. military maintains a capable posture in the Arabian Gulf to deter and respond to Iranian aggression, strengthen ballistic missile defense capabilities, ensure freedom of

navigation at the Bab al Mandab Strait and the Strait of Hormuz, and counter Iranian efforts to illicitly proliferate weapons.

The committee has also focused on the Department's efforts to deter aggression by the Russian Federation against Ukraine and other allies and partners in Europe. The committee supports a significant increase in European Deterrence Initiative funding above the fiscal year 2017 request, including funding for heel-to-toe rotations of U.S. forces, pre-positioning of equipment in Europe, and building up necessary Air Force infrastructure. The bill would also provide \$150.0 million for the Ukraine Security Assistance Initiative to enhance the defense of Ukraine and to deter further Russian aggression.

The committee supports the Department of Defense in strengthening U.S. military posture and capabilities in the Indo-Asia-Pacific region. To aid in its oversight, H.R. 2810 would require the Department of Defense to provide a strategy on United States defense objectives and priorities in the Indo-Asia-Pacific region and an assessment of U.S. force posture and basing needs. Additionally, it would reaffirm U.S. extended deterrence commitments to Japan and the Republic of Korea and condemn any assertion that limits the right of freedom of navigation and overflight in the South China Sea. It would express a sense of Congress in strengthening security cooperation with allies and partners, including Japan, the Republic of Korea, Taiwan, Australia, and with regional institutions such as the Association of Southeast Asian Nations.

The committee also supports the Department of Defense in countering instability and strengthening capabilities of U.S. partners in Africa. To aid in its oversight, H.R. 2810 would require the president to provide a strategy on United States objectives and priorities in the Federal Republic of Somalia.

#### **HEARINGS**

Committee consideration of the National Defense Authorization Act for Fiscal Year 2018 results from posture and budget-related hearings that began on February 1, 2017, and that were completed on June 12, 2017. The full committee conducted 8 hearing and the 6 subcommittees conducted a total of 31 sessions during this time period. Additionally, over the past year, the committee conducted numerous policy and program oversight hearings, including hearings in support of its reform initiatives, to inform its development of the legislative proposals contained in this Act.

#### COMMITTEE POSITION

On June 28, 2017, the Committee on Armed Services held a markup session to consider H.R. 2810. The committee ordered the bill H.R. 2810, as amended, favorably reported to the House of Representatives by a recorded vote of 60–1, a quorum being present.

#### EXPLANATION OF THE COMMITTEE AMENDMENTS

The committee adopted an amendment in the nature of a substitute during the consideration of H.R. 2810. The title of the bill is amended to reflect the amendment to the text of the bill. The remainder of the report discusses the bill, as amended.

#### RELATIONSHIP OF AUTHORIZATION TO APPROPRIATIONS

The bill does not provide budget authority. This bill authorizes appropriations; subsequent appropriations acts will provide budget authority. However, the committee strives to adhere to the recommendations as issued by the Committee on the Budget as it re-

lates to the jurisdiction of this committee.

The bill addresses the following categories in the Department of Defense budget: procurement; research, development, test, and evaluation; operation and maintenance; military personnel; working capital funds; and military construction and family housing. The bill also addresses the Armed Forces Retirement Home, Department of Energy National Security Programs, the Naval Petroleum Reserve, and the Maritime Administration.

Active Duty and Reserve personnel strengths authorized in this bill and legislation affecting compensation for military personnel determine the remaining appropriation requirements of the Department of Defense. However, this bill does not provide authorization

of specific dollar amounts for military personnel.

#### SUMMARY OF DISCRETIONARY AUTHORIZATIONS IN THE BILL

The President requested discretionary budget authority of \$659.8 billion for programs within the jurisdiction of the committee for fiscal year 2018. Of this amount, \$574.6 billion was requested for "base" Department of Defense programs, \$64.6 billion was requested for Overseas Contingency Operations requirements covering the entire fiscal year, \$20.5 billion was requested for Department of Energy national security programs and the Defense Nuclear Facilities Safety Board, and \$0.2 billion was requested for defense-related activities associated with the Maritime Administra-

The committee recommends an overall discretionary authorization of \$688.3 billion in fiscal year 2018. The base committee authorization of \$613.8 billion is a \$70.4 billion increase above the levels provided for in the National Defense Authorization Act for Fiscal Year 2017 (Public Law 114–328). The authorization provided in title XV totals \$74.6 billion for Overseas Contingency Operations, of which \$10.0 billion is authorized in support of base budget requirements.

The table preceding the detailed program adjustments in division D of this report summarizes the committee's recommended discretionary authorizations by appropriation account for fiscal year 2018 and compares these amounts to the President's request.

#### BUDGET AUTHORITY IMPLICATION

The President's total request for the national defense budget function (050) in fiscal year 2018 is \$675.8 billion, as estimated by the Congressional Budget Office. In addition to funding for programs addressed in this bill, the total 050 request includes discretionary funding for national defense programs not in the committee's jurisdiction, discretionary funding for programs that do not require additional authorization in fiscal year 2018, and mandatory programs.

The table preceding the detailed program adjustments in division D of this report details changes to the budget request for all aspects of the national defense budget function.

## DIVISION A—DEPARTMENT OF DEFENSE AUTHORIZATIONS

## TITLE I—PROCUREMENT

AIRCRAFT PROCUREMENT, ARMY

Items of Special Interest

Health and Usage Monitoring Systems

In the committee report (H. Rept. 113–446) accompanying the National Defense Authorization Act for Fiscal Year 2015, the committee directed the Secretary of the Army review the potential for integrating and demonstrating a Next Generation Health Monitoring System (NGHMS) for UH–72 light utility helicopters. The NGHMS could enable early warning for failing platform systems, reduce emergency maintenance demands, provide predictable platform maintenance schedules, reduce cost and should increase readiness.

The committee notes the Army is currently evaluating NGHMS systems and most recently conducted a critical design review in February 2017. The committee understands that preliminary test and evaluation have demonstrated promising results. Given these encouraging results with light utility rotorcraft, the committee believes there could be potential for integrating NGHMS on ground combat vehicles, in particular the Stryker Combat Vehicle, to help with improving maintenance and readiness.

Therefore, the committee directs the Secretary of the Army to provide a briefing to the House Committee on Armed Services by September 15, 2017, that provides the status and available results of the UH–72 NGHMS testing; the Army's plan for procuring and integrating NGHMS into the UH–72 fleet to include any detailed description of the planned changes to the UH–72 aircraft maintenance construct, expected efficiencies and estimated annual cost savings, as well as any potential for application on ground combat vehicles.

## MISSILE PROCUREMENT, ARMY

## Items of Special Interest

#### Lethal Miniature Aerial Missile Systems

In the committee report (H. Rept. 114–102) accompanying the National Defense Authorization Act for Fiscal Year 2016, the committee noted the effectiveness of the Lethal Miniature Aerial Missile System (LMAMS) currently fielded in the U.S. Central Command (CENTCOM) theater of operations, and supported the potential distribution of this capability across Army infantry units. The LMAMS is a single man-portable/operable, lightweight, beyond-line-of-sight, precision-guided, loitering aerial missile system capable of locating and engaging obscured and/or fleeting enemy targets

who otherwise cannot be engaged by typical direct fire weapon systems.

The committee notes the Army requested a total of \$63.5 million for 655 LMAMS as part of the fiscal year 2017 Overseas Contingency Operations request to address joint urgent operational needs in CENTCOM's area of operations. The committee understands the LMAMS Capability Development Document has completed initial Army staff review, is currently being revised by the U.S. Army Training and Doctrine Command Maneuver Center of Excellence, and will then be considered by the Army Requirements Oversight Council for transition to a program of record. While the committee fully supports the Army's request from fiscal year 2017 and the budget request for fiscal year 2018, the committee requires additional details regarding the Army's long-term acquisition strategy for LMAMS.

Therefore, the committee directs the Secretary of the Army to provide a briefing to the House Committee on Armed Services by November 1, 2017, on the Army's long-term plan for LMAMS, to include current analysis of LMAMS operational performance to date, current fielding strategy, as well as projected funding requests across the Future Years Defense Program.

## PROCUREMENT OF WEAPONS AND TRACKED COMBAT VEHICLES, ARMY

#### Items of Special Interest

Armored brigade combat team modernization

The committee understands that Budget Control Act of 2011 (Public Law 112–25) funding levels have reduced buying power, disrupted modernization plans, and reduced the Army's capability advantage over near-peer, high-end competitors. The committee notes that Army modernization funding declined 74 percent from 2008–2015 as a result of the drawdown from two wars and the imposition of the budget caps by Public Law 112–25. Perhaps most significant is that research and development (R&D) funding has been reduced by 50 percent, and appears to be concentrated in the later stages of R&D at the prototyping and system design and development stages, which are the precursors to fielding new capabilities. The Vice Chief of Staff of the Army stated, in testimony before the House Committee on Armed Services, that today's Army is "out-ranged, outgunned, and outdated; and on our present course, the U.S. Army will not be sufficiently modern to deter and defeat potential enemies." The committee is concerned that the tactical overmatch that U.S. ground forces have enjoyed for decades is being diminished, or in some cases, no longer exists.

The committee believes the consequences of reduced modernization funding are most dramatic with respect to ground combat vehicle modernization. While the Army has definitive plans in place for Army aviation modernization, and has worked to establish mature acquisition strategies using multiyear procurement contracts for aviation platforms, the same cannot be said for ground combat vehicle modernization. The committee believes there is an immediate need for a more accelerated ground combat vehicle modernization strategy that should include the development of a next

generation infantry fighting vehicle and main battle tank, while also looking for ways to accelerate needed upgrades for legacy combat vehicles in the near term to address immediate threats.

The committee understands the armored brigade combat team (ABCT), which is comprised of Abrams tanks, Bradley fighting vehicles, M109A7 Paladin self-propelled artillery, M113 Armored Personnel Carriers, Armored Multipurpose Vehicles, M88 Improved Recovery Vehicles, Joint Light Tactical Vehicles, and other systems is the only full-spectrum force in the Army's force structure. Over the past several National Defense Authorization Acts, the committee has noted concerns regarding the reduction of active ABCTs and the Army's ability to have sufficient numbers of fully ready active ABCTs to meet combatant commander steady-state and contingency plan requirements. The committee has also taken action to prevent further reductions in ABCT force structure, and prevent any production breaks in the combat vehicle industrial base. Given the return of armored units to the European theater, as well as the Army's plans to increase ABCT capacity, the committee believes that these actions have been validated.

However, the committee remains concerned about the stability of ABCT modernization funding in fiscal year 2018 and beyond, and encourages the Army to fully modernize at least one ABCT per year. The committee directs the Secretary of the Army, in consultation with the Chief of Staff of the Army, to provide a report to the House Committee on Armed Services and the Senate Committee on Armed Services by April 5, 2018, on the Army's plan for executing its ground combat vehicle modernization strategy. Elements of the report should include: the Army's combat vehicle modernization priorities over the next 5 and 10 years; the extent to which those priorities can be supported at current funding levels within a relevant time period; the extent to which additional funds are required to support such priorities; detail how the Army is balancing and resourcing these priorities with efforts to rebuild and sustain readiness and increase force structure capacity over this same time period; and explain how the Army is balancing its near-term modernization efforts with an accelerated long-term strategy for acquiring next generation combat vehicle capabilities.

The committee also directs the Comptroller General of the United States to provide a briefing to the House Committee on Armed Services by May 1, 2018, on the Comptroller General's preliminary assessment of the Army's report on the ground combat vehicle modernization strategy. The committee further directs the Comptroller General to provide a report on the Comptroller General's final assessment to the House Committee on Armed Services at a date to be determined at the time of the briefing. The Comptroller General's review should focus in particular on how the Army has developed its modernization priorities for the next 5 years, and examine how the Army is balancing and resourcing these priorities with efforts to rebuild and sustain readiness and increase force structure capacity over this time period. Additionally, the review should evaluate the extent to which the Army has balanced its near-term modernization efforts with its long-term strategy for acquiring new capabilities.

## M240B medium machine gun inventory assessment

The committee has concerns regarding the Army's inventory of M240B medium machine guns due to the Army's lack of detailed information regarding the condition of the weapons within that inventory. The committee understands the Army has achieved the procurement objective for the M240 medium machine gun, and that current M240 acquisition and sustainment strategies rely on piecemeal replacement of individual parts instead of new production. The committee is concerned about the impact of this strategy on the industrial base, and the potential to eliminate a critical production line that would be difficult and costly to reestablish at a later date. The committee also notes that M240 requirements could potentially increase as a result of the Army increasing end-strength levels and growing additional armored brigade combat teams. The committee believes the Army needs to clearly demonstrate the operational viability of its M240B inventory.

In light of these concerns, the committee directs the Secretary of the Army to conduct an assessment of the health and operational viability of the Army's M240B inventory. The committee further directs the Secretary of the Army to provide a briefing on the findings of this assessment to the Committees on Armed Services of the Senate and the House of Representatives by January 17, 2018. This briefing shall include, at a minimum: a detailed review of the Army's current M240B inventory, to include the number of systems that are operationally ready, the number of systems that require repair, and the number of systems that should be taken out of inventory and replaced; a description of the full cost to repair and refurbish an M240B machine gun, to include parts procurement, labor, logistics, and sustainment costs; a description of the current contracted cost to procure new production M240B machine guns; and a detailed comparison of the timelines associated with repair and refurbishment efforts, and those required to replace systems with new weapons.

#### Small arms magazine procurement

The committee understands the Enhanced Performance Magazine (EPM) is the latest upgrade of the 30 round 5.56mm magazine used in Army and Marine Corps rifles and carbines that resulted from the introduction of the M855A1 Enhanced Performance Round (EPR). The EPR, while providing a number of significant performance enhancements over the original general purpose M855 ammunition, to include improved lethality, contributed to a reduction in system level reliability under certain conditions. The committee understands the EPM mitigates the system reliability issues that resulted from using the EPR in Army weapons. However, the committee has been informed by the Marine Corps that in some Marine Corps unique weapons, such as the M27 Infantry Automatic Rifles and M16A4 rifles, reliability concerns remain. The committee further understands that, as a result of these concerns, that the Marine Corps conducted further reliability testing on additional commercial polymer magazines, and that the Commandant of the Marine Corps has approved the decision to field a different magazine than the EPM. The committee understands that as of now the Army will replace all legacy magazines with the EPM, and the Marine Corps will replace all legacy magazines with their qualified

polymer magazine.

The committee has long supported small arms modernization, and notes that the Program Executive Office-Soldier through the Soldier Enhancement Program (SEP) is currently evaluating alternative magazines to the EPM, to include polymer magazines used by the Marine Corps. The committee expects the Army to leverage Marine Corps test and evaluation data and any other available Department of Defense data to the maximum extent possible to shorten the overall evaluation timeline which the committee understands could take up to 6–12 months. The committee directs the Secretary of the Army to provide a briefing to the House Committee on Armed Services by September 29, 2017, with an update on the status of the Army's SEP evaluation.

## Small arms production industrial base

The committee notes that the Ike Skelton National Defense Authorization Act for Fiscal Year 2011 (Public Law 111–383) repealed section 2473 of title 10, United States Code, which required the Department of Defense to only procure certain small arms repair parts and components from a limited number of industry sources that the Department had identified as comprising the small arms production industrial base (SAPIB).

The committee directs the Secretary of Defense, in coordination with senior military services acquisition executives, to provide a briefing to the House Committee on Armed Services by January 15, 2018, on the state of the small arms production industrial base. At a minimum, the briefing should identify critical small arms systems and items; describe the Department's strategy for preserving a stable SAPIB in the areas of development, production, maintenance, and competitive contracting; describe the results of increased use of small business set-asides, as well as organic depot activities on quality, delivery, competition, engineering, and research and development investments and capability.

## Vehicle active protection systems

The committee is encouraged by the Army's expedited Non-Developmental Item (NDI) vehicle active protection systems (APS) risk reduction strategy, and notes the current program remains on cost and on schedule. In the committee report (H. Rept. 114–537) accompanying the National Defense Authorization Act for Fiscal Year 2017, the committee noted this strategy will allow the Army to better address the evolving threats posed by the growing proliferation of anti-tank guided missiles and rocket-propelled grenades. The committee is also aware of the importance of vehicle APS capabilities for forward-deployed units, specifically those units in the U.S. European Command area of operations. The committee understands this risk reduction effort installs and characterizes three different NDI APS solutions on Abrams main battle tanks, Bradley fighting vehicles, and Stryker combat vehicle platforms. The committee believes the outcomes of these characterization tests and evaluations will allow the Army to assess integration and performance risks, and should provide the necessary information to make an informed decision regarding the transition of these NDI solutions to a future program of record. The committee under-

stands this characterization effort will be completed in calendar year 2017. Should the outcomes of these characterization tests prove favorable, the committee expects the Army to proceed forward with an accelerated procurement strategy for this critical capability that is consistent with acquisition reform principles and maximizes use of all available acquisition authorities.

## PROCUREMENT OF AMMUNITION, ARMY

## Items of Special Interest

Ammunition production base support

In the committee report (H. Rept. 114–537) accompanying the National Defense Authorization Act for Fiscal Year 2017, the committee was concerned that despite a commitment by the Army to maintain steady-state funding of \$250.0 million for ammunition industrial base upgrades, significant safety, environmental, and operational discrepancies exist among the Army ammunition plants (AAPs), in particular the four largest AAPs. This could require investments exceeding what is currently in the Army's long-term modernization plan for the ammunition industrial base. The committee remains concerned about this discrepancy between documented need and planned investment. These committee concerns are further amplified by the recent explosion that occurred at the Lake City AAP. The committee understands the explosion caused significant damage to the primer production area and that, as a result of the explosion, the Army was forced to stop all production of small caliber ammunition production for an indefinite amount of time until safety inspections can be completed.

The committee directs the Secretary of the Army to provide a briefing to the House Committee on Armed Services by November 1, 2017, on the Army's 2025 Ammunition Industrial Base strategic plan

Clean disposal of conventional munitions

The committee continues to support the use of technologies like those deployed at Camp Minden as a cleaner and safer alternative to the open burning of munitions. The committee directs the Secretary of the Army to provide a briefing to the House Committee on Armed Services by January 31, 2018, on the use of cost-competitive technologies that minimize waste generation and air emissions to dispose of stockpiles of conventional munitions awaiting demilitarization, as directed by section 314 of the Fiscal Year 2017 National Defense Authorization.

## OTHER PROCUREMENT, ARMY

## Items of Special Interest

Army land mobile radio acquisition

The committee is aware of the Army's effort to secure upgraded communications infrastructure on U.S. military installations, specifically land mobile radios (LMRs), and its progress towards meeting this requirement. However, the committee is concerned that delays in fielding enhanced secure infrastructure could lead to risks to force protection, as well as to public safety. The committee

encourages the Army to consider an expedited timeline for LMR upgrades across U.S. military bases, if additional resources become available.

## Army personal dosimeters

The committee is aware that the Department of the Army is investing in the Joint Personnel Dosimeter-Individual, an advanced radiological dosimeter that will replace legacy dosimetry systems. Personal dosimeters are essential tools for tracking radiological exposure throughout a service member's career, and provide important diagnostic data as the service member seeks medical care during and after Active Duty service. To ensure service members are provided with the best possible tracking data for radiological exposure, the committee urges the Army to ensure production requirements and schedules are met to provide Active Duty and Reserve Components the ability to track radiological exposure.

## Heavy Equipment Transport System modernization strategy

The committee encourages the Army to continue development and procurement of a heavy equipment trailer solution to be used as part of the Heavy Equipment Transport System (HETS) for current and future combat vehicles. The committee notes the current heavy equipment transport (HET) trailer is rated for 70 tons, but the most modernized M1A2 Abrams main battle tank configuration, the M1A2 SEPv3, will weigh in excess of 80 tons. The committee understands the current HET trailer will be unable to transport modernized M1A2 SEPv3 tanks, or future M1A2 SEPv4 configurations. The committee believes the Army will require a more capable means of transport organic to the service. The committee encourages the Army to begin to plan and resource the modification of all 192 existing HET trailers, as well as develop ways to accelerate the new Enhanced HETS developmental program.

The committee directs the Secretary of the Army to provide a briefing to the House Committee on Armed Services by December 1, 2017, on the Army's strategy for upgrading current HETS and HET trailers.

#### Personnel and cargo parachute acquisition and management

The committee is concerned that the military services appear to lack a comprehensive and resourced plan to upgrade military personnel parachutes, parachute support equipment, and guided cargo parachutes. The committee understands both the Army and Marine Corps are pursuing high glide parachutes that will allow a parachutist to cover a substantial horizontal distance. However, this capability is not currently fully operational because the Army and Marine Corps have not procured complete parachute systems. While the military has the parachute, it does not have oxygen equipment with sufficient capacity to allow the full use of the high glide canopy. Additionally, the committee understands that the Army and Marine Corps have not procured guided cargo parachutes with the same glide capability as the personnel parachute. Finally, the committee notes that the Army has assigned responsibility for the acquisition of guided cargo parachutes and personnel parachutes to different program executive offices. The committee is

concerned that this organizational structure could fragment responsibility for integrating the capabilities of all systems involved in airborne missions.

The committee directs the Secretary of Defense to provide a briefing to the House Committee on Armed Services by March 1, 2018, that examines (1) whether the Army and Marine Corps have a valid requirement for high glide canopies, and if so, whether each service has an integrated plan to procure all associated equipment required to use the high glide features; (2) whether the Army's decision to divide parachutes between two different program offices hinders or enhances integration of their capabilities; and (3) whether the Army and Marine Corps have a plan and contracts that will allow for the improvement of parachutes over the life cycle of the equipment.

## Rough Terrain Container Handler recapitalization

The committee is concerned that the budget request does not include funding for the Rough Terrain Container Handler (RTCH), a material handling equipment system considered vital and critical to Department of Defense expeditionary logistics. The committee understands the RTCH system, along with other material handling equipment logistic systems, provides strategic capability to set the theater, strategic agility to the joint force, and maintains freedom of movement and action during sustained and high tempo operations at the end of extended lines of communication in austere environments. The committee is concerned by the number of RTCH systems that are combat worn, and notes there is neither a formal reset and recapitalization program for these systems, nor a long-term strategy to modernize a fleet that entered service in 2001.

Accordingly, the committee directs the Secretary of the Army to develop plans to recapitalize and modernize RTCH systems and other material handling equipment systems in a timely manner, and encourages the Army to resource this effort across the Future Years Defense Program. The committee further directs the Secretary of the Army to provide a briefing to the House Committee on Armed Services by September 1, 2017, on this recapitalization strategy.

#### Small unit support vehicle recapitalization strategy

The committee understands the Army's family of small unit support vehicle (SUSV) fleet is used by Army units that train and operate in extreme cold weather conditions, and that this vehicle provides those units with unique capabilities not found elsewhere in the Army. In addition, while the committee is aware of the Army's effort to refurbish some of the fleet, the committee notes that legacy SUSVs are beyond their economic useful life and have become increasingly difficult to maintain. In the committee report (H. Rept. 114–537) accompanying the National Defense Authorization Act for Fiscal Year 2017, the committee required a briefing on the potential requirement for a replacement to the SUSV fleet. The briefing indicated the Army National Guard has established an SUSV overhaul program; however, this overhaul does not provide any additional capability.

The committee remains concerned regarding the capability and capacity of the Army's SUSV fleet, and therefore directs the Secretary of the Army to conduct a business case analysis (BCA) to determine whether the Army should develop or procure a replacement for the small unit support vehicle designated SUSV. The BCA should include the following elements:

(1) an analysis of how the SUSV fleet will be affected if a re-

placement for the vehicle is not developed or procured;

(2) an explanation of the costs associated with refurbishing the SUSV fleet:

- (3) a description of specific requirements for a new SUSV vehicle and whether there is a vehicle available that would meet such requirements;
- (4) an analysis that compares the costs and benefits of the procuring of a new SUSV to the costs and benefits of refurbishing the SUSV fleet; and

(5) recommendations for the most cost-effective approach to addressing the needs of the SUSV fleet.

The committee directs the Secretary of the Army to provide a briefing to the House Committee on Armed Services by March 1, 2018, on the results of the BCA.

## Tactical network review

The committee understands that the Army is evaluating all of the tactical network components to reduce vulnerabilities and focus on capability gaps to ensure that the Army's end-to-end network is resilient, interoperable, and secure. The committee notes that this review will cover the lower and upper tactical internet that make up the Army's tactical network. The committee also notes that software-defined radios and various waveforms are among two of the components that comprise the lower tactical internet that support soldiers at the tactical level. The committee understands the Army's network review should allow for the rapid introduction of other new capabilities, including advances in satellite communications, cyber protection, and electronic warfare, as well as assured positioning, navigation, and timing technology and other technologies that enable assured communications. The committee directs the Secretary of the Army to provide a briefing to the House Committee on Armed Services by September 29, 2017, that details the network study results and the Army's recommended way ahead.

#### Vehicle medical kits

The committee understands there have been significant advances made in emergency medical treatment for combat casualties, and notes that during Operation Iraqi Freedom, the military services, as a result of a joint urgent operational need from U.S. Central Command, fielded a standardized vehicle medical kit called the warrior aid and litter kit (WALK), to complement the capabilities already provided as part of the improved first aid kit and the combat lifesaver bag. The committee notes there is no official program of record for the WALK, and it is unclear to the committee as to how the Army would provide standardized vehicle medical kits for future contingency operations.

The committee directs the Secretary of the Army to provide a briefing to the House Committee on Armed Services by March 1,

2018, on the advisability and feasibility of providing a standardized vehicle medical kit for combat and tactical vehicles.

#### AIRCRAFT PROCUREMENT, NAVY

## Items of Special Interest

EA-18G ALQ-99 tactical jamming system modernization

The committee notes that the EA–18G is the Navy's primary tactical aircraft platform dedicated to the dominance of the radio frequency spectrum in support of contingency and training operations requiring electronic warfare support. The EA–18G currently accomplishes this mission with the ALQ–99 tactical jamming system, but certain legacy transmitters of this system have not been upgraded, resulting in unsatisfactory reliability and increased risk to fulfilling contingency operation requirements. The Navy's Next Generation Jammer program is planned to eventually replace legacy ALQ–99 equipment, and is currently scheduled to be fielded incrementally starting with initial operational capability being declared in 2021, and full operational capability projected for some time during the 2035 timeframe.

Therefore, the committee supports the continued sustainment of legacy ALQ-99 equipment, and expects the Navy to continue upgrading ALQ-99 transmitters, particularly bands 5 and 6 of the ALQ-99 legacy system that have not been upgraded, with solid state technologies in order to mitigate risk pertaining to low reliability and potential failures in flight.

Implications of a 355-ship Navy on Naval and Marine Corps Aviation force structure requirements

The committee notes that the Navy's most recent Force Structure Assessment indicates a need to increase Navy force structure to 355 ships, which includes a 12th aircraft carrier. The committee also notes that this greater fleet size may in turn impact Navy and Marine Corps Aviation force structure requirements.

Consequently, the committee directs the Secretary of the Navy to provide a briefing to the House Committee on Armed Services not later than September 30, 2018, or 12 months after the issuance of a new National Defense Strategy, whichever date is earlier. The briefing should provide estimates as to the number of Navy and Marine Corps aircraft by series and type needed to achieve the objectives of the National Defense Strategy and to complement the capability resident in a 355-ship Navy with 12 aircraft carriers. The briefing shall also include the following elements: (1) a detailed explanation of the strategy and associated force sizing and shaping constructs, associated scenarios and assumptions used to conduct the analysis; and (2) quantification of risk using Chairman of the Joint Chiefs of Staff risk management classifications.

Maritime intelligence, surveillance, and reconnaissance capabilities demonstration

The budget request contained \$15.2 million in PE 63782N for mine and expeditionary warfare advanced technology program, but contained no funding for the MS-177A maritime enhanced sensor demonstration program.

The committee notes that the Navy has the opportunity to leverage a \$300.0 million Air Force investment in the MS-177A sensor, which is meant to improve maritime target detection and longrange imaging and could significantly reduce procurement costs and expedite fielding. The committee is aware that PACOM identified the MS-177A in its classified fiscal year 2018 integrated priority list for consideration in meeting mission gaps. The committee believes that having an organic Navy MS-177A demonstration in the U.S. Pacific Command (PACOM) area of responsibility could help the Navy to assess the full range of anti-surface unit warfare and anti-submarine warfare capabilities, as well as gather needed intelligence against threats in the PACOM strategic environment. Specifically, this could allow the Navy to address, validate, and fill current PACOM maritime intelligence surveillance and reconnaissance mission gaps in a timely manner. The MS-117A could also improve the Navy organic capability to conduct standoff anti-surface unit warfare intelligence, surveillance, and reconnaissance and long-range positive identification of targets.

The committee recommends \$38.7 million, an increase of \$23.5 million, in PE 63782N to procure one MS-177A sensor for the mar-

itime enhanced sensor demonstration program.

## MQ-4C Triton unmanned aircraft system

The committee recognizes that the Navy's MQ-4C Triton will be a forward-deployed, land-based, remotely piloted aircraft system that provides persistent maritime intelligence, surveillance, and reconnaissance (ISR) capability using a mission payload that will eventually be able to collect information in the signals and imagery intelligence disciplines. Given the MQ-4C combination of long endurance and advanced sensors, it will provide robust ISR support in meeting combatant commanders' requirements in the maritime domain. Although the MQ-4C program has had its share of cost, schedule, and execution challenges over the years, the committee fully supports the program, and acknowledges that it will be a critical component and integral capability both for the Navy and the intelligence community as a whole.

The MQ-4C is integral to recapitalization of the Navy's maritime patrol and reconnaissance force (P-3C and EP-3E), and will be complementary to the capability provided by the P-8A patrol aircraft. The committee understands that a fleet of 68 MQ-4C aircraft is planned to support five separate lines of high-altitude airborne ISR capability to provide real-time ISR information to a variety of operational and tactical users. However, the committee is unclear as to how the Navy plans to support mission execution and subsequent tasking, collection, processing, exploitation, and dissemination (TCPED) processes of these ISR missions when ISR collection taskings may occur outside the traditional naval employment constructs of aircraft carrier strike group deployments and operations.

Therefore, the committee directs the Secretary of the Navy to provide a briefing to the House Committee on Armed Services not later than November 15, 2017, on MQ-4C mission execution and TCPED processes. The briefing should include:

(1) a framework description of the manning, equipping, and training requirements for the MQ-4C system;

- (2) a description of the baseline architecture of the mission support infrastructure required to support MQ-4C operations;
- (3) how the Navy plans to support and execute the TCPED processes;
- (4) how the Navy plans to support flying operations from either line-of-sight or beyond-line-of-sight locations;
- (5) how many aircraft the Navy plans to dedicate annually to the ISR Global Force Management Allocation Process of the Department of Defense; and (6) how many hours of collection the MQ-4C will be able to provide annually in each of the intelligence disciplines for combatant commanders.

## MV-22 upgrades

The committee notes that the Commandant of the Marine Corps included the Special Purpose Marine Air-Ground Task Force Enroute Command, Control, Communications, and Computer Urgent Universal Need (SPMAGTF En-route C4 UUN) in his unfunded priorities for fiscal year 2017. The SPMAGTF En-route C4 UUN provides a communications capability to maintain tactical situation awareness of events ongoing in a target area, while Marines are en route to the target destination in an MV–22 aircraft. The committee further notes that in fiscal year 2017, the budget planned for fiscal year 2018 for the SPMAGTF En-route C4 UUN included \$3.3 million for research, development, test, and evaluation; \$42.1 million in Procurement, Marine Corps; \$14.4 million for Operations and Maintenance, Marine Corps; and \$171.4 million for Aircraft Procurement, Navy. The committee supports the SPMAGTF Enroute UUN, and expects that the Department of the Navy will execute the programmed funding for fiscal year 2018.

The committee understands that the majority of maintenance man-hours (MMH) conducted on the MV-22 are for components and wiring internal to the nacelle, and that high vibration and external environmental factors such as sand, dust, and water, have led to significantly more maintenance required on the nacelle than expected. According to aviation officials in the Department of the Navy, nacelle wiring alone accounts for 35 percent of MMH on the nacelles for MV-22. The committee also understands that recent aircraft incidents and failure to meet time on wing requirements for the engine have led to a need to improve the performance of the engine inlet system, and that high failure rates of infrared suppressor (IRS) components drive excessive MMH and contribute to low aircraft availability. Accordingly, the committee believes the Department of the Navy should pursue a common nacelle structure with options for changeable engine inlet systems, improved IRS, and optimized nacelle wiring. The committee believes that the Department of the Navy could develop the common nacelle with nacelle improvements by fiscal year 2019 and have testing complete by fiscal year 2020.

## Naval aircraft physiological episodes

In the committee report (H. Rept. 114–537) accompanying the National Defense Authorization Act for Fiscal Year 2017, the committee noted its concern with the increasing rates of physiological episodes (PEs) experienced by F/A–18 pilots over the previous 5 years. At the committee's recommendation, the National Defense

Authorization Act for Fiscal Year 2017 (Public Law 114–328) included a provision that required the Secretary of the Navy to establish an independent review team to review the Navy's data on, and mitigation efforts related to, the increase in F/A–18 physiological episodes since January 1, 2009, and to report to the congressional defense committees on its findings by December 1, 2017. The committee understands that the Department of the Navy has engaged personnel assigned to the National Aeronautics and Space Administration to conduct this review, and expects that the Department

of the Navy will submit the report on time.

To continue its oversight of naval aircraft physiological episodes, the Subcommittee on Tactical Air and Land Forces held a hearing on Naval Strike Fighter Issues and Concerns on March 28, 2017. At that hearing, Navy witnesses testified that the PE rate per 100,000 hours increased in the F/A-18A through D, F/A-18E/F, and EA-18G each year from 2012 to 2016. Also at that hearing, the committee requested PE data for the T-45C, and Navy witnesses testified that the PE rate per 100,000 hours had also increased each year since 2012. Within a few days of the March 28, 2017, hearing, the committee notes that a high percentage of T-45C pilots at the three T-45C flying locations opted not to fly the T-45Cdue to safety concerns with the aircraft's oxygen system, and the Department of the Navy suspended student training due to these concerns. The committee views these events as a serious readiness issue if student training continues to be suspended, which will result in fewer of the aircraft carrier qualified pilots and naval flight officers necessary to conduct fighter, attack, and electronic combat missions. The committee notes that the Department of the Navy has established a physiological episode team to evaluate these events, and has undertaken actions to address these occurrences and mitigate their effects, while considering this issue as its highest aviation safety priority.

The committee will continue to closely monitor PEs in naval aircraft, and expects the Department of the Navy to aggressively take actions to determine the root cause of these events, determine mitigation procedures, and to budget for the modifications for each aircraft necessary to lower the rate of PEs in naval aircraft.

#### PROCUREMENT OF AMMUNITION, NAVY AND MARINE CORPS

## Items of Special Interest

## Advanced Low Cost Munition Ordnance

The committee continues to support development of the Advanced Low Cost Munition Ordnance (ALaMO), a guided 57 mm projectile, with fire-and-forget capability that requires no Littoral Combat Ship fire control system changes, to counter the growing threats posed by small boat swarms, unmanned aerial systems, and other emerging threats. Therefore, the committee directs the Secretary of the Navy to provide a briefing to the House Committee on Armed Services by August 30, 2017, on achieving low rate of initial production in 2019. The briefing should also include, but not be limited to, an evaluation of the current funding profile of this program across the Future Years Defense Program, as well as po-

tential courses of action to accelerate or streamline the current program strategy.

## SHIPBUILDING AND CONVERSION, NAVY

## Items of Special Interest

America-class amphibious assault ships

The committee is concerned that the Navy program of record for <E T="03">America</E>-class amphibious assault ships (LHA-9) would result in a break in production of 7 years following delivery of LHA-8, thereby accruing significant additional costs at both the shipyard and the supply chain. The committee believes the optimal schedule would be to begin construction of LHA-9 in 2020. Therefore, the committee directs the Secretary of the Navy to provide a briefing to the House Committee on Armed Services by March 1, 2018, that provides an assessment of the cost savings and other benefits of accelerating LHA-9 to 2020 compared to 2024, assuming LHA-9 is identical to LHA-8.

## Columbia-class submarine program

The committee continues to exercise specific oversight on the progress and challenges facing the Navy's <E T="03">Columbia</E>-class acquisition program and the replacement to the <E T="03">Ohio</E>-class ballistic missile submarines, which are scheduled to begin retirement in 2027. The committee notes the Department of Defense and the Navy consider the <E T="03">Columbia</E>-class acquisition among the highest priorities in order to meet sea-based strategic deterrence requirements in the future threat environment through the 2080s. The magnitude of the program's estimated cost, expected to exceed \$267.0 billion over its life cycle, as well as the aggressive schedule on which the Navy and its shipbuilders plan to complete the submarine's technology development and design, and start constructing the new class, among other issues, will be subjects of continued interest and concern to the committee.

Therefore, the committee directs the Comptroller General of the United States to assess the Navy's <E T="03">Columbia</E>-class acquisition and submit a report to the congressional defense committees by March 1, 2018, that includes an analysis of the following:

- (1) technology development including activities in support of the submarine's nuclear propulsion system;
  - (2) progress of shipbuilder design products;
  - (3) program cost estimates;
- (4) approved acquisition strategy and use of expanded authorities including cross-program material procurement, early structural fabrication, and advance construction;
- (5) industrial base capacity to meet the Navy's plans and requirements; and
- (6) construction readiness and feasibility of achieving on-time submarine delivery to meet Navy operational requirements.

## Guided missile patrol boats

The committee recognizes that as the Navy continues to refine its distributed lethality concept, one component could be the incorporation of patrol boats equipped with guided missiles. As described in the 2017 Surface Force Strategy, one distinguishing component of the distributed lethality concept is increasing lethality at the unit level in order to reduce the susceptibility of higher end warships. Another key characteristic is the employment of adaptive force packages that allow operational commanders the ability to scale force capabilities based on the threat. The low cost of fielding combined with the ability to quickly disperse them make patrol boats an ideal platform in achieving these two distinguishing characteristics. Patrol boat units equipped with a variety of offensive capabilities, including short- and long-range anti-ship cruise missiles, would provide an operational commander the ability to inject increased levels of uncertainty and complexity into an adversary's planning. As the Navy concludes the planned production of the MK VI Patrol Boat and initiates the start of the PB(X) program, there are opportunities to leverage stable production lines that could rapidly field a patrol boat that is ideally suited to support the distributed lethality concept. Therefore, the committee strongly encourages the Navy to pursue an offensive capability, including guided missiles, which can be incorporated on patrol boats in support of surface warfare operations.

## High-pressure Cold Spray repair

The committee is aware that the Department of Defense is utilizing high-pressure Cold Spray repair, a solid-state metal deposition technology that is capable of reapplying metal to highly worn or corroded metal surfaces without damaging the base metal. The committee understands this technology would restore the strength and serviceability of parts that previously would require replacement. The committee notes this technology is capable of portable, hand-held, high-pressure operation and has been used by the Department of the Navy to achieve cost savings for the repair of critical components. Therefore, the committee encourages the Secretary of the Navy to expand the use of this technology for the development of new repair processes for additional Navy components.

# Increased standardization and commonality for U.S. Navy ship-building programs

The committee recognizes the importance of maintaining a robust shipbuilding budget to support increasing demands and commitments being placed upon the U.S. Navy. The committee also recognizes that steps need to be taken to continually reduce the cost of shipbuilding so that the U.S. Navy can maximize the number of ships being built under the current and projected fiscal constraints. Since a large portion of the cost associated with shipbuilding resides in the subcontracted systems, subsystems, and components provided by the shipbuilding supplier industrial base, it is important to help this industrial base reduce the cost of its products that support these major shipbuilding programs.

As many of these suppliers are small- to mid-sized companies, it is incumbent upon the U.S. Navy and the shipbuilding prime contractors to explore ways that help reduce the costs of these prod-

ucts without placing additional stress on this supplier base. The committee encourages the U.S. Navy to address alternate approaches to the shipbuilding process that would alleviate the more onerous and costly processes that increase the cost of these ships. The committee also encourages the U.S. Navy and major shipbuilding prime contractors to explore additional levels of standardization and commonality across shipbuilding programs and across major shipbuilding prime contractors to realize significant potential cost savings.

## Littoral Combat Ships capability enhancements

The committee believes that the Littoral Combat Ship and the Frigate will continue to play a critical role in the mix of warships necessary for Distributed Maritime Operations and believe the Navy should begin Frigate construction as soon as possible. To better expand Frigate capabilities, the committee notes that the Chief of Naval Operations initiated an Independent Review Team to assess Frigate requirements. The committee further notes that the Navy intends to leverage the proposed capabilities of the original Frigate program while adding: increased air warfare capability in both self-defense and escort roles; enhanced survivability; and increased electromagnetic maneuver warfare. The committee supports the Navy's intent to increase the lethality and survivability of the Frigate and further supports backfit options that will provide appropriate enhancements to the existing Littoral Combat Ships. In fiscal year 2019, the committee also believes that additional forward fit options for the fiscal year 2019 Littoral Combat Ships should be pursued. Therefore, the committee directs the Secretary of the Navy to prepare a report to the congressional defense committees by March 1, 2018 that details a transition plan to include forward fit options for the fiscal year 2019 Littoral Combat Ships and backfit options for the existing fleet. Specifically, this report should include an assessment of the following elements: deploying an over-the-horizon weapons system; expanding electronic warfare capabilities to include SEWIP Block II or SEWIP Lite; enhancing survivability attributes; and expanding use of unmanned aerial vehicles or unmanned underwater vehicles.

#### Propeller shafts

The committee recognizes that title III of the Defense Production Act (Public Law 81–774) provides the Department of Defense with an important tool to ensure the timely creation and availability of domestic production capabilities for technologies that have the potential for wide-ranging impact on the operational capabilities and technological superiority of U.S. defense systems. The committee supports the Defense Production Act title III program and recognizes its importance to preserving key capabilities throughout the U.S. defense industrial base.

The committee notes the importance of the segments of the defense industrial base where limited numbers of suppliers provide materiel that is critical to readiness of the force. The committee further notes that the industrial segment responsible for the manufacturing and refurbishment of propeller shafts for the Navy's surface and submarine fleet faces considerable strain from high demand from Naval Supply Systems Command and Naval Sea Sys-

tems Command. Accordingly, the committee supports the Under Secretary of Defense for Acquisition, Technology and Logistics, as manager for the Defense Production Act title III program, working with the Secretary of the Navy to ensure that this and other areas of the defense industrial base are maintained and enhanced.

Protection of Navy ships against High-Altitude Electromagnetic Pulse

The committee notes that the High-Altitude Electromagnetic Pulse (HEMP) protection for military surface ships became an official Department of Defense interface standard when it was issued on January 25, 2016, as a result of the Department's interest in system survivability of warships to HEMP. MIL—STD—4023 establishes performance metrics, test protocols, and hardness margin levels for protection of military surface ships that must function when subjected to the HEMP environment.

The committee believes that the only reliable method to assure a ship will survive a HEMP event is to test the ship with physical, realistic simulations of the HEMP environment. Such assurance can be technically justified by evaluating the ship's resistance to a simulated, threat-representative HEMP environment and monitoring for any undesired effects. Incorporating guidance of MIL—STD—4023 combined with the active testing of ships using a threat level simulator can achieve a high-confidence, low-risk assurance that the Navy warships can survive the nuclear weapon-generated threat of HEMP environments.

#### AIRCRAFT PROCUREMENT, AIR FORCE

#### Items of Special Interest

#### A-10 to F-16 transition at Fort Wayne, Indiana

The committee notes that section 134 of the National Defense Authorization Act for Fiscal Year 2017 (Public Law 114–328) included a subsection that authorizes the Secretary of the Air Force to carry out the transition of the A–10 aircraft unit at Fort Wayne Air National Guard Base, Indiana, to an F–16 aircraft unit, as described by the Secretary in the Force Structure Actions map submitted in support of the budget request for fiscal year 2017. The committee understands that the Secretary of the Air Force has not yet planned for or announced this transfer, and encourages the Secretary to execute this transfer as soon as possible. The committee remains concerned about the status of other A–10 and F–16 basing decisions for the Active Duty Air Force, Air Force Reserve, and Air National Guard.

Therefore, the committee directs the Secretary of the Air Force to provide a briefing to the House Committee on Armed Services by September 1, 2017, on an update of A–10 and F–16 basing decisions for the Active Duty Air Force, Air Force Reserve, and Air National Guard.

## A-10 wing replacement program

In the committee report (H. Rept. 114–537) accompanying the National Defense Authorization Act for Fiscal Year 2017, the committee noted its belief that the Department of the Air Force con-

tinues to suffer from capacity shortfalls in its fighter aircraft fleets. The committee further believes that sustainment of the 283-aircraft A-10 fleet helps to meet the Department of the Air Force fighter aircraft capacity requirements, and notes that the A-10 aircraft has been recently deployed in support of both Operations Inherent Resolve and Atlantic Resolve. To sustain the A-10 fleet, the committee understands that all 283 A-10 aircraft require wing replacement, but the committee notes that the Department of the Air Force has procured wing replacement for only 173 A-10 aircraft.

Accordingly, the committee encourages the Department of the Air Force to program the necessary funds to accelerate wing replacement for the remaining 110 A-10 aircraft.

#### B-52 modernization

The committee notes that the nation's ability to meet its long-range strike requirements may be placed at increased risk by the aging B-52 fleet, which averages more than 60 years old.

The committee also notes that the B–21 is not expected to achieve initial operational capability until the mid-2020s and that the Air Force is considering plans to retire certain bomber fleets over the next few decades while keeping the B–52 through 2040 and possibly longer. Consequently, there is a pressing need to upgrade the B–52 bomber fleet with new engines, ground mapping radar, and self-protection electronic warfare capabilities to meet future long-range strike requirements.

Therefore, the committee directs the Secretary of the Air Force to provide a briefing to the House Committee on Armed Services by February 6, 2018, on its modernization plan for the B–52 aircraft fleet. The briefing should include:

- (1) re-engine options, including utilizing authorities pursuant to section 2371b of title 10, United States Code, third-party financing, and traditional procurement;
  - (2) plans to upgrade the ground mapping radar;
  - (3) electronic self-defense options; and
- (4) an integration timeline that best takes advantage of scheduled depot throughput.

#### Bomber modernization

The committee notes that the Air Force has not released its bomber vector. This document is expected to describe the future of the current bomber fleets. It is also expected to detail when the new B–21 long range strike bomber will transition with the existing bomber force and identify which aircraft will be retired. The committee is uncertain that the bomber modernization plan is informed by the bomber vector. The committee is concerned that modernization programs with procurement delivery dates in the early to mid-2020s are not properly coordinated, and as such, bomber investment strategies across the Future Years Defense Program appear to lack justification. The committee expects the Secretary of the Air Force to provide the bomber vector to the committee upon its completion to better assist the committee with its oversight responsibilities for bomber programs.

The committee recommends a general Air Force reduction of \$195.9 million for bomber modernization programs.

## C-130H Aircraft Modernization Program Increments 1 and 2

The committee supports the C-130H Avionics Modernization Program (AMP) Increments 1 and 2 and encourages the Air Force to upgrade all 172 C-130H aircraft in the most expeditious and costeffective way to meet military requirements. However, the committee is concerned that an over-reliance on military specification solutions could potentially delay completion of AMP Increments 1 and 2, despite the availability of commercial off-the-shelf (COTS) and non-developmental item (NDI) technologies, such as glass cockpit and autopilot systems available and in use on C-130 derivative aircraft today.

The committee encourages the Air Force to maximize efforts to procure COTS and NDI solutions to the maximum extent possible, while meeting the requirements for AMP Increments 1 and 2. The committee also encourages all efforts to meet the intent of section 2377 of title 10, United States Code, and the tenets of the Department of Defense Better Buying Power (BBP) 3.0 policy.

Therefore, the committee directs the Secretary of the Air Force to provide a briefing to the House Committee on Armed Services by January 15, 2018, that outlines Air Force efforts to leverage COTS and NDI solutions for the C-130H AMP Increment 1 and 2 programs. The briefing shall include the following elements:

(1) a detailed explanation of how the Air Force considered section 2377 of title 10, United States Code, and Department of Defense BBP 3.0 during the definition of the technical requirements and acquisition strategies for AMP Increments 1 and 2;

(2) examples of incentives made to offerors for accelerated and cost-capped implementation for C-130 AMP Increment 1 and 2;

- (3) where military specification standards were selected for C-130 AMP Increment 1 and 2, a comparison of such standards and COTS standards; and
- (4) where military specification standards were selected for C-130 AMP Increment 1 and 2, a comparison of operation and support costs for such standards and COTS standards.

#### C-130H propulsion systems upgrades

The budget request contained no funds for C-130H propulsion

systems upgrades.

The committee continues to support the upgrade of C-130H aircraft with the T56 3.5 engine enhancement, NP2000 8-bladed propeller and the inflight propeller balancing system. The committee notes that the Air National Guard (ANG) is currently testing the T56 3.5 engine enhancement and preliminary test results have exceeded expectations for fuel savings and performance gained. The committee understands the ANG expects to issue a full test report in the summer of 2018 to be followed with a business case analysis for upgrading the entire fleet of C-130H aircraft. The committee is aware that only 8 of 172 C-130H aircraft are programmed to receive these upgrades across the Future Years Defense Program. The committee expects the Air Force to include the necessary funds to accelerate C-130H upgrades in future base budgets.

The committee recommends \$146.6 million for the C-130H pro-

pulsion systems upgrade program.

## E-8C Joint Surveillance and Target Attack Radar System

The committee acknowledges that the E-8C Joint Surveillance Target Attack Radar System (JSTARS) is a proven Air Force Battle Management Command and Control platform enabled by leveraging its extremely capable active radar system that provides invaluable moving target indicator (MTI) intelligence, surveillance, and reconnaissance (ISR) targeting information to multiple users both on the ground and in airborne attack platforms. The demand for MTI capability within each geographic combatant commander's area of responsibility far exceeds what JSTARS can currently provide due to its limited fleet size and strained crew resources. The committee also notes that the current fleet of 16 E-8C aircraft has issues and challenges the Air Force must successfully navigate to maintain viability until the current fleet of E-8C aircraft is replaced by the JSTARS Recapitalization program beginning in the late 2020s. Despite these issues and challenges, the committee is confident that the Secretary of the Air Force can develop a successful legacy JSTARS to JSTARS Recapitalization transition plan that would not prematurely retire E-8C aircraft, reassign crews or maintenance personnel, or otherwise create an MTI ISR capability gap or capacity deficit greater than what existing levels of aircraft should be providing currently.

Therefore, the committee directs the Secretary of the Air Force to provide a briefing to the House Committee on Armed Services not later than November 1, 2017, that describes, in detail, a strategy to sufficiently address manning, sustainment, modernization, and viability deficiencies that would resolve capability gaps, shortfalls, and deficiencies of the E-8C fleet of aircraft. The briefing should include a strategy that addresses right-sizing and balancing unit manning among the Total Force; maintaining proficient and current aircrews to meet operational requirements; resolving obsolescence and diminishing manufacturing sources of parts and supply; necessary mission system upgrades and operational enhancements across the E-8C fleet to keep the aircraft viable and relevant until the JSTARS Recapitalization aircraft is fielded; standardizing existing aircraft capabilities in areas such as imagery servers and the Automated Information System; a forward-deployed basing construct that would enable E-8C aircraft to operate simultaneously while deployed, if needed, from three forward-deployed locations while on temporary duty supporting a combatant commander's command and control or moving target indicator intelligence, surveillance, and reconnaissance requirements; and, the associated cost, budget, and timeline required to implement the strategy.

Finally, the committee also directs the Secretary of the Air Force to provide a report to the congressional defense committees not later than March 1, 2019, that explains in detail all aspects of how and when the Air Force will transition from legacy JSTARS aircraft capability to JSTARS Recapitalization aircraft capability.

#### EC-130 Compass Call cross deck

Last year, the committee received a letter from the U.S. Air Force requesting a technical adjustment to the fiscal year 2017 budget request and authorization for a new start program to rehost the EC-130H Compass Call mission equipment onto a new

platform identified as the EC-37B. At the time, the U.S. Air Force stated that there was only one aircraft option that met requirements and did not require development and/or further certification work. This aircraft was identified as the Gulfstream G550 Conformal Airborne Early Warning airframe. Earlier this year, the committee was notified that the acquisition strategy had changed and the Air Force no longer planned to make the selection as to which aircraft would re-host the mission equipment. In a letter dated February 1, 2017, the Air Force stated its intention to contract with a lead system integrator (LSI) and delegate the aircraft selection to the LSI. The letter claims that "after extensive analysis, we have determined that the most efficient, expedient, and cost effective means to acquire Compass Call capability is through a lead systems integrator approach."

However, in testimony before the Subcommittee on Seapower and Projection Forces on May 25, 2017, Air Force officials stated that they yet again changed their acquisition strategy. The committee understands the Air Force now intends to contract with a systems integrator, not an LSI, in contravention to what was stated in letters from both the Acting Secretary of the Air Force and the Office of the Assistant Secretary of the Air Force for Acquisition. While the committee supports the Air Force's need to accelerate fielding a replacement aircraft for the Compass Call mission that meets its requirement, it is not clear that the Air Force is pur-

suing a coherent acquisition strategy.

Elsewhere in this Act, the committee includes a provision that would restrict the Secretary of the Air Force from obligating or expending funds until 30 days after the Under Secretary of Defense for Acquisition, Technology, and Logistics certifies that the acquisition strategy conforms to law, follows appropriate guidelines, and adheres to best practices.

#### F-15C capability, capacity, and recapitalization

The committee notes that during the hearing on March 22, 2017, titled "The Current State of the U.S. Air Force," before the Subcommittee on Readiness of the House Committee on Armed Services, Air Force witnesses testified that the Department of the Air Force is likely to decide during fiscal year 2019 budget deliberations whether or not to proceed with an option of divesting F-15C aircraft from the Air Force inventory and replacing those aircraft

with upgraded F-16 aircraft.

The committee notes that the Air Force is executing a service life extension program to upgrade the F-15C with an improved radar and missile warning system, as well as airframe structural enhancements. The committee strongly supports the Eagle Passive Active Warning and Survivability System (EPAWSS) modernization program for the F-15C fleet. The committee recalls that the Air Force has previously stated a requirement to extend the service life of the F-15C aircraft fleet to fill the air superiority mission capacity gap created by the truncation of the F-22 procurement program to only 187 aircraft. Similarly, the committee also recalls that the Air Force planned to keep the F-15C viable until the Air Force's next-generation air dominance aircraft is fielded to avoid a capacity gap in the air superiority mission area. Additionally, the committee is unaware of any warfighting analysis within the De-

partment of Defense that would validate replacing F-15C capability and capacity with upgraded F-16 aircraft to fulfill requirements of the air superiority mission area. The committee does not understand how the Air Force would grow to its desired number of 60 fighter squadrons by retiring a significant number of F-15C aircraft and replacing those with aircraft already in the Air Force inventory. As well, the committee is concerned such a decision would exacerbate the substantial personnel shortage that currently exists within the F-16 maintenance enterprise by having to retrain and

qualify F-15C personnel to maintain F-16 aircraft.

Therefore, the committee directs the Secretary of the Air Force to provide a briefing to the House Committee on Armed Services not later than February 28, 2018, that provides detailed information on the following: the Air Force's weapon system sustainment and service-life plan for the F-15C aircraft, to include EPAWSS integration; when and with which material option(s) the Air Force plans to recapitalize air superiority mission capability provided by modernized F-15C aircraft, without incurring a reduction in capacity, if the F-15C is retired; how and when the Air Force plans to grow, and with which aircraft, to 60 fighter squadrons; any analysis completed by the Department of Defense that validates that the air superiority mission capability and capacity provided by a modernized F-15C can be supplanted with an upgraded F-16; and forecasted mission transition plans for locations and units that currently possess or support F-15C aircraft, personnel, operations, or maintenance activities if F-15C aircraft are retired.

#### F-16 radar modernization

In the committee report (H. Rept. 114–102) accompanying the National Defense Authorization Act for Fiscal Year 2016, the committee noted the joint operational urgent need (JOUN) that specifically required an active electronically scanned array (AESA) radar upgrade to the F–16 aircraft that perform the aerospace alert control mission, and the committee supported taking all appropriate steps to meet that JUON as soon as possible. For fiscal year 2017, the committee notes that the Department of the Air Force F–16 program includes \$216.5 million for 72 AESA radars and \$15.0 million for F–16 AESA radar development. The committee further notes that the budget request includes \$2.9 million for AESA radar procurement, \$40.8 million for AESA radar development, and the committee understands that the budget request also includes \$14.4 million for procurement of six F–16 AESA radars as initial procurement spares.

The committee continues to view the procurement and development of the AESA radar upgrade to the F-16 aircraft that perform the aerospace alert control mission as a national security priority, and expects the Department of the Air Force will fully execute its planned procurement and development for fiscal years 2017 and 2018.

#### F-22 increment 3.2B upgrade

The committee notes that the Department of the Air Force plans to upgrade 143 F-22 aircraft with the increment 3.2B upgrade. The increment 3.2B upgrade provides the F-22 aircraft with the most advanced air superiority capabilities including the AIM-9X missile,

AIM-120D missile, electronic protection, and in-flight data link enhancements. The committee understands that the Department of the Air Force F-22 inventory includes 34 Block 20-configured F-22 aircraft which are used for training pilots upgrading to the F-22 aircraft, and believes those 34 F-22 aircraft should also be configured with the increment 3.2B upgrade.

Accordingly, the committee encourages the Department of the Air Force to program the necessary funds to configure the 34 Block 20-configured F-22 aircraft with the increment 3.2B upgrade, and believes that such an upgrade will improve F-22 pilot training, improve F-22 inventory capability, and standardize F-22 configurations for more efficient maintenance and parts replacement.

## F-35 Lightning II aircraft program

The committee continues to support the F-35 Lightning II program. The F-35 Lightning II aircraft is the Department of Defense's largest acquisition program, which will eventually deliver 2,443 F-35 aircraft to the Departments of the Navy and Air Force. The committee notes the Department of Defense has taken delivery of over 285 F-35 aircraft. The committee believes that the F-35 will form the backbone of U.S. air combat superiority for decades to come, replacing or complementing the legacy tactical fighter fleets of the Air Force, Navy, and Marine Corps with a dominant, multirole, fifth-generation aircraft capable of projecting U.S. power and deterring potential adversaries. The committee notes that, for the F-35 program's international partners and foreign military sales customers, the F-35 will become a cornerstone for future coalition operations and will enhance the strength of our security alliances.

The committee understands the F-35 Lightning II program is approximately 90 percent through its system development and demonstration (SDD) phase, which is planned to be completed not later than the second quarter of fiscal year 2018 and will provide capabilities required by the Departments of the Navy and Air Force in a final software block known as block 3F. At a hearing held by the House Committee on Armed Services' Subcommittee on Tactical Air and Land Forces on February 16, 2017, the F-35 program executive officer (PEO) testified that the F-35 program is making solid progress as it grows and accelerates. The committee notes that looking beyond completion of the SDD phase of the F-35 program, the follow-on effort, known as the follow-on modernization (FOM) or block 4 program, is moving forward and will be executed as a continuation of the F-35 program with full transparency and reporting on cost, schedule, and performance as if it were a new program. The committee fully supports development and delivery of a FOM software increment that will provide vitally important additional combat capabilities such as advanced electronic protection, nuclear weapon delivery, and additional air-to-ground precision munitions. The committee believes that the FOM is critical to improve the F-35's warfighting capabilities to keep pace with rapidly maturing adversary threat aircraft and integrated air defense systems, and expects that the FOM engineering, manufacturing, and development contract award will take place as scheduled in late 2018.

The committee is aware the budget request for SDD is \$231.0 million over the previous year's projection for SDD in fiscal year 2018, and that this additional amount is necessary due to delays in software development, the need to address problems found during testing, and funding reductions in prior years. The committee also notes that both the Director of Cost Assessment and Program Evaluation and the Government Accountability Office have estimated that significant additional funding beyond the amount requested may be necessary to finish the SDD phase of the program, and that the difference between their estimates and the F–35 joint program office estimates are due in large part to different assump-

tions about flight test efficiency and duration.

The committee supports completion of the SDD phase and delivery of full block 3F software capability as soon as possible. However, the committee is concerned that, if remaining SDD activities do take longer and cost more than planned, the joint program office may recommend termination of the SDD phase, and transfer of unfinished or incomplete capabilities could be deferred into the FOM portion of the program. While the committee understands that deferral of some minor capabilities may be appropriate and low-risk, the committee does not support premature termination of the SDD phase if combat capabilities critical to the military services are not completed. Accordingly, the committee directs the Secretary of Defense to submit a report to the congressional defense committees, not later than January 30, 2018, that provides an updated estimate of the cost and time necessary to complete the SDD phase, a list of any block 3F capabilities planned for deferral to the FOM phase, and the impact of any such deferred capabilities on the FOM phase of the program.

The committee continues to support increased F-35 aircraft production rates to address fighter aircraft capability and capacity shortfalls in both the Departments of the Navy and Air Force. The committee notes that at a hearing held by the Subcommittee on Tactical Air and Land Forces on July 13, 2016, entitled "Future Air Dominance and the Role of Fifth Generation Fighters," the Commander of the Air Combat Command testified that, to address capability and capacity shortfalls in the Department of the Air Force, the desired F-35A production rate is 60 aircraft per year. The committee believes that full-rate production in fiscal year 2021 would require an annual procurement rate of 80 F-35As, 36 F-35Bs, and 30 F-35Cs. The committee expects the Department of Defense to invest in the tooling necessary to accelerate these future F-35 pro-

duction rates.

The committee is also aware that the Department of Defense has recently reached a successful agreement with the F–35 prime contractor that achieves lower unit costs for low-rate initial production (LRIP) lot 10. Further, the committee notes the testimony of the F–35 PEO at the February 16, 2017, hearing informed the committee that the then President-elect had a conversation with the F–35 PEO, prior to the conclusion of the lot 10 negotiations, where the President-elect sought more information about the F–35 and its affordability. The F–35 PEO also noted that the conversation with the President-elect resulted in tasks to the F–35 Program Office to determine what actions are currently being taken to ensure the affordability of the F–35, and how the Department of Defense can be

assured that F-35s are procured at the best value. The committee commends the actions taken by the administration and the F-35 PEO to negotiate lower unit costs and continued cost savings for F-35 aircraft.

To continue the trend of decreasing unit F-35 procurement costs, the committee notes that the Department of Defense submitted a request for authorization to enter into contracts for economic order quantities of material and equipment for use in F-35 procurement contracts, to be awarded during fiscal years 2019 and 2020, so that the Department of Defense can execute a block buy contracting strategy. The committee understands that such a block buy contracting strategy would generate cost savings of approximately \$2.0 billion. Accordingly, elsewhere in this Act, the committee includes a provision that would authorize the Secretary of Defense to enter into one or more contracts, beginning with the fiscal year 2018 program year, for the procurement of economic order quantities for material and equipment for the F-35 program, to be used in F-35 procurement contracts in fiscal years 2019 and 2020.

Implications of increased Army, Navy, and Marine Corps force structure on Air Force airlift, air refueling tanker, and Navy sealift force structure requirements

The committee notes that the administration intends to increase Army, Navy, and Marine Corps force structure and that the last mobility capability and requirements study was completed in 2013. With this greater force structure, the committee is concerned about the anticipated impact on Air Force airlift and air refueling tanker and Navy sealift force structure.

Therefore, the committee directs the Secretary of Defense to carry out a mobility capability and requirements study and provide a briefing to the House Committee on Armed Services not later than September 30, 2018, or 12 months after the issue of a new National Defense Strategy, whichever date is earlier. The study should estimate the number of airlift aircraft, tanker aircraft, and sealift ships needed to meet the combatant commander requirements. The briefing shall include the following elements:

- (1) a detailed explanation of the strategy and associated force sizing and shaping constructs, associated scenarios, and assumptions used to conduct the analysis;
- (2) estimate of risk based on Chairman of the Joint Chiefs of Staff risk management classifications; and
- (3) implications of operations in contested areas with regard to the Civil Reserve Air Fleet.

## MQ-9 modernization and upgrades

The committee notes that the Air Force relies heavily upon its MQ-9 fleet of remotely piloted aircraft to support global combatant commander requirements for both steady-state and contingency operations. As a result of the extensive use of the MQ-9 platform for operations, many aircraft are reaching the end of their designed service life sooner than expected. The committee notes that in the fiscal year 2017 President's budget request, the Air Force proposed a new effort to retrofit and upgrade 166 MQ-9 aircraft to a Block 5 configuration. The committee also notes that while the Block 5 upgrade increases the mission capability of the aircraft by modern-

izing avionics and mission systems, the upgrade does not address structural or fatigue issues of the MQ-9 aircraft that could extend the designed service life of the aircraft. The committee understands that the Air Force could forgo the option of continued Block 5 upgrades to existing MQ-9 aircraft, and could pursue an option to participate in development and procurement of the MQ-9B aircraft. The committee also understands that the MQ-9B system plans to leverage both the current MQ-9 aircraft and the Advanced Cockpit Ground Control Station as points of departure for MQ-9B systems design, and that hardware, software, and structural upgrades will be included in MQ-9B aircraft to improve structural fatigue and damage tolerance over the current MQ-9 baseline aircraft. However, the committee currently lacks the required information to make an informed determination as to which effort the Air Force should pursue.

Elsewhere in this title, the committee includes a provision that would require the Secretary of Defense, in consultation with the Secretary of the Air Force, to conduct a cost-benefit analysis (CBA) that compares upgrading MQ-9 Reaper aircraft to a Block 5 configuration versus proceeding with procurement of MQ-9B aircraft. The committee expects the CBA to explain in detail all assumptions that underpin the CBA, and to weigh and analyze factors in the CBA such as investment cost, schedule, risk, open-architecture design, capability, capacity, mission systems configuration within the MQ-9 enterprise, manpower requirements, sustainment, logistics, and life-cycle cost or cost-avoidance.

#### Next generation ejection seat acquisition

The committee notes that section 146(b) of the National Defense Authorization Act for Fiscal Year 2014 (Public Law 113–66) required a report by the Secretary of the Air Force on various aspects of the health and safety risks associated with ejection seats. That report confirmed that, with increased use of helmet-mounted devices, the risks of death or serious injury increases, and increases even more for lighter weight aircrew. The committee also notes that the Joint Explanatory Statement to Accompany the Carl Levin and Howard P. "Buck" McKeon National Defense Authorization Act for Fiscal Year 2015 (Committee Print No. 4) stated that the Air Force should establish a program for increasing the ejection safety and reliability of the Air Force's fighter and bomber aircraft. Subsequently the Air Force established the Next Generation Escape System (NGES) program of record, and is currently in the market research phase of its next acquisition endeavor to upgrade and modernize ejection seats for aircraft currently in the Air Force inventory. The committee also recognizes that there are a limited number of ejection seat manufacturers qualified to meet Department of Defense egress requirements for high-performance military aircraft.

Concerning the acquisition of NGES, the committee expects the Secretary of the Air Force to design and execute an acquisition strategy that enables fair, open, equitable, and objective consideration of ejection seat technologies. The committee encourages the Air Force to also take into account industrial base considerations that will preserve sufficient access to ejection seat technology for future programs. The committee also expects that any ejection seat proposal assessed during source selection processes will be evalu-

ated in accordance with established Department of Defense policies, regulations, and instructions governing the acquisition of

egress systems for military aircraft.

Therefore, the committee directs the Secretary of the Air Force, and a representative from the office of the Under Secretary of Defense for Acquisition, Technology, and Logistics, to provide a briefing to the House Committee on Armed Services not later than September 1, 2017, that explains in detail the acquisition strategy for NGES and how the committee's aforementioned considerations related to the acquisition strategy will be implemented. Finally, the committee is dissatisfied with the slow pace the Air Force has given this issue since it was initially addressed by the committee over 3 years ago, and expects the Secretary of the Air Force to demonstrate more urgency in providing modernized and safer egress systems for Air Force aircrews.

#### RC-135S Cobra Ball

The committee notes that the collection of information associated with foreign ballistic missile programs remains a priority for the Department of Defense. For many years, the RC-135S Cobra Ball program has served a vital role by providing unique and highly responsive collection on numerous high-priority missions. As one of the smallest aircraft inventories in the Department of the Air Force, the three aircraft of the RC-135S fleet struggle to balance routine and depot maintenance schedules against operations and training requirements. The committee remains concerned that the Department's ability to conduct responsive technical collection against high-priority items of interest is constrained by the small size of the RC-135S enterprise which must compete fulfilling requirements for operations, training, and maintenance.

Therefore, the committee directs the Secretary of the Air Force to provide a briefing to the House Committee on Armed Services not later than December 1, 2017, on modernization and upgrades to RC-135S aircraft and training facilities. Specifically, the briefing should include what actions the Secretary will take to complete the modernization and upgrade of the remaining two RC-135S aircraft to the newest baseline standard for mission systems and software, as well as what actions the Secretary will take to field an RC-135S ground-based mission trainer to reduce reliance on mission aircraft and increase operational availability of RC-135S aircraft for world-

wide deployments.

Reporting on air traffic control avionics upgrades for Air Force air-

The committee notes that the Air Force is upgrading the avionics of its entire fleet to make the tracking of military aircraft by air traffic control facilities more secure and to comply with Federal Aviation Administration Air Traffic Management Surveillance mandates which go into effect on January 1, 2020.

The committee is aware that the Air Force is combining the acquisition of Identification, Friend or Foe Mode 5 and Automatic Dependent Surveillance Broadcast-Out capable avionics and the supporting software in an effort to reduce overall costs. The committee is concerned that the Air Force will not fully meet the January 1,

2020, mandate, which could seriously impact operational capability of the force.

Therefore, the committee directs the Secretary of the Air Force to provide a briefing to the House Committee on Armed Services not later than February 15, 2018, that addresses the following elements:

- (1) operational and training impacts of non-compliant aircraft;
- (2) mitigation efforts to minimize training and operational disruptions;
- (3) plans to bring aircraft into compliance by aircraft series and type;
  - (4) challenges to bringing all aircraft into compliance; and
  - (5) steps taken to ensure cost effectiveness of avionics upgrades.

## RQ-4 and universal payload adapter integration

The budget request contained \$86.7 million for RQ-4 post-production charges, but contained no funding for integration of the

universal payload adapter.

The committee notes that the RQ-4 Global Hawk is the Department of Defense's only remotely piloted, high-altitude, long-endurance, intelligence, surveillance, and reconnaissance (ISR) system that provides complementary capability alongside the U-2. The RQ-4 system provides critical support to deployed forces around the world, including providing critical communications to forward-deployed ground forces and essential ISR information to the intelligence community. The RQ-4 also provides support to homeland defense and disaster response operations that could not be achieved using other medium-altitude remotely piloted aircraft that are unable to operate in the high-altitude flight environment. The committee notes that integrating the universal payload adapter on the RQ-4 fleet will ensure greater interoperability and flexibility alongside the U-2, as it would enable employment of an array of ISR sensors, including select U-2 sensors, in support of combatant commander high-altitude ISR requirements.

Therefore, the committee recommends \$105.0 million, an increase of \$18.3 million, for RQ-4 post-production charges to support continued modifications to existing RQ-4 aircraft and integra-

tion of the universal payload adapter.

## Wide-area motion imagery intelligence capability

The budget request contained \$4.5 million in PE 35206F for development of airborne reconnaissance systems, and \$321.1 million for MQ-9 unmanned aircraft system (UAS) modifications, but contained no funding for continued development or procurement of wide-area motion imagery (WAMI) beyond line-of sight (BLOS) ca-

pabilities.

The committee notes that persistent, near real-time day and night WAMI capability is considered by operational commanders to be a critical beyond line-of-sight intelligence, surveillance, and reconnaissance capability for numerous combat units. WAMI capability has been deployed in support of combat operations in Afghanistan since 2010 and in Iraq since 2015; however, despite the invaluable capability that WAMI capability provides, the Air Force has only been able to provide four steady-state UAS lines of WAMI capability. The committee understands that last year, the Depart-

ment of Defense validated a U.S. Central Command Joint Urgent Operational Need Statement that requires the further development and procurement of WAMI BLOS capabilities for forward-deployed

operations.

Accordingly, the committee recommends \$17.3 million in PE 35206F, an increase of \$12.8 million, for development of WAMI BLOS processor upgrades to enable enhanced data management and integration of multi-intelligence WAMI technologies, automatic target recognition, correlation and tracking information, and near-vertical direction finding capabilities. The committee recommends \$326.3 million for MQ-9 UAS modifications, an increase of \$5.2 million, to complete the purchase of the 10th pod set for which partial funding was authorized by the National Defense Authorization Act for Fiscal Year 2017 (Public Law 114–328).

Additionally, the committee directs the Vice Chairman of the Joints Chief of Staff (VCJCS), utilizing the Joint Requirements Oversight Council process, to provide a report to the House Committee on Armed Services by March 1, 2018, that determines the quantity of steady-state operational combat UAS lines that would be required to provide WAMI BLOS capabilities to meet airborne signals and imagery intelligence requirements for all of the geographic combatant commanders. The committee expects the VCJCS to seek input from all geographic combatant commanders, and to also provide an explanation of underpinning assumptions and risk analysis for the final derived requirement.

Finally, the committee directs the Secretary of the Air Force to provide a report to the House Committee on Armed Services by March 1, 2018, that describes in detail the life-cycle weapon system sustainment and modernization strategy for maintaining an enduring WAMI capability for the geographic combatant commanders.

#### PROCUREMENT, DEFENSE-WIDE

#### Items of Special Interest

MC-12 modernization initiatives

The budget request contained \$5.8 million in Aircraft Procurement, Air Force, for MC-12 aircraft modernization initiatives.

The committee is aware of a capability and modernization gap with the MC-12W fleet of aircraft currently being flown by Air National Guard units when compared to those being flown by Active Components. The committee notes these critical capability gaps are found in tactical data links, signals intelligence, high definition optics, and antennas, all of which are critical for flight operations in contested environments.

Therefore, the committee recommends \$70.8 million, an increase of \$65.0 million, in Aircraft Procurement, Air Force, for MC–12W aircraft upgrades utilized by the Air National Guard.

Modernization of UH-60A/L aircraft bound for Afghanistan Aviation Forces

The committee encourages the Office of the Secretary of Defense (OSD) to develop strategies to modernize analog flight and crew advisory instruments in the UH–60A/L aircraft bound for Afghanistan Aviation Forces. The committee understands the aging analog

systems in the UH-60A/L are being phased out in favor of digital glass flight displays that provide increased situational awareness and avoid growing obsolescence and reduced readiness. The committee notes that the digital glass flight displays have the added benefit of more efficient delivery of information to the pilot and copilot, easier scan of flight parameters, and more intuitive use of this information in the control of safe flight operations.

The committee directs the Secretary of the Defense to provide a briefing to the House Committee on Armed Services by December 1, 2017, on OSD's strategy to transition UH-60A/L aircraft bound for Afghanistan Aviation Forces.

## Standard data link requirement for the Department of Defense

The committee reminds the Department of Defense that the National Defense Authorization Act for Fiscal Year 2013 (Public Law 112–239) included a provision, section 157, requiring tactical manned intelligence, surveillance, reconnaissance (ISR) aircraft and unmanned aerial systems (UAS) to use a specified standard data link. The provision requires the use of encrypted waveforms to transmit and receive internet protocol communications, requires UAS use data formats that are consistent with North Atlantic Treaty Organization standards, and requires that acquisition solicitations conform to Department of Defense data link specification standards without requirements or evaluation criteria that mandate proprietary or undocumented waveforms, control interfaces, or data interfaces.

The committee understands that the office of the Under Secretary of Defense for Acquisition, Technology, and Logistics (USD(AT&L)) is currently developing a common data link (CDL) enterprise modernization policy intended to transition the Department of Defense to a Bandwidth Efficient CDL Revision B (BE CDL Rev B), implement an open system cryptographic modernization, and provide a vendor neutral terminal control interface. The committee also understands the CDL executive agent (the Department of the Air Force) is developing a BE CDL Rev B software upgrade that will allow the Department to port this compliant waveform into a number of widely fielded airborne and ground terminals. Further, the Department of Defense has informed the committee that preliminary transition is already beginning via the secure CDL ISR radio program which requires each vendor to implement BE CDL Rev B, Cryptographic Core Modernization (CCM) encryption, and the new terminal Common Control Interface (CCI), which are currently pending National Security Agency certification. The Department of Defense also informed the committee that the CDL enterprise modernization policy to be issued later this year will direct all new programs requiring CDL terminals (and existing programs replacing their terminals) to implement BE CDL Rev B, the CCI, and CCM modular encryption, and that the policy will retire the 466ER, Vortex Native, Predator Tactical, and Frequency Modulation (FM) Analog ISR waveforms, not later than October, 1,

However, the committee is not entirely convinced that the Department of Defense is on a path to meet the requirements of section 157 without a need to exercise future waiver authority, because the committee understands that some programs of the Department of Defense may still seek to obtain waivers from USD(AT&L). The committee believes that the Department of Defense's waiver authority should be used rarely and only in cases in which vital, unavoidable circumstances exist. Therefore, the committee will consider in the future repealing the waiver authority provided in section 157 if the committee observes that program offices of the Department of Defense are utilizing the waiver authority as a matter of convenience rather than outright necessity.

Elsewhere in this title, the committee includes a provision that would amend section 157 to require the Secretary of Defense to provide the congressional defense committees notification of common data link solicitations containing certain waveforms, and modifies criteria related to the review and approval of waiver requests by program offices seeking to use legacy data link waveforms.

#### LEGISLATIVE PROVISIONS

#### SUBTITLE A—AUTHORIZATION OF APPROPRIATIONS

Section 101—Authorization of Appropriations

This section would authorize appropriations for procurement at the levels identified in section 4101 of division D of this Act.

#### SUBTITLE B—ARMY PROGRAMS

Section 111—Report on Acceleration of Increment 2 of the Warfighter Information Network-Tactical

This section would require the Secretary of the Army to submit a report to the congressional defense committees by January 30, 2018, detailing potential options for the acceleration of procurement and fielding of the Warfighter Information Network-Tactical Increment 2 program.

#### SUBTITLE C—NAVY PROGRAMS

#### Section 121—Aircraft Carriers

This section would express the sense of Congress as to the necessity to obtain 12 aircraft carriers, the frequency of aircraft carrier construction, the requirement to provide shock trials on the *USS John F. Kennedy* (CVN 79), and the desire to continue the Fordclass carrier design for CVN 81. This section would also require the Secretary of the Navy to obtain 12 aircraft carriers by September 2023, which is expected to occur with the delivery of the *USS John F. Kennedy*. Finally, this section would provide economic order quantity authority for the construction of two *Ford-class* aircraft carriers and incremental funding authority for the nuclear refueling and complex overhaul of four Nimitz-class aircraft carriers.

#### Section 122—Procurement Authority for Icebreaker Vessels

This section would authorize the Secretary of the Navy to act as a general agent for the Secretary of the Department in which the Coast Guard is operating and to enter into a contract for not more than three heavy icebreakers and three medium icebreakers.

## Section 123—Limitation on Availability of Funds for Procurement of Icebreaker Vessels

This section would prohibit funds authorized to be appropriated by this Act or otherwise made available for the Department of Defense for fiscal year 2018 from being obligated or expended for the procurement of an icebreaker vessel.

## Section 124—Multiyear Procurement Authority for Virginia Class Submarine Program

This section would authorize the Secretary of the Navy to enter into one or more multiyear contracts for *Virginia* class submarines beginning in fiscal year 2018, in accordance with section 2306b of title 10, United States Code.

## Section 125—Multiyear Procurement Authority for Arleigh Burke Class Destroyers and Associated Systems

This section would authorize the Secretary of the Navy to enter into one or more multiyear contracts for *Arleigh Burke* class destroyers and associated systems beginning in fiscal year 2018, in accordance with section 2306b of title 10, United States Code.

#### Section 126—Limitation on Availability of Funds for Arleigh Burke Class Destroyer

This section would limit the obligation of certain funds to procure new air and missile defense radars for *Arleigh Burke* class destroyers unless the radars are AN/SPY-6(V) radar modular assembly (RMA) based. This section would authorize the Secretary of the Navy to a waive the limit if the Secretary determines that the cost or schedule risk associated with the integration of the AN/SPY-6(V) radar is unacceptable or incongruous with an appropriate business case.

The committee recognizes that the Under Secretary of Defense for Acquisition, Technology, and Logistics, in his report to Congress required by the committee report (S. Rept. 114–49) accompanying the National Defense Authorization Act for Fiscal Year 2016 (Public Law 114–92), noted that the Navy's current radar program of record, AN/SPY–6(V) Air and Missile Defense Radar, was designed to be fully scalable and modular to support a variety of shipboard radar applications on a variety of platforms and that the radar modular assembly conforms to the Department of Defense's Better Buying Power initiative by leveraging open systems, common logistics, and software baselines, and by securing government data rights to both the hardware and software to affect affordability.

The committee applauds the Navy's successful efforts to leverage RMA-based applications of AN/SPY-6(V) technologies as part of the Enterprise Air Surveillance Radar (EASR) program that provides critical capabilities for America-class amphibious assault ships, amphibious transport docks, and aircraft carrier-class combatants. The committee believes these efforts demonstrate the feasibility of integrating RMA-based solutions to existing ship designs.

The committee believes that all future DDG-51 radar new construction procurements should remain consistent with the Navy's current destroyer modernization plan and leverage the AN/SPY-

6(V) radar modular assembly architecture to minimize operation and sustainment costs, reduce training and logistical requirements, and maintain affordability through economies of scale with other programs like EASR.

Section 127—Extensions of Authorities Relating to Construction of Certain Vessels

This section would extend incremental funding authorities for Ford class aircraft carriers and LHA replacement ships.

Section 128—Multiyear Procurement Authority for V–22 Osprey Aircraft

This section would authorize the Secretary of the Navy, subject to section 2306b of title 10, United States Code, to enter into one or more multiyear contracts, beginning with the fiscal year 2018 program year, for the procurement of V–22 Osprey aircraft and common configuration-readiness and modernization upgrades for the V–22 Osprey aircraft. Notwithstanding section 2306b(k) of title 10, United States Code, this section would also authorize the period covered by such contract entered into on a multiyear basis to exceed 5 years, but not to exceed 7 years. Additionally, this section would require that any such multiyear contract provide that any obligation of the United States to make a payment under the contract for a fiscal year, after fiscal year 2018, be subject to the availability of appropriations or funds for that purpose for such later fiscal year.

The committee encourages the Department of the Navy to execute a procurement profile for this multiyear in order to acquire the aircraft at economic order quantity levels that most efficiently acquire the aircraft and fully procures the programmed acquisition objective aircraft for the Department of the Navy.

#### SUBTITLE D—AIR FORCE PROGRAMS

Section 131—Streamlining Acquisition of Intercontinental Ballistic Missile Security Capability

This section would list findings regarding the acquisition of an aircraft to provide intercontinental ballistic missile security as a replacement for the UH–1N helicopter, express the sense of Congress that the Secretary of Defense should have the authority to expedite procurement of a replacement aircraft for the UH–1N helicopter, and authorize the Secretary of Defense to waive any provision of law requiring the use of competitive procedures for the procurement of a UH–1N helicopter replacement and enter into a contract for the procurement on a sole-source basis. The Secretary's authority in this section would be subject to a 15-day wait period, a notice of the Secretary's intent to exercise such authority, and the Secretary's certification of certain events and determinations.

Section 132—Limitation on Selection of Single Contractor for C– 130H Avionics Modernization Program Increment 2

This section would prohibit the Department of the Air Force from selecting a single contractor for the C-130H avionics modernization program increment 2 until the Secretary of the Air Force certifies

to the congressional defense committees that every opportunity will be taken to make use of commercial-off-the-shelf technology solutions and nondevelopmental items and that excessively restrictive military specification standards were not used as criteria to restrict or eliminate fair and open competition.

## Section 133—Limitation on Availability of Funds for EC-130H Compass Call Recapitalization Program

This section would restrict the Secretary of the Air Force from contracting with any entity for the purposes of the Compass Call re-host program until the Under Secretary of Defense for Acquisition, Technology, and Logistics submits a certification to the congressional defense committees that indicates the acquisition strategy has been reviewed and determined to meet applicable laws, guidelines, and best practices.

#### Section 134—Cost-Benefit Analysis of Upgrades to MQ-9 Reaper Aircraft

This section would require the Secretary of Defense, in coordination with the Secretary of the Air Force, to conduct a cost-benefit analysis that compares upgrading MQ-9 Reaper aircraft to a Block 5 configuration, or foregoing the Block 5 upgrade to MQ-9 aircraft and proceeding with procurement of MQ-9B aircraft instead. The provision also requires the Department of Defense to submit the analysis to the congressional defense committees not later than 180 days after the date of the enactment of this Act.

Subtitle E—Defense-Wide, Joint, and Multiservice Matters

## Section 141—Authority for Procurement of Economic Order Quantities for the F-35 Aircraft Program

This section would authorize the Secretary of Defense to enter into one or more contracts, beginning with the fiscal year 2018 program year, for the procurement of economic order quantities for material and equipment that has completed formal hardware qualification testing for the F-35 program and is to be used in procurement contracts to be awarded under the F-35 program in fiscal years 2019 and 2020. This section would also limit the amount of such contracts for fiscal year 2018, or any year thereafter, to not more than \$661.0 million. Additionally, this section would limit the Secretary of Defense from entering into such contracts until a period of 15 days has elapsed following the date on which the Secretary submits to the congressional defense committees a written certification that the contract meets certain conditions.

#### Section 142—Limitation on Demilitarization of Certain Cluster Munitions

The section would prohibit the elimination of cluster munition stockpiles considered to be non-compliant after January 1, 2019, according to the Memorandum of the Secretary of Defense dated June 19, 2008, regarding the Department of Defense policy on cluster munitions and unintended harm to civilians. The prohibition remains in effect until the Secretary of Defense certifies that the Department retains sufficient inventory levels of operationally suit-

able cluster munitions that comply with the Department's current policy, and meets at least 75 percent of the U.S. combatant commands operational requirements across the full range of military operational environments.

This section would allow the demilitarization of cluster munitions determined to be unserviceable due to a significant failure to meet performance or logistics requirements. Cluster munitions categorized as unserviceable solely due to current or amended Department of Defense policy related to cluster munitions would not meet this definition of unserviceable, and would be subject to the limitation in this provision.

#### Section 143—Reinstatement of Requirement To Preserve Certain C–5 Aircraft

This section would amend section 132 of the National Defense Authorization Act for Fiscal Year 2017 (Public Law 114–328) to reinstate the requirement for the Secretary of the Air Force to continue to preserve certain C–5 aircraft in a storage condition that would allow a recall of retired aircraft to future service in the Air Force Reserve, Air National Guard, or Active Force structure.

## Section 144—Requirement That Certain Aircraft and Unmanned Aerial Vehicles Use Specified Standard Data Link

This section would amend section 157 of the National Defense Authorization Act for Fiscal Year 2013 (Public Law 112–239) by: requiring the Secretary of Defense to notify the congressional defense committees not later than 15 days after a solicitation is issued for a Common Data Link-To Be Sunset (CDL–TBS) waveform; elevating waiver review and approval authority from the Under Secretary of Defense for Acquisition, Technology, and Logistics to the Deputy Secretary of Defense; and, terminating the waiver authority that enables use of legacy data link waveforms on October 1, 2023.

# TITLE II—RESEARCH, DEVELOPMENT, TEST, AND EVALUATION

RESEARCH, DEVELOPMENT, TEST, AND EVALUATION, ARMY

Items of Special Interest

Acoustic threat detection technology

The committee is aware of efforts undertaken by the Army to develop and operationally test acoustic threat detection technology as a method of improving forward operating base protection. The committee is also aware that acoustic threat detection technology has been successfully integrated and tested from fixed, aerostat, and deployable containerized platforms. As such, the committee encourages continued operational testing, to include limited user evaluations. If warranted, the committee expects the Army to consider acceleration of the transition of this technology to a program of record through the utilization of acquisition reform principles.

# AN/VVR-4 Laser Detecting Set

The committee recognizes U.S. Army ground combat vehicles are increasingly susceptible to laser-aided threats. The committee believes ground combat vehicle crews require a reliable means to identify laser threats and to apply countermeasures or take evasive action against the growing reliance by adversaries on lasers to enhance ballistic solutions on weapons terminal guidance systems. The committee believes a key element to the detection of these threats is the AN/VVR-4 Laser Detecting Set, and is aware the AN/VVR-4 Laser Detecting Set was designed to meet or exceed all performance and environmental specifications defined by the U.S. Army. Therefore, the committee encourages the Secretary of the Army to pursue initial production and fielding of the AN/VVR-4 Laser Detecting Set and to begin initial integration on the M1A2 Abrams tank.

Army counter-improvised explosive device technology

The committee recognizes that over the last decade the military services have succeeded in developing, fielding, and deploying highly capable systems to address the threats from improvised explosive devices (IEDs), and that the Department of Defense is currently supportive of additional ongoing development efforts, including, but not limited to, the Army's Research, Development, and Engineering Command's activities in this area.

However, the committee is concerned that despite progress in research and development, shortcomings may still exist in areas such as real-time and easily interpreted imaging, non-metallic detection, false alert rates, and non-invasive sensor technologies. The committee is aware of currently available technologies, tested and endorsed by close allies and partners, such as the United Kingdom, capable of providing additional protection from these IEDs.

Therefore, the committee directs the Commanding General of the U.S. Army Materiel Command to provide a briefing to the House Committee on Armed Services by September 1, 2017, on such technologies. This briefing shall include a detailed assessment of the Army's ongoing efforts to improve capabilities to counter IEDs, the extent to which existing and innovative sensor technologies are and will be incorporated into relevant development efforts, and the applicability of those technologies by allies and partner nations, such as the United Kingdom, to Army development efforts.

Army Network Integration Evaluations and Joint Warfighting Assessments

The committee acknowledges the importance of the Department of the Army's Network Integration Evaluation (NIE) exercises conducted at Fort Bliss, Texas, and White Sands Missile Range, New Mexico. The committee notes that, through this program, the Army has been able to test equipment in a realistic battlefield environment in the hands of soldiers so the Army can successfully integrate new technologies. The committee also acknowledges the importance of the Joint Warfighting Assessments (JWA). The committee recognizes NIE and JWA as critical cost saving measures since these exercises allow the Army to clarify program requirements and discontinue programs that do not meet Army needs. As a result, the Army has produced over \$1.8 billion in savings and

cost avoidance since 2011. The committee believes that these exercises help the Army to test emerging concepts, integrate new capabilities and technology, and promote interoperability between the

military services and U.S. allies.

The committee also acknowledges the investments made in the Joint Modernization Command, located at Fort Bliss, and encourages the Army to continue NIE and JWA exercises at Fort Bliss whenever possible to utilize those investments as well as the unique space, terrain, and freedom of movement available at Fort Bliss and White Sands Missile Range. The committee also acknowledges that NIE and JWA events should be brigade-level exercises when practical to ensure any systems tested will be fully capable of deployment at the brigade level.

While the committee believes that the NIE and JWA should continue to be an integral part of the Army's modernization strategy, and encourages the Army to pursue both the NIE and JWA, the committee understands that the Army is assessing the most efficient way to test the integration of new concepts and technologies. The committee directs the Secretary of the Army to provide a briefing to the House Committee on Armed Services by March 1, 2018,

on this assessment.

Army warfighter technology programs

The budget request contained \$39.6 million in PE 62786A for

Warfighter Technology research and development programs.

The committee is aware of the work being done by the Warfighter Technology Directorate in improving the protection, survivability, mobility, and combat effectiveness of soldiers. The committee understands the directorate is continuing research in the areas of advanced ballistic polymers for body armor, fibers to make more durable and breathable uniforms, fire resistant and lightweight infrastructures for advanced shelters, among other research programs that should provide tangible benefits to the individual soldier. The committee believes it is critical to ensure that the Army continues development of this technology and believes additional funding could help to accelerate its development.

The committee recommends \$44.6 million, an increase of \$5.0 million, in PE 62786A for Warfighter Technology research and de-

velopment programs.

Civil Support Team Information Management System

The committee is aware that the National Guard Bureau (NGB) Weapons of Mass Destruction-Civil Support Teams (CST) currently field a system called the "CST Information Management System" (CIMS) to provide a common operating picture, promote information-sharing and real-time collaboration in an emergency situation, and support the CST mission of assisting and advising first responders and facilitating communications with other Federal resources. The committee is aware that the NGB has developed a long-term strategy to expand that system to the rest of the Chemical, Biological, Radiological and Nuclear Response Enterprise, known as "NG CIMS 2018+." The current plan for NG CIMS 2018+would standardize the tactical common operational picture and information management systems for all elements of the CRE, and achieve full operational capability (FOC) by September 30, 2018.

The committee is also aware that this system has been successfully demonstrated in recent real-world operations and training events,

including the 2017 Presidential Inauguration.

The committee encourages the National Guard to continue to develop and deploy NG CIMS 2018+ on the current timeline, and utilize the National Guard and Reserve Equipment appropriation, if necessary, to ensure resourcing to meet that FOC date.

# Cold Temperature and Arctic Protective System development

The committee is aware that the Army is developing an updated cold weather clothing system referred to as the "Cold Temperature and Arctic Protective System" (CTAPS). The committee supports efforts to ensure that soldiers are equipped with organizational clothing and individual equipment for all environments. The committee is aware the CTAPS system would include flame-resistant technology similar to that of the current flame-resistant environmental ensemble. The committee encourages the Army to consider commercial-off-the-shelf technologies, as well as technologies already proven in current Army cold and extreme weather clothing systems as part of the CTAPS development program.

The committee directs the Secretary of the Army to provide a briefing to the House Committee on Armed Services by November 15, 2017, that includes the development timeline and schedule for CTAPS, as well as addresses the cooperative efforts being taken by the Army, to include the industrial base into the overall design of

the CTAPS system.

Enhanced lightweight hard armor and combat helmet research and development

The budget request contained \$20.2 million in PE 63827A for soldier systems—advanced development, to include weight reduction and performance improvements for body armor and combat helmets.

The committee has consistently highlighted the critical need for modernization of personal protective equipment (PPE), to include body armor and combat helmets. In previous legislation, the committee has expressed its concern regarding the Department of Defense's long-term strategy for PPE industrial base sustainment, and has encouraged the Department to pursue strategies that would allow for sustainment of this critical industrial base through modernization efforts. For example, section 141 and section 216 of the National Defense Authorization Act for Fiscal Year 2010 (Public Law 111-84) established separate procurement line items and separate program elements required for the procurement and research and development (R&D) of individual body armor and associated components. The committee continues to encourage and recommend a weapon system approach to PPE acquisition, in particular body armor and combat helmets. The committee believes this would provide for more efficient planning, programming, and budgeting for PPE, and would create a more stable environment for the industrial base to continue to invest in innovation and weight reduction technology.

The committee notes the Army's Soldier Protection System and other service R&D efforts have made significant progress in reducing the weight and improving the form, fit, and function of body

armor. The committee is also aware of current R&D projects in this PE to help advance improved performance. The committee understands that the Department of Defense Appropriations Act, 2017 (division C of Public Law 115–31) included an additional \$25.0 million in PE 63827A to continue to improve the capability of hard and soft body armor and combat helmets. The committee supports this initiative and understands the industrial base is ready to start the efforts to address the Army's two key goals of reducing body armor weight by 20 percent or more, and improving combat helmet capability against projected threats.

The committee recommends \$45.2 million, an increase of \$25.0 million, in PE 63827A to ensure continuity and sufficient resources are programmed for enhanced soft and hard body armor and combat helmet research and development. The committee also directs the Secretary of the Army to provide a briefing to the House Committee on Armed Services by March 14, 2018, on the Army's plan to obligate these additional funds, and identify potential develop-

ment projects that could be accelerated.

# Future Vertical Lift

The committee is aware that the Army is continuing execution of the Future Vertical Lift (FVL) analysis of alternatives (AOA) during fiscal year 2018, and the FVL initiative has been informed by concept definition efforts such as the Joint Multi-Role Technology Demonstration and the Vertical Lift Consortium. The committee recommends that the Army continue leveraging existing Other Transaction Authority efforts to execute concept definition studies for the purpose of informing acquisition approaches and advancing vertical lift technologies in support of future requirements. The committee encourages the Army to fully fund FVL efforts and to seek opportunities to accelerate the program based on performance and available resources.

#### High Bandwidth Tethered Unmanned Air Systems Technology

The committee understands that there are new, commercial tethered unmanned air system solutions that could provide significant improvements in the following capability sets: communications, persistent surveillance, force protection, and counter-VAS. The committee believes these improved capabilities could benefit the forward deployed warfighter. As such, the committee directs the Secretary of the Army to provide a briefing to the Committees on Armed Services of the House of Representatives and the Committee on Armed Services of the Senate by September 30, 2017, on the advisability and feasibility of procuring new, tethered-based multirotor platforms as a potential solution to address critical operational capability gaps in communication, expeditionary cyber operations, and intelligence collection requirements as well as counterunmanned aircraft systems applications.

# High Mobility Multipurpose Wheeled Vehicle external fire suppression systems

The committee is aware that in 2008 the Army pursued Work Directive 379 in response to an operational needs statement, and that the purpose of the directive was to explore options for fluid-based fires in the fuel tank and engine compartment of Army High Mobil-

ity Multipurpose Wheeled Vehicles (HMMWV). The committee is also aware that one of the recommendations resulting from this effort was to continue testing of fuel tank, engine, and tire improvements that could potentially reduce the risk of fluid-based fires. However, despite this recommendation, the Army chose not to pursue such improvements or validate a requirement for an external

fire suppression system (EFSS) for Army HMMWVs.

Given the evolution of fire suppression technology since this evaluation was conducted, the committee believes that the Army should reconsider the potential requirement for an EFSS for Army and Army National Guard HMMWVs. Therefore, the committee directs the Secretary of the Army, in coordination with the Chief, National Guard Bureau, to provide a briefing to the House Committee on Armed Services by September 1, 2017, on the advisability and feasibility of such a system being installed on Army and Army National Guard HMMWVs as part of HMMWV modernization and recapitalization programs.

# Improved Turbine Engine Program

The committee continues to support the Army research and development budget request for the Improved Turbine Engine Program (ITEP), as well as the acquisition strategy included in the request. ITEP is a competitive acquisition program that is designed to develop a more fuel-efficient and powerful engine for the current Black Hawk and Apache helicopter fleets. This new engine will increase operational capabilities in high/hot environments, while reducing operating and support costs. The committee acknowledges the benefits of improved fuel efficiencies through lower specific fuel consumption that ITEP will bring to the battlefield. In addition, the committee encourages the Army to prioritize maintenance and sustainment cost savings for ITEP to ensure the continued affordability of the program.

In the committee report (H. Rept. 114–537) accompanying the National Defense Authorization Act for Fiscal Year 2017, the committee required the Army to provide a briefing to the House Committee on Armed Services on potential options to accelerate the ITEP program. The committee notes that the Army provided the briefing and that the Army stated that there are two potential acceleration opportunities that will be informed by program knowledge points. The committee understands that performance and available resources will drive these two knowledge points. The committee encourages the Army to continue to fully fund this competitive program and to pursue acceleration opportunities based on program performance and available resources.

Improved vehicle camouflage systems and next generation signature management

The budget request contained \$91.0 million in PE 64804A for Logistics and Engineer Equipment-Engine Development. Of this amount, \$6.6 million was requested for next generation signature management systems.

The committee remains encouraged by recent research and the approval of the updated requirements document for next generation signature management systems for combat and tactical vehicles. The committee continues to recognize the importance of this

low-cost defensive capability against current and emerging threats, particularly in Europe, and encourages the Department of Defense to continue to accelerate development, procurement, and fielding of this advanced camouflage net system to meet warfighter requirements.

Given the immediate increasing demand for next generation signature management systems by combatant commanders, the committee encourages the Army, to the maximum extent possible, to accelerate completion of the research and development of the woodland and arctic camouflage variants in order to set the conditions for a low-rate initial production decision in fiscal year 2018, 1 year earlier than planned.

The committee recommends \$93.0 million, an increase of \$2.0 million, in PE 64804A to address an unfunded requirement for next generation signature management systems.

Integrated Air and Missile Defense command and control capabilities

The committee acknowledges that fielding of an Integrated Air and Missile Defense command and control set of capabilities remains the U.S. Army's Air Defense Artillery community's number one priority and believes that such capabilities are urgently required to meet warfighter needs.

However, the committee is concerned about continued programmatic challenges that have delayed even incremental capability delivery. The committee notes the President's budget request for Fiscal Year 2018 formalizes a shift of initial operational capability for the Integrated Air and Missile Defense (IAMD) Battle Command System (IBCS) from September 2016 to April of 2022 and that total program costs have grown from \$1.73 billion to \$2.68 billion as of the end of 2016.

The committee is further concerned about recent IBCS performance observations by the Department of Defense's Office of Operational Test and Evaluation which, in its February 2017 report, called the system's software "neither mature nor stable . . ." and by the Army Test and Evaluation Command which noted in report detailing a June 2016 limited user test that the system is "Not suitable, Not survivable, Not reliable."

The committee recognizes that the Army IAMD architecture has changed significantly since IBCS requirements were validated in 2009 with the cancellation of the Joint Land Attack Cruise Missile Defense Elevated Netted Sensor System (JLENS), the Medium Extended Air Defense System (MEADS), and the Surface Launched Advanced Medium Range Air to Air Missile (SLAMRAAM), and that emphasis has now shifted to integration of other Army systems.

Therefore the committee directs the Secretary of Army, not later than September 30, 2017, to provide a briefing to the congressional defense committees on the status of the IBCS program. At a minimum, this briefing shall include:

- (1) Updated information on programmatic risks, total estimated costs, and a new testing and fielding schedule;
- (2) The program's plan to address emerging threats such as cyber and electronic attack; and

(3) A plan for potential IBCS capability delivery acceleration, including options for how the Army could use Fiscal Year 2018 funding, prior year funding, or otherwise leverage other programs' investments to contribute or be incorporated into IBCS prior to the completion of fielding or investments that could alternatively meet program requirements.

Land-Based Anti-Ship Missile hardware and software integration and test capability

The committee understands the U.S. Army Aviation and Missile Research, Development, and Engineering Center has initiated a science and technology program for the Land-Based Anti-Ship Missile effort. This effort includes adapting existing Army and Marine Corps High Mobility Artillery Rocket Systems (HIMARS) and Multiple Launch Rocket System (MLRS) missile systems for this landbased offensive surface warfare capability. The committee is aware that HIMARS and MLRS systems could be limited to only engagement of stationary area and point targets using global positioning system aided inertial navigation, while maritime targets would require the capability to engage mobile target sets. The committee notes that additional technology consisting of integrating multimode seekers and datalinks to existing HIMARS and MLRS systems could be required, and also notes that this would be a significant advancement in capability. The committee expects the Army to program the necessary resources required across the Future Years Defense Program to begin the integration work and testing of the capability to address maritime targets.

Lightweight metal matrix composite technology for combat and tactical vehicles

The committee recognizes the versatility and broad application that Metal Matrix Composite (MMC) technology may provide to the armed services through weight reduction of vehicle components by potentially 50 percent, and in turn could increase the service life of vehicles by three to four times that of vehicles manufactured with traditional steel and armor. The committee understands the U.S. Army Tank and Automotive Research, Development, and Engineering Command (TARDEC) is currently evaluating technologies that can reduce vehicle weight, reduce fuel consumption, increase payload capacity, and extend service life of combat and tactical vehicles, and that MMC technology is part of this ongoing evaluation.

The committee directs the Commanding General of TARDEC to provide a briefing to the House Committee on Armed Services by November 1, 2017, on the progress of development and implementation of Metal Matrix Composite component technology in order to reduce vehicle weight, reduce fuel consumption, increase payload capacity, and extend service life.

# M4 Carbine Free Floating Rail Technology

The committee has long supported small arms modernization and continues to encourage increased investment to improve small arms capability. The committee notes that the Army continues to use and field legacy rail systems for use on M4 carbines. However, the committee understands that the U.S. Special Operations Command (SOCOM) and the Army Marksmanship Unit have begun to

field free-float rail systems instead of using current legacy systems. The committee is also aware that free-float rail systems are considered to be the commercial industry standard and are readily available. The committee understands that the Program Executive Office-Soldier (PEO-Soldier) through the Soldier Enhancement Program (SEP) is currently evaluating the SOCOM free-float rail system. The committee encourages the Army, subject to a favorable SEP evaluation, to consider the advisability and feasibility of developing an accelerated acquisition strategy for free-float rail systems.

The committee directs the Secretary of the Army, in coordination with PEO Soldier, to provide a briefing to the House Committee on Armed Services by December 1, 2017, on the results of the current SEP evaluation and the Army's plans for upgrading legacy rail systems

Material development, characterization, and computational modeling

The committee recognizes the importance of evaluation of materials and technologies, designs, and the development of methodologies and models to enable enhanced lethality and survivability. Methods such as computational research allow for the development of models that predict the mechanical properties of materials that are used in research and development at the U.S. Army Research Laboratory (ARL). These models and simulations provide a cost savings to the Department of Defense by simulating materials prior to testing them to ensure mechanical properties will work together. Additionally, these methodologies allow for the enhanced development of technologies, such as lightweight armors, protective structures, kinetic energy active protection, ballistic shock and mine blast protection, and helmet technologies to prevent traumatic brain injury, as well as numerous other uses. The committee encourages ARL to continue the utilization of computational modeling and simulations research to achieve greater cost savings.

# Mobile protected firepower

The committee understands that as part of the Army's modernization strategy, the Army is attempting to improve the tactical mobility and lethality of infantry brigade combat teams (IBCTs). The committee notes the mobile protected firepower (MPF) combat vehicle program would provide the Army's IBCTs with a mobile and survivable direct fire capability to defeat enemy armored vehicles, hardened fortifications, and dismounted personnel. The committee recognizes that the Army Chief of Staff has made MPF a high priority modernization program, and notes the Army is actively engaging with the industrial base to ensure clarity of requirements. The committee believes the Army is developing strategies to potentially accelerate the MPF schedule given that the current projected schedule has MPF fielding beginning in 2024.

Therefore, the committee directs the Secretary of the Army to provide a briefing to the House Committee on Armed Services by October 5, 2017, that outlines potential opportunities for MPF program acceleration. The briefing should include a review of testing requirements and potential areas for consolidation; funding required in fiscal year 2018 and beyond to accelerate the program;

and any areas of legislative relief that would be required in order to accelerate the program.

Multi-function explosive material detection technology

The committee notes that deployed U.S. military forces in the greater Middle East face a range of explosive threats from improvised explosive devices (IED), which vary based on geography, adversary technical expertise, and availability of different explosives. The committee is concerned that current explosive detection technology is limited to detecting a limited set of explosive materials. The committee is aware of research work conducted by the Joint Improvised Threat Defeat Organization and the Army in the area of multi-function detection technology between fiscal years 2012 and 2015 that had the potential of providing improved explosive material detection capability against certain threats. However, the committee was informed by the Army Armament Research, Development and Engineering Center (ARDEC) that there was no funding planned in fiscal years 2017 or 2018 to further pursue this technology due to a lack of a specific requirement. The committee is concerned that this potentially useful technology's development may be hindered as a result. Therefore, the committee directs the Director of the U.S. Army Armament Research, Development and Engineering Center to provide a briefing not later than September 30, 2017, on the mix of explosive materials that could be used to target US forces with IEDs, the variety of explosive detection technologies available, the potential utility of multi-function explosive detection technology, and an estimate of the funding necessary to accelerate work on this technology to a level that would enable thorough testing in the future.

# Open Campus

The committee commends the Army Research Laboratory (ARL) for establishing its new Open Campus concept. The committee notes that the goal of Open Campus is to build a science and technology ecosystem that will encourage groundbreaking advances in basic and applied research areas of relevance to the Army through a unique arrangement that allows government, industry, and academia to work collaboratively on projects in common spaces. Such innovation initiated at the laboratory level reflects current practices in industry and academia, and can be a useful tool in maintaining the ability of ARL to maintain its technological competency, workforce, and facilities. The committee also encourages the Army to explore opportunities to provide stipends for temporary sabbaticals to allow academic experts to conduct research at ARL and to consider funding long-term joint assignments between academia and government. The committee recognizes that Open Campus might be a useful model for the other military service laboratories to examine to improve their collaboration as well as attract new researchers and foster new multidisciplinary teams.

Rapid integration for emerging threats against missile system networks

The committee is aware that there are a number of rapidly emerging threats to the integrity and security of space and missile systems and their associated networks. The committee recognizes that the Program Executive Office for the Army Missile and Space Command is developing a capability to provide cyber-robust networked weapon systems the ability to assess and integrate rapid countermeasures to such threats. The committee understands this capability is accomplished through a unique approach to adapt to real-time threats, dramatically accelerating the timeline to employ resilience in networked weapon systems. Therefore, the committee directs the Secretary of the Army to provide a briefing to the Committee on Armed Services of the House of Representatives by March 1, 2018, on the status of progress being made through this accelerated program.

Remote weapon system development and integration for tactical and ground combat vehicles

The budget request included \$87.6 million in PE 64601A for infantry support weapons. Of this amount, \$22.5 million is for the purchase of prototypes, design improvements, and test and evaluation for a remote weapon station (RWS) that integrates a medium-caliber weapon system with a 30mm auto-cannon and a Stinger surface-to-air missile. This effort will support upgraded lethality capabilities for Army and Marine Corps tactical vehicles, including the Joint Light Tactical Vehicle (JLTV).

The committee understands these upgrades are necessary to fill emerging capability gaps identified by the Maneuver Support Center of Excellence (MSCoE) and identified in the Common Remotely Operated Weapon Stations (CROWS) Increment II Capability Development Document (CDD). The committee is aware the Army is considering upgrades to legacy remote weapon systems in order to accelerate fielding of this capability. The committee believes other alternative RWS platforms may be available that could address these capability gaps. The committee encourages the Army to consider a competitive acquisition strategy that would leverage advances made in this area by the industrial base that potentially generates better value for the warfighter, and address the capability gap without delaying fielding of this capability. However, the committee also recognizes that the Secretary of the Army can still exercise discretion in developing the appropriate acquisition strategy to meet urgent operational needs.

Therefore, the committee directs the Secretary of the Army to provide a briefing to the House Committee on Armed Services by August 31, 2017 that reviews the Army's current plan for acquisition and fielding of remote weapon stations for tactical and ground combat vehicles.

Report on heavy and Stryker brigade combat team wireless intercommunication systems

The committee understands the Army's Training and Doctrine Command conducted a requirement capability gap trace in March 2016 on wireless intercommunication systems for heavy brigade combat teams and Stryker brigade combat teams, and subsequently identified and re-certified a capability gap and standing requirements. The committee is aware the Army is conducting a Combined Arms Futures Integrated Exercise (CAFIX) assessment at the Maneuver Center of Excellence (MCoE) to identify potential technology solutions. Additionally, the committee understands that the

Program Executive Office Soldier (PEO Soldier) in coordination with the Army's Soldier Enhancement Program (SEP) is considering formal field user assessments of the wireless intercommunications systems evaluated by MCoE.

The committee directs the Secretary of the Army to provide a briefing to the House Armed Services Committee by March 29, 2018, that describes the technologies evaluated by MCoE during the CAFIX assessment, as well as provides the results of the SEP field user assessments.

Short range air defense advanced development

The committee believes there are significant capability and capacity shortfalls in the Army's short-range air defense artillery (SHORAD) force structure and posture. The committee notes the National Commission on the Future of the Army concluded that unacceptable modernization shortfalls can be found in SHORAD. Section 114 of the National Defense Authorization Act for Fiscal Year 2017 (Public Law 114-328) required an assessment of the ways and associated costs to reduce or eliminate capacity shortfalls in major capability areas, to include SHORAD. The committee has not received this assessment to date. However, the committee understands that the Army has conducted a Strategic Portfolio Analvsis and Review (SPAR) to review 780 programs and evaluate their impact on warfighting, and that the SPAR identified SHORAD as a top priority. Given current and emerging threats, to include the proliferation of small, unmanned aircraft as well as near-peer and peer competitors' anti-access and area denial capability, the committee supports the SPAR's assessment. The committee also notes that U.S. forces can no longer assume air superiority or air dominance in future overseas contingency operations, which makes SHORAD that much more important.

The committee understands the Army is pursuing a maneuverable, protected, SHORAD capability, as well as plans to modernize legacy SHORAD capability and capacity. The committee supports these efforts and would encourage the Army to develop ways to accelerate this capability.

### Software Based Mesh Network for Tactical Communications

The committee recognizes small dismounted teams require nodes of tactical communication that are operationally flexible, secure, reliable in austere and contested environments, and emit minimal electronic signature. Furthermore, the committee notes that satisfying these unique communications requirements often entails introduction of hardware infrastructure that degrades unit mobility, operational agility and stealth. The committee is aware of and encouraged by software-based alternatives that create secure mesh communications networks, are highly mission adaptable, hardware agnostic and scalable to larger maneuver units. As such, the committee directs the Department of the Army, in coordination with the U.S. Special Operations Command, to provide the Committee on Armed Services of the House of Representatives and the Committee on Armed Services of the Senate a briefing, not later than 90 days after enactment of this act, to include results of a market survey of existing software mesh capabilities, on its plan for addressing capability gaps in its tactical communications requirements.

# Soldier Enhancement Program

The budget request contained \$87.6 million in PE 64601A for Infantry Support Weapons. Of this amount, \$3.3 million was requested for Soldier Enhancement Program (SEP) initiatives.

The committee supports the work of the Soldier Enhancement Program operated by Program Executive Office Soldier. For several years, SEP has helped the Army rapidly evaluate and type classify commercial off-the-shelf individual equipment and organizational clothing to ensure soldiers in training and in the field have the best products available. The committee encourages the Army, through SEP, to continue evaluating additional equipment in order to ensure soldiers have the best and latest equipment possible, and believes additional funding will allow the program to expand the scope of its work.

The committee recommends \$90.6 million, an increase of \$3.0 million, in PE 64601A for Soldier Enhancement Program initiatives

# Soldier Power development

The committee understands that the Soldier Power portfolio consists of the squad power manager (SPM) and integrated soldier power and data system-core (ISPDS-C) with conformal central power source (CCPS), universal battery charger (UBC), flexible solar blankets, and soldier power generation programs. The committee is aware that the SPM and ISPDS-C with CCPS Capability Production Document (CPD) received final approval from the Vice Chief of Staff of the Army on May 15, 2017. The committee understands the UBC program is currently completing low-rate initial production and is on track for full-rate production approval decision in July 2017. The committee notes these capabilities provide soldiers with expeditionary power and multiple power management alternatives all designed for combat operations in austere environments and can be tailored to any mission. The committee supports these critical programs and believes that they will help to reduce the soldier's combat carrying load. The committee encourages the Army to continue to work with the industrial base to improve and upgrade components in the Soldier Power portfolio to potentially reduce weight and cost, as well as to improve overall performance.

#### Testing and evaluation of supercavitating ammunition

The committee understands the defense industry has been investing in research and development of full caliber supercavitating ammunition for use in small arms. The committee notes supercavitating ammunition can be used in various operational environments, including air-to-air, water-to-water, air-to-water and water-to-air, and that this technology could potentially address critical mission capability gaps for the warfighter.

The committee is aware that the Government of Norway's Norwegian Defense Research Establishment has performed tests and evaluation of supercavitating ammunition and that initial assessments regarding these tests have demonstrated positive results. Given these positive results of the Norwegian government's assess-

ments, the committee encourages the Secretary of the Army and the Secretary of the Navy to consider conducting similar tests and

evaluations of this technology.

Therefore, the committee directs the U.S. Army Program Executive Officer for Ammunition, in coordination with the Navy Surface Warfare Center-Crane, and any other relevant U.S. defense officials to provide a briefing to the House Committee on Armed Services by October 6, 2017, that addresses the advisability and feasibility of establishing a test and evaluation program that could provide for a full capabilities assessment.

Underwater munitions disposal and waterjet technology development

The committee remains concerned that the military services have programmed insufficient resources and attention towards technology that could significantly improve capabilities required for underwater explosive ordnance disposal. The committee notes the Navy continues to be threatened by mines placed in the waters in which they operate, as well as the Army having a requirement to remotely demilitarize obsolete, discarded, and unstable munitions that have become embedded in the undersea habitat, including coral, without damaging the ocean environmental habitat. As such, the committee understands the Department of Defense has a requirement for a feasible technological approach to recover a munition's chemical and explosive ordnance without removing the munition from the ocean environment that would both render a munition safe by removing the fuse, recovering the explosive material while also leaving the munitions body in place. The committee believes additional targeted research is needed to demonstrate technology capable of both remotely defeating mines threatening U.S. Naval forces, as well as providing the capability to demilitarize underwater munitions without damaging critical ocean habitat.

Therefore, the committee directs the Secretary of the Army, in coordination with the Secretary of the Navy, to provide a briefing to the House Committee on Armed Services by December 1, 2017, on research and development efforts by the Army and the Navy to further develop a prototype for underwater munition explosive ordnance disposal for the purpose stated above.

RESEARCH, DEVELOPMENT, TEST, AND EVALUATION, NAVY

#### Items of Special Interest

Academic partnerships for undersea technology

The budget request contained \$57.8 million in PE 63680N for the

manufacturing technology program.

The Navy has been studying the capacity of U.S. shipyards to maintain higher production rates for the Virginia-class submarine, while at the same time designing and then beginning construction of the first Columbia-class ballistic missile submarine in 2021. Although this is a feasible option aligned with the administration's stated strategic objectives, this scenario may present numerous schedule and affordability issues.

The committee is aware that opportunity may exist for the Navy to leverage existing relationships with higher education partners in the Manufacturing Technology (MANTECH) program to decrease the risk the proposed concurrency at the shipyards may pose for the cost and schedule of the programs. Specifically, the committee believes greater leverage of existing partnerships within MANTECH that are focused on undersea vehicle applications relating to several key fabrication and manufacturing processes technologies, including composites, metals, and electronics, may be beneficial.

Therefore, the committee recommends \$67.8 million, an increase of \$10.0 million, in PE 63680N to develop increased manufacturing capability through academic and industrial partnerships to better support the needs of the submarine and undersea fleet.

Advanced capability for 81mm and 120mm mortar development

The committee understands that the Marine Corps has a science and technology (S&T) objective for a precision-guided, extendedrange munition for the M252 81mm mortar system, and that the Office of Naval Research (ONR) is currently leading this effort. The committee is aware that ONR's goal is to demonstrate an affordable precision-guided round using a global positioning system or semi-active lasers with minimal size and weight growth that has an extended maximum range of 20 kilometers or more. The committee notes that current testing conducted by ONR in 2015 and 2016 have shown promising results, and that additional testing is planned in 2017 to demonstrate engagements in stationary and moving targets by utilizing a semi-active laser. The committee also notes that a potential employment concept option exists for either an 81mm or 120mm mortar round to be dropped from an aircraft at medium altitude with the mortar round utilizing precision guided maneuvering to strike the intended target set.

If either of these developmental and demonstration efforts are successful, the committee expects the Marine Corps to consider transitioning these validated employment concepts from S&T to a warfighting capability, and to consider developing an accelerated acquisition strategy that would utilize all available authorities to accelerate the acquisition of production ready, or near-production ready, capabilities.

#### Airborne anti-submarine warfare systems

The committee understands that the Secretary of the Navy continues to advocate for the advanced development and developmental testing of airborne anti-submarine warfare systems, including aircraft, equipment, and devices for use against all types of submarine targets. The committee notes that this includes sensors and components, processing, post-processing, data recording and display capabilities to address regional threat scenarios against surfaced or submerged conventionally and nuclear-powered submarines. The committee continues to support the rapid development of these technologies that are considered mature and provide increased operational capability through the use of the Rapid Capability Insertion program.

Amphibious Combat Vehicle engineering and manufacturing development

The budget request contained \$179.0 million in PE 65611M for

the Amphibious Combat Vehicle (ACV) program.

In testimony before the committee, senior Marine Corps officials, to include the Commandant of the Marine Corps, have described the Amphibious Combat Vehicle program as the service's highest modernization priority for the ground combat element. The committee supports the President's budget request for the ACV program. The committee commends the Marine Corps on executing an accelerated acquisition strategy that incorporates lessons learned from previous amphibious vehicle and armored personnel carrier programs. By using an incremental acquisition approach, the Marine Corps will be able to field a next generation modernized ground combat vehicle to the warfighter in an efficient and timely manner.

While the committee is encouraged by the progress of the ACV program to date, and the committee notes the program remains on cost and schedule with all engineering and manufacturing development prototype vehicles having been delivered, the committee will continue to exercise oversight on the ACV program. The committee will focus particular attention on the levels of concurrency, or overlap, that may exist between testing, and the low-rate production decision that is currently scheduled for the fourth quarter of fiscal year 2018.

The committee recommends \$179.0, the full amount requested, in PE 65611M for the Amphibious Combat Vehicle program.

#### Automated Testing Technologies

The committee is aware that the Navy's Automated Testing and Analysis (ATA) program was established to expand the use of automated test methods currently in use by the Navy, such as Automated Test and Re-Test, and adds new methods of testing, promotes the use of automated test technologies, and standardizes automated test practices, methods, and tools. In addition, funding supports the development of enterprise level strategies to apply ATA technology to a broad range of software-intensive acquisition

programs.

The committee applauds the Department's move to a more flexible and agile development approach for software intensive projects, but also recognizes that such activities must also be matched with the ability to do automated software assurance to improve security, and automated testing to improve software quality and effectiveness. While the Navy has struggled to develop an effective strategy for how to best utilize these technologies, the committee believes the other services and agencies are even more woefully underprepared to identify and adopt useful and effective automated testing technologies such as those demonstrated in the ATA program. The committee believes that automated tools like this could be beneficial to other service and agency test and evaluation activities for software intensive systems, and elsewhere in this bill has endorsed recommendations for how best to manage and centralize such tools to support widespread use across the services and agencies.

Therefore, the committee directs the Director of the Test Resource Management Center (TRMC) to provide a briefing to the

House Committee on Armed Services assessing the current state of the art in automated testing technologies available in the commercial marketplace by March 1, 2018. This briefing should assess the requirements for automated testing tools across each of the services and defense agencies developing software-intensive systems, include a matrix with current commercial automated testing tools that could service those requirements, a rough order of magnitude assessment of the resources needed for those tools, recommendations for making such tools available on an enterprise basis, and recommendations for measuring the use of and effectiveness of such tools, such as through quantitative goals for the reduction of time and improvements in the quality of tested software across the enterprise.

# Barking Sands Tactical Underwater Range modernization

The budget request contained \$66.5 million in PE 24571N for consolidated training systems. Of this amount, no funds were requested for research and development to upgrade the anti-submarine warfare (ASW) underwater range instrumentation needs at the Barking Sands Tactical Underwater Range at the Pacific Missile Range Facility in Hawaii.

The committee recognizes that the military's ability to conduct advanced ASW training is a critical aspect of our military technological superiority. The Barking Sands Tactical Underwater Range, which was designed, manufactured, and installed in 1994, is the largest underwater instrumented range in the world, and covers over 1,100 square nautical miles. However, the committee is concerned that the current system is beyond its 20-year design life, and rapidly becoming difficult to operate, repair, and maintain. Senior leaders within the Nation's submarine community have been on record since 2012 calling for a range replacement to begin in order to maintain worldwide ASW fleet readiness and superiority.

Therefore, the committee recommends \$76.5 million, an increase of \$10.0 million, in PE 24571N to support upgrading the ASW underwater range instrumentation needs at the Barking Sands Tactical Underwater Range.

#### F/A–18 noise reduction research

The committee understands that Navy testing to date on F/A–18E/F Super Hornet noise reduction concluded that engine chevron attachments achieved significant noise reduction in a limited area of the F/A–18's engine's power settings. However, the committee has also been informed by the Navy that further research is likely needed to determine if chevron attachment technology can be improved to cover a wider range of F/A–18 engine power settings, and in particular the range of settings most relevant to high-noise flight operations near naval air stations.

Therefore, the committee directs the Secretary of the Navy to provide a briefing to the House Committee on Armed Services not later than September 1, 2017, on the results of all noise reduction research complete as of the date of the briefing, its plans for continued testing of noise reduction technologies for the F/A–18E/F Super Hornet, and any possible funding needed to pursue such testing efforts in the future.

# Incremental development of Next Generation Jammer

The committee notes that the Navy's Next Generation Jammer (NGJ) program is an element of airborne electronic attack that is required to meet both current and emerging electronic warfare capability gaps and shortfalls. The committee understands that the Navy plans to field NGJ capabilities in three increments, with each increment designed as separate podded systems that will cover a different segment of the electromagnetic spectrum. NGJ increment one is designed for the mid-band threat range, while NGJ increment two will be designed to cover frequency ranges to counter emerging threats from low-band radar systems.

The committee expects that funding already invested to develop NGJ increment one capability likely resulted in product development lessons learned that could be applied to implement efficiencies and capabilities, which could reduce the overall development cost of NGJ increment two capability. Furthermore, the committee notes that the modular open-architecture design of NGJ increment one should offer the Navy a significant opportunity to benchmark capability that could be leveraged into the design of

NGJ increment two capability.

# Littoral Combat Ship immersive virtual ship environment

The committee notes that the Littoral Combat Ships (LCS) training and certification capability is a key enabler of the reduced crew size. The Navy indicated that the LCS training is based on a virtual ship-centric concept, accomplished through a combination of classroom instruction, vendor training, shore-based trainers, and sophisticated virtual reality training systems. The committee notes that the original LCS training design relied upon using an immersive, virtual ship environment (IVSE) to replicate key training objectives and protocols for both ship variants. The committee continues to support efforts to fully employ such sophisticated training, particularly live-virtual-constructive training, for the LCS fleet with the objective of improving sailor performance through higher-fidelity, effective training solutions.

Despite the broad acknowledgement of the value of this approach to training, positive fleet feedback from the first immersive course, and the existence of a contract vehicle to support courseware development, the committee believes the Navy has been slow to leverage this capability to address readiness. The committee is concerned about the Navy's commitment to addressing the LCS training environment. In light of ongoing LCS operations and maintenance challenges, the committee encourages the Navy to more fully utilize

IVSE courseware.

## Marine and hydrokinetic technology

The committee is aware of the U.S. Navy's vision in the 30-year research and development plan for supporting energy harvesting, undersea sensor nets, and unmanned underwater vehicle operations. In order to conduct many of the development and research projects planned by the Navy, the committee recognizes the need to have sufficient infrastructure to not only test, but also to do a broader range of experimentation, prototyping, and development that will be necessary for future naval capabilities. The committee encourages the Navy, in coordination with its other Federal partners, to continue its support for the development of marine and hydrokinetic technologies, including research, testing, and demonstration of maritime security systems, at-sea persistent surveillance and communications systems, and unmanned undersea vehicle charging. The committee believes that support from existing facilities, such as the Navy's Wave Energy Test Site in Hawaii and other research facilities that are supporting marine and hydrokinetic energy systems technology development, will be critical to developing the naval force of the future.

Marine Corps and Navy small unmanned aircraft system and capability development

The committee supports the U.S. Marine Corps pursuit of nanosized vertical takeoff and landing small unmanned aircraft systems at the squad level to help Marines in small units enhance situational awareness. The committee notes that this plan was further supported in the 2017 Marine Corps Land Systems Investment Plan. For squad-level missions, pocket-sized sensors provide soldiers with improved intelligence, situational awareness, and enhanced targeting capability. The committee understands that this technology has been successfully demonstrated by the Army and allied militaries during operations, and believes it holds promising potential for Marine Corps operations. The committee is further aware that the Marine Corps Requirements Oversight Council approved a nano-sized and vertical takeoff and landing (VTOL) small unmanned aircraft system (SUAS) program.

The committee also recognizes that the Navy and Marine Corps are taking advantage of and increasing reliance on the many capabilities that SUAS have to offer. The committee understands that computer vision and machine learning algorithms have been used by other agencies of the federal government for the past decade for various applications ranging from face recognition to three-dimensional surface modeling. Until recently, these algorithms have required significant computational resources, and therefore, power consumption. However, because of recent technological advancements, it is now possible to place an embedded processor on a SUAS and perform a number of computer vision tasks onboard. Technologies developed by Small Business Innovative Research in the specialty of object detection, tracking, and recognition have high potential for addressing Department of Defense intelligence community surveillance and reconnaissance challenges. Automated object detection and tracking (AODT) capability for SUAS platforms applied to airborne computer vision technology have the potential to provide seamless, secure, and scalable SUAS deployed systems in support our Nation's surveillance and reconnaissance efforts.

The committee encourages the Navy and Marine Corps to advance development and implementation of nano-sized VTOL SUAS capability at the squad level, to include researching AODT integration opportunities. Therefore, the committee directs the Secretary of the Navy to provide a briefing to the House Committee on Armed Services not later than December 15, 2017, providing the status of the nano-sized and VTOL SUAS programs, a detailed discussion of the technologies being reviewed, and the acquisition

strategy for potentially implementing this capability into the Department of the Navy.

Marine Corps female body armor

The committee commends the Marine Corps for updating its guidance for body armor sizes to better fit Marines at both ends of the size distribution scale. Whereas before the standard for body armor sizes was to cover Marines from the 5th to 95th percentile in size, the new guidance goes further to cover the 2nd to 98th percentile in order to provide better form, fit, and function to a greater range of male and female Marines. The committee also notes that the Marine Corps made other changes to its plate carrier system to improve the fit for both smaller and larger Marines. The committee understands that the Marine Corps believes that this new sizing approach is the best way to ensure female Marines have body armor that fits properly. The committee supports these efforts.

In the committee report (H. Rept. 114-537) accompanying the National Defense Authorization Act for Fiscal Year 2017, the committee directed the Secretary of Defense to provide a briefing to the committee outlining plans to provide personal protective equipment (PPE) and organizational clothing and individual equipment developed specifically for female service members. The committee notes that this briefing was supposed to be presented by March 1, 2017; however, the Department of Defense requested additional time and now expects to deliver the briefing in late June 2017. As such, the committee remains concerned that the Marine Corps and the Army continue to take different approaches to the development of PPE, to include body armor, for female service members. Specifically, the committee notes that the Army has fielded female improved outer tactical vests, better designed female protective undergarments, ballistic combat shirts, as well as requiring female variants for the Torso and Extremity Protection System, as part of the overall Soldier Protection System. While the committee recognizes that both military services are trying to provide the best possible protection to their service members, the apparent disconnect on this issue is concerning. The committee expects the Marine Corps to fully coordinate with the Army regarding the Army's development of body armor and PPE to meet specific female needs.

Therefore, the committee directs the Commanding General, Marine Corps Combat Development Command, in coordination with the Principal Military Deputy to the Assistant Secretary of the Army for Acquisition, Logistics, and Technology, to participate in the briefing, as required by H. Rept. 114–537, to address the Marine Corps' views on the Army's female PPE efforts, as well as the Marine Corps' position on the appropriateness of adopting the Army's approach to PPE and body armor development for female service members. The committee further directs that the Secretary of Defense provide the briefing no later than September 1, 2017.

Marine Corps Group 5 unmanned aircraft systems experimentation initiative

The budget request included \$8.0 million in PE 34240M for advanced tactical unmanned systems, of which \$5.0 million is for development and capability requirements of the Marine Air Ground

Task Force Unmanned Aircraft System Expeditionary with Vertical/Short Take-Off and Vertical Landing Group 5 UAS capa-

bility (MUX).

The committee notes that these funds will allow for early trade studies, analysis, experimentation, and concept refinement for MUX capability, and that the MUX system's initial capabilities document was approved in October 2016. The committee is aware that the material development decision and analysis of alternatives is also planned to start in fiscal year 2018. The future MUX system concept is envisioned to be a multi-mission, weaponized, shipboard capable, expeditionary system that is runway independent for all weather, long-range, and persistence operations from the sea in a contested environment. The MUX effort will inform future program scope and phasing for development of a MUX capability that is planned to be part of a future program of record, supporting Expeditionary Force 21 Operating Concepts.

The committee looks forward to engaging with the Marine Corps as the MUX capability becomes more refined in the future. The committee also encourages the Commandant of the Marine Corps to proactively keep the committee apprised of concept refinement and any developmental efforts regarding the MUX capability.

The committee recommends \$8.0 million, the amount of the request, in PE 34240M for advanced tactical unmanned systems.

## Maritime Strike Tomahawk

The budget request contained \$133.6 million in PE 24229N for Tomahawk mission planning and development. Of this amount, \$114.8 million was requested for the Maritime Strike Tomahawk

program.

The committee remains concerned about the Navy's ability to relieve the back-loading of development funding for the Maritime Strike Tomahawk (MST) effort. The vision of the Navy regarding the MST program implementation is to install the MST components in missiles concurrently with the Tomahawk missile recertification program. The committee supports this expanded research and development of the MST capability and the concurrent delivery of the MST effort with the Tomahawk recertification process.

The committee recommends \$123.8 million, an increase of \$9.0 million, in PE 24229N for the Maritime Strike Tomahawk program.

Modification to independent review of F/A-18 physiological episodes and corrective actions as required by section 237 of the National Defense Authorization Act for Fiscal Year 2017

Section 237 of the National Defense Authorization Act for Fiscal Year 2017 (PL 114–328) required an independent review of F/A–18 Physiological Episodes (PEs) and corrective actions. The findings of the Independent Review are to be sent to the congressional defense committees by December 1, 2017.

The committee notes that in June 2017 the Navy issued a Comprehensive Review (CR) examining the facts, circumstances and processes surrounding the recent PEs involving T-45 and FA-18 aircrew, including recommendations for how best to address this ongoing problem. The Committee notes with concern the CR's finding that at least four deaths have been related to incidents involving mishaps involving PEs over the past several years.

Therefore, as part of the Independent Review required by Section 237 of PL 114–328, the committee directs the Secretary of the Navy to provide further information on the service's effort to address this problem in the immediate and long term. This information should include, but not be limited to, addressing the findings and recommendations provided in the June 2017 CR including the Navy's plans (including aircraft design changes) to address the following:

(1) execution of a depot-level deep dive inspection of the entire F/A-18 environmental control system and onboard oxygen generation system, to include associated sub-components and piping;

(2) replacement of the F/A-18 cockpit altimeter;

(3) redesign of F/A-18 aircraft life support systems as required to meet onboard oxygen generation system input specifications;

(4) development of comprehensive F/A-18 physiological event resolution instrumented data plans including multi-media in-flight audio/video recording;

(5) design of an F/A-18 automatic or semi-automatic initiation of

emergency oxygen;

(6) design of an F/A–18 automatic ground collision avoidance system;

(7) designs for improved FA-18 physiological monitoring and alerting systems;

(8) how all improvements to the F/A-18 aircraft will be included

in future F/A-18 production.

The information provided by the Secretary of the Navy should also include an assessment of whether the Navy and the Independent Review Team have the Resources necessary to carry out its mission. Should resources be found to be insufficient, the Secretary of the Navy shall include an estimate of what resources are necessary.

# MQ-25 Unmanned Air System

The committee notes that the MQ-25 Unmanned Air System program is programmed to provide an air refueling capability. The committee supports this unmanned air refueling capability and believes that it is critical that the Navy integrate an unmanned aerial vehicle into carrier aviation operations to increase the striking power of carrier air wings.

However, the committee is concerned that while the MQ-25 program continues to leverage Unmanned Carrier-Launched Airborne Surveillance and Strike (UCLASS) requirements justification, the most recent documentation that was sent to industry did not include precision strike capability as a requirement. The committee believes that the Navy may be unnecessarily excluding a critical capability and precluding future growth in a platform that will likely be integrated into the carrier air wing for the next 30 years.

Finally, the committee directs the Comptroller General of the United States to submit a report to the congressional defense committees by March 1, 2018, on the Navy's carrier based unmanned aircraft acquisition program(s), with specific focus on the MQ-25 that takes into account the revised capability development document. At a minimum the report should include: (1) the extent to which the program(s) have established cost, schedule, and performance goals, including test, production, and fielding plans; and (2) an assessment of program progress toward meeting those goals.

Naval energetic materials roadmap

The committee is aware that energetic materials, including both explosives and propellants, are critical components to Navy weapon systems and munitions. While the committee is aware that Navy laboratories and engineering centers have been involved in some research into energetic materials, the committee is concerned that these investments have not been strategic in scope or direction. Much of the ongoing work is devoted to sustaining legacy formulations for energetic materials, not investing in new or revolutionary propellants or explosives.

Therefore, the committee believes that the Navy should pursue a renaissance of its energetic materials enterprise and directs the Secretary of the Navy to develop a long-term science and technology roadmap for the development of energetic materials, both explosives and propellants. In developing this roadmap, the committee believes that Navy should consider the identification of the long-term research opportunities for the Navy for energetic materials; an assessment of the current laboratory and engineering infrastructure to meet the needs of this roadmap; and a resourcing strategy. The committee further directs the Secretary of the Navy to provide a briefing to the House Committee on Armed Services by March 2, 2018, on the plan.

Passive rocket propelled grenade armor protection technology

The committee notes there have been significant improvements in passive rocket propelled grenade (RPG) armor protection over legacy RPG armor systems, which are heavy and cumbersome, as well as present form, fit, and function constraints, particularly for Marine Corps ground combat tactical vehicle fleets operating in expeditionary environments. The committee encourages the Secretary of the Navy to consider lightweight RPG armor solutions that provide protection against RPG attacks, while maintaining the ability to fold flat against the vehicle to allow for rapid deployment and transport from amphibious ships and aircraft.

Scalable energy and chemical conversion system

The committee supports continued research by the Office of Naval Research into the development of a scalable energy and chemical conversion system. The goal of this research and development project is to convert small waste-energy sources, such as landfill gas, animal digester gas, sewage treatment plants, agricultural and forest product wastes, and wellhead flare gas, into useful fuels and chemicals. The committee is aware that a demonstration effort could take waste methane emissions from a solid-waste landfill, clean and desulfurize the methane, and then convert it catalytically into gasoline. Once fully piloted, it is anticipated that such plants would not only reduce or eliminate their fugitive methane emissions, but also the methane captured could be converted into a useful fuel with only a 2-year payback period before it becomes a positive cost contributor to the overall waste collection and disposal process. The committee encourages this research as a way to potentially reduce fuel cost for the military, and potentially address supply chain concerns in forward areas.

# Torpedo defense

In 2010, the Chief of Naval Operations issued an urgent operational need for a robust surface ship torpedo defense (SSTD) system to address a range of torpedo threats facing the Navy's high value units. In response, the Navy accelerated research and development efforts of torpedo detection and defense capabilities, resulting in the deployment of a towed array sensor system and passive sonar signal processing, automation, and tactical control system four years ahead of its original schedule. Today, five systems with more than 20,000 operational hours are deployed on aircraft carriers, with active sonar upgrades to be delivered for all systems in 2017. In parallel, industry has continued to implement planned technology upgrades, with Department of Defense officials confirming that the most recent sea trial successfully identified system achievements and further development priorities.

The committee notes that these improvements have occurred against the backdrop of increasing torpedo threats as other nations become more aggressive in the maritime domain. While the intended goal was to develop a full SSTD capability for a program of record while supporting deployed systems, the committee understands that accelerating the program in this manner impacted funding originally planned for the program of record development. The committee appreciates the Navy's plan to use the results of the 2017 Quick Reaction Assessment (QRA) to help inform and validate the size and scope of planned future investments in this critical technology. While the committee also supports the Navy's interim plan to fully fund necessary upgrades to ensure the highest operational availability and performance of currently deployed CVN systems, the committee notes that the FY2018 SSTD budget request does not provide full funding to achieve this goal, let alone enable appropriate program planning and adjustments that may result following a successful QRA. As such, the committee believes that this capability is essential to support the fleet and will continue to monitor this program.

In addition, the committee notes that through the SSTD program, the Navy has expended significant resources to develop advanced Torpedo Warning System (TWS) software and algorithms for torpedo detection, classification and localization that could be used to enhance torpedo warning capabilities on surface ships, particularly combatants that carry a MultiFunction Towed Array (MFTA). This expanded utilization of the TWS capability aligns with the Navy's efforts to work across domains to leverage existing systems and programs to achieve efficiencies while addressing requirements effectively. Therefore, the committee directs the Navy to provide a briefing to the House Committee on Armed Services, no later than November 1, 2017, on the ability to integrate applicable surface ship torpedo defense technologies to support an expanded range of ships and the results of the QRA and related testing events. At a minimum, this briefing shall include an in-depth analysis of: the current and foreseeable torpedo threats facing surface combatants; requirements for a torpedo defense capability on surface combatants; the applicability of the Navy's existing test and operational data regarding the torpedo defense system to surface combatants; and cost savings that would be achieved by capitalizing on the integration of mature SSTD capabilities on a broader range of surface ships.

Workforce management at Navy test ranges

The committee notes that Navy elements of the Major Range and Test Facility Base (MRTFB) operate under the Navy Working Capital Fund (WCF). As such, their workforce management should be dictated by section 2208 of title 10, United States Code, which allows for flexibility in decisions to expand the workforce driven by the funded work coming in from other Navy or government customers. However, other parts of the MRTFB, which in the other military services do not operate in a WCF, use a billeting system to manage the workforce. The committee notes that such conflicting workforce management methods can prove to be problematic when funding work across the MRTFB enterprise. The committee is concerned that this uncertainty may be posing challenges for planning at these Navy test ranges.

Therefore, the committee directs the Secretary of the Navy to provide a briefing to the House Committee on Armed Services by October 2, 2017, on the workforce management policies at Navy MRTFBs, including any shortfalls in staffing, conflicts in guidance between WCF organizations and MRTFB organizations, and recommendations for improving hiring and talent management at these facilities.

RESEARCH, DEVELOPMENT, TEST, AND EVALUATION, AIR FORCE

## Items of Special Interest

Adaptive engine transition program

The committee continues to support Department of the Air Force efforts to mature technology and reduce the risk for the adaptive cycle engine (ACE). The committee notes that the Department of the Air Force has given official engine designations to the two competing ACE concepts. The committee also understands that significant accomplishments validated by the Department of the Air Force include the designation of technology readiness level six for the adaptive fan technology, completion of a preliminary design for an ACE, and validation of third stream cooling air operation for aircraft and engine heat sink capacity. Accordingly, the committee believes that both legacy and future aircraft can benefit from this technology and capability.

Therefore, the committee recommends the full amount requested in PE 64858F to continue the adaptive engine transition program, and further encourages the Department of the Air Force to continue to make the necessary investments in these critical technology demonstrations and engine developments to ensure achieving operational capability at the earliest opportunity.

Advanced laser technologies for coating removal, surface restoration, and repair

The committee recognizes the mission critical importance of using cutting-edge technologies in Air Force service depots. The committee notes that technologies such as advanced laser coating removal, repair, and additive restoration of aircraft skin made of

metal and composite materials results in significant increases in warfighter system readiness, sustainability, better environmental outcomes, and cost savings. By improving and upgrading laser technologies and incorporating them into aircraft life cycle, depot, and field programs, the Air Force has estimated a significant annual cost savings across all airframes and other Air Force systems and ground support equipment. Additionally, the Air Force has estimated environmental hazards due to coating removal at depots to be reduced by 50 percent through the use of laser technologies. Therefore, the committee encourages the Product Support Engineering Division in the Air Force Life Cycle Management Center, in support of the Air Force depots, to qualify and incorporate advanced laser technologies for de-painting, restoration, and repair of aircraft surfaces for both metal and composite surfaces.

# Advanced pilot training program

As the Department of the Air Force continues to recapitalize its combat aircraft with fifth generation fighters and bombers, the committee is becoming increasingly concerned with the T-38C's inability to safely and affordably train the Department of the Air Force's incoming pilots. In the committee report (H. Rept. 114–537) accompanying the National Defense Authorization Act for Fiscal Year 2017, the committee noted that the average age of aircraft in the T-38C fleet is 50 years, with an average of over 16,000 flight hours on each aircraft. As a result, the committee believes that the T-38 is reaching the end of a safe and viable service life, and is increasingly unable to provide the modern pilot training required by the Department of the Air Force. The committee notes that the APT program office is currently engaged in the in-source selection phase to evaluate proposals received by the submission deadline of March 30, 2017, and that contract award is anticipated to occur late in 2017. Upon contract award, the committee understands that the program will enter a limited development phase to finalize and verify system design prior to a production decision planned for fiscal year 2022. The committee also understands that the Air Force plans to make a full rate production decision and declare initial operating capability in 2024. Further, the Department of the Air Force plans to attain full operating capability of the APT system in 2034. The committee notes that the costs of sustaining the T-38C fleet are growing even as aircraft availability is decreasing, and that the T-38C was originally intended to undergo replacement in the mid-1990s. Accordingly, the committee continues to believe that any delay to the APT program will place the Department of the Air Force combat readiness at risk, and that maintaining or accelerating the current APT program schedule is required to ensure safe and effective training of Department of the Air Force

Therefore, the committee recommends the full amount requested in PE 64233F to continue the T–X program. The committee also directs the Secretary of the Air Force to provide a briefing to the House Committee on Armed Services not later than January 15, 2018, on potential options to accelerate the APT program, subsequent to contract award.

Air Force dual-mode missile testing and evaluation

The committee understands the Department of the Air Force's plans to complete development and fielding of the GBU-53 Small Diameter Bomb II (SDB II) weapon, with initial operational capability on F-15E aircraft planned in fiscal year 2019. The committee notes that the SDB II has a three mode sensor that provides capability against many target sets in a variety of conditions. The committee also notes that, based on the 2016 selected acquisition report to Congress, the average procurement unit cost for the GBU-53 is approximately \$140,000 per weapon. The committee supports continued development, production, and fielding of the GBU-53.

However, the committee also encourages the Department of the Air Force to look at less expensive dual-mode missiles that, if proven effective and fielded in quantity, could help increase precision munition stocks. In particular, the committee is concerned that the Department of the Air Force may struggle to meet anti-armor precision weapon stock requirements in a U.S. European Command context. Therefore, the committee encourages the Department of the Air Force to conduct integration testing with any dual-mode, air-launched, anti-armor missiles currently in production and available to the Department of the Air Force, including the Brimstone missile now in service with the United Kingdom of Great Britain and Northern Ireland and the Kingdom of Saudi Arabia, or other similar weapons.

# Air Force test and evaluation support

The budget request contained \$678.3 million in PE 65807F for the Department of the Air Force. Of this amount, the budget request contained \$640.8 million for Department of the Air Force test and evaluation support. The committee notes that test facilities capabilities and resources operated through this program include wind tunnels, rocket and jet engine test cells, armament test ranges, civilian payroll, and contractor services.

Department of the Air Force officials have informed the committee that funding for test and evaluation support is about \$30.0 million below its historical norm, and that this funding erosion has diminished the ability of the Air Force Test and Evaluation (T&E) enterprise to support T&E of next generation capabilities in the near-term. Therefore, the committee recommends an increase of \$30.0 million for this purpose.

Additionally, the committee understands that due to late resolution of a collective bargaining agreement for a test range operations and maintenance contract, the determination of required increases for pay and benefits did not occur in time to be addressed in the fiscal year 2018 budget request. The Department of the Air Force has informed the committee that the shortfall amount is \$2.4 million, and without these funds, critical support to ongoing testing of weapons systems and support for operational training activities would be in jeopardy. To address this shortfall, the committee recommends an increase of \$2.4 million.

Finally, the committee understands that the Department of the Air Force does not have a validated requirement for joint threat emitters (JTEs) at all test ranges. However, the committee believes that the installation of JTEs on all test ranges would enhance tactical fighter pilot training, particularly for pilots flying fifth genera-

tion aircraft at nearby locations. Therefore, the committee encourages the Department of the Air Force to reconsider its requirement for JTEs at all test ranges.

In total, the committee recommends \$710.7 million, an increase of \$32.4 million, in PE 65807F for Air Force test and evaluation support.

# Assessment of Air Force Test Center

The committee acknowledges the importance of the Air Force Test Center (AFTC) and the invaluable developmental test and evaluation (DT&E) of air, space, and cyber systems conducted throughout the AFTC enterprise. The AFTC enterprise leverages its 31 locations across the U.S., 100-plus aircraft, and a workforce of 18,000 strong to carryout complex electronic warfare testing, airframe and avionics testing, propulsion testing, C4ISR testing, and weapons integration. The Committee notes that through the AFTC the Air Force has successfully tested equipment and aircraft in a realistic and cutting-edge environment, ensuring the U.S. maintenance of airpower superiority.

While the Committee believes that the AFTC should continue to serve as the cornerstone of Air Force's test and evaluation enterprise, the Committee understands that the AFTC faces unique challenges in carrying out its mission. These challenges include funding for critical sustainment, restoration, and modernization of test capabilities; development and growth of hypersonic infrastructure and testing capabilities; and increasing workforce recruitment and retention. The committee directs the Secretary of the Air Force to submit a report on its assessment of these challenges and plans to address such challenges to the House Committee on Armed Services by March 1, 2018.

## Battlefield airborne communications node program

The committee notes that the battlefield airborne communications node (BACN) system was initially developed to meet an urgent warfighter need, and continues to provide critical communications and information sharing capability between disparate tactical data and voice networks in some of the most challenging and important environments around the world. The committee appreciates the Department of the Air Force's efforts to establish a program of record, and encourages continued progress towards this goal.

In addition, the committee encourages the Secretary of the Air Force to continue the planning and establishment of a BACN program of record while continuing to meet ongoing warfighter requirements in theater. As part of the program's future, the committee encourages the Secretary to begin system modernization planning in support of anticipated future requirements across multiple theaters to ensure that BACN capability is maintained in the Department of the Air Force to support joint operational communications, 5th Generation communications, Combat Cloud, and data networking requirements.

# Educational Partnership Agreements

The committee is aware that the Air Force performs a wide range of advanced research and engineering in multi-disciplinary design for unmanned air platforms. Further, the committee recognizes that advanced modeling and design, as well as quicker comparative analyses, are beneficial to this effort. The committee believes that academia is well-suited to partner with the Air Force on modeling, design, and comparative analysis through the use of Educational Partnership Agreements, which are mutually beneficial agreements that also may enhance the Air Force's effort to recruit a diverse and educated workforce. The committee encourages the Air Force to leverage Educational Partnership Agreements for advanced research and engineering for unmanned air platforms.

# F135 aircraft engine component improvement program

The budget requested contained \$32.3 million in PE 27268F for

the F135 aircraft engine component improvement program.

The committee notes that the F135 component improvement program (CIP) provides the only source of critical sustaining engineering support for this in-service propulsion system. Engine CIP maintains flight safety, fixes in-service revealed deficiencies, and improves system operational readiness and reliability and maintainability (R&M) to reduce propulsion system life-cycle cost and sustain the propulsion system throughout the service life of the aircraft. With most F135 systems design and development funding ending in fiscal year 2018, CIP funding will be a critical part of efforts to maintain single engine safety and support of the F-35 fleet.

The committee notes further that in 2015 the F135 CIP successfully completed a full service life demonstration test, and that the program continued in 2016 with an engine assembled and delivered to test by the end of the year. In addition, the program is now positioned with multiple tasks for design and development which will contribute to the planned course of reliability specification requirements. The committee believes that continued funding of CIP will ensure that necessary improvements can be properly fielded following planned task design, development, and test validation.

The committee recommends \$32.3 million, the full amount requested, in PE 27268F for the F135 aircraft engine component improvement program.

#### High-efficiency heat exchangers

High-efficiency heat exchangers are becoming increasingly necessary for engines and aircraft, such as the F-35, that generate more heat as more advanced capabilities, and thus increased weight, are added to the platform. The committee is aware that current thermal management systems (TMS) may be limited by traditional manufacturing processes, and that additive manufacturing is crucial to next-generation TMS. Therefore, the committee encourages the Air Force to make investments in additive manufactured TMS.

High-speed, anti-radiation missile targeting system pod block upgrade program

The budget request contained \$15.1 million in PE 27136F for manned destructive suppression, but included no funds for a high-speed, anti-radiation missile targeting system (HTS) pod block upgrade program.

The HTS pod is currently the only reactive suppression of enemy air defenses capability and enables the F-16 pilot to detect, iden-

tify, and locate hostile ground-based emitters. Additionally, the HTS pod provides the precise geo-location capability necessary to employ precision-guided munitions to destroy fixed and mobile

enemy air defense systems.

The committee understands that component obsolescence diminishes the availability of HTS pods, and that the Department of the Air Force is currently managing this issue by using a part-by-part replacement approach that will maintain pod inventory, but will not increase the capability of the system since any re-design efforts are limited to form-fit-function constraints. The committee believes that this process may result in more advanced and agile threat systems outpacing the capability of the HTS pod. To address this issue, the committee believes that development of a block upgrade program would be a more efficient option to mitigate the impact of obsolescence in a single development cycle, and to provide the capability enhancements necessary to defeat future adversary threat systems.

Therefore, the committee recommends \$35.1 million, an increase of \$20.0 million, in PE 27136F for manned destructive suppression

to begin a block upgrade program for the HTS pod.

# Hypoxia research collaboration

The budget request contained \$245.9 million in PE 63115DHA for medical technology development for promising candidate solu-

tions for defense medical challenges.

The committee recognizes the challenges posed to military pilots from hypoxia, and notes the recent significant hypoxia challenges with the Navy's F/A–18 Hornet and F/A–18 Super Hornet fleets, and the grounding of Navy T–45C Goshawk training aircraft. The committee believes that the Air Force should be maintaining a robust aerospace research program focused on hypoxia research to enhance human resiliency and performance within extreme and variable cognitive and physical environments. The committee also believes that deeper relationships with universities and non-profit research institutes can be a useful mechanism to deepen the bench of expertise focused on these challenges. Finally, the committee encourages the Air Force to work with the Navy as it designs its research plans to ensure that hypoxia research efforts are fully coordinated across the Department of Defense.

Therefore, the committee recommends \$250.9 million, an increase of \$5.0 million, in PE 63115DHA to expand collaboration on

hypoxia research for the Air Force.

Joint Surveillance and Target Attack Radar System Recapitalization program

The committee is aware of the progress to date being made by the Joint Surveillance Target Attack Radar System (JSTARS) Recapitalization program in the effort to replace the legacy E–8C JSTARS platform. In accordance with the waiver authority provided in section 223 of the National Defense Authorization Act for Fiscal Year 2017 (Public Law 114–328), regarding the limitation on availability of funds for the JSTARS Recapitalization program, the committee notes that the Secretary of Defense waived the congressional requirement to have a firm-fixed-price contract structure for the engineering and manufacturing development phase of the pro-

gram. The committee expects the Secretary of the Air Force to keep the committee informed regarding the radar risk reduction effort, eventual source-selection and contract award for the aircraft, progress towards achieving a milestone B award. The committee also expects to be informed regarding any efforts that could be implemented to enable program acceleration without inadvertently increasing program cost, schedule, or risk beyond that are already planned for the program. Finally, the committee supports the current acquisition strategy and discourages any alteration to the strategy that would rely upon the use of a private-sector lead systems integrator.

# Light Attack Aircraft Experiment Report

The committee is aware that the Air Force is conducting a Capability Assessment of Non-Developmental Light Attack Platforms run by the Air Force Strategic Development Planning and Experimentation Office with inexpensive, light attack aircraft to determine what missions such aircraft could perform, how well, and the efficacy of creating a 'high/low' aircraft capability mix within the Service. The committee supports service-wide efforts to explore innovative solutions that lower costs. The possibilities afforded by highly capable, low-cost, and low cost-per-flying-hour aircraft include: dramatically reducing the use of existing legacy and 5th Generation aircraft in low-threat insurgency-type environments, reducing the Service's yearly operations and support costs, offering increased joint training opportunities with ground forces, improving international partnerships and capacities, and helping to solve pilot absorption issues by dramatically increasing the amount of fighter mission flying time trained pilots receive every month. The committee does not believe that light attack aircraft can replace the high-end capabilities of aircraft such as the A-10 or F-35. The committee notes that these lower cost aircraft can be operated as supplement to, and thereby maximizing the life of, these important aircraft for the near-peer fight, were that to be necessary.

The committee directs the Secretary of the Air Force to submit a report to the House Committee on Armed Services by December 31, 2017, on the results of the OA–X experiment. If the Secretary has concluded that an OA–X program will effectively complement the existing force structure, reduce costs, and improve pilot training and proficiency, and that such a program should proceed expeditiously, the Secretary is encouraged to provide the Congress with a supplemental funding request and acquisition plan.

# Metals Affordability Initiative

The committee is pleased by the continuing work of the Air Force Research Laboratory to decrease costs and weight of high-performance metals for use in airframes, engines, and other structures and devices through the Metals Affordability Initiative. Technologies produced through this program have aided many major weapons systems, including the F-35, C-130, and legacy aircraft such as the F-15 and F-16. The committee encourages the Air Force to continue the work of this innovative public-private partnership.

Remote and stand-off detection of weapons of mass destruction threats

The budget request included \$124.7 million in PE 62201F for Aerospace Vehicle Technologies, but contained no funding for technology development research for remote and stand-off detection of weapons of mass destruction using remotely piloted aircraft.

The committee encourages the Department of Defense and the Air Force to leverage existing work to increase focus regarding the development of weapons of mass destruction sensor technology that could be potentially integrated on remotely piloted aircraft. The committee understands that analyzing and applying chemical plume tracking behavior could potentially lead to opportunities to address current requirements for improved detection and location of sources of chemical, biological, radiological and nuclear targets, and recovery of endangered personnel through the integration of this sensor technology on remotely piloted aircraft.

The committee recommends \$129.7 million, an increase of \$5.0 million, in PE 62201F to accelerate technology development for remote and stand-off detection of weapons of mass destruction using remotely piloted aircraft.

# Reusable hypersonic vehicle structure

The committee is aware of the importance of hypersonic research to future defense needs. The committee notes that the Air Force has reinvigorated its work in this area, and in conjunction with the Defense Advanced Research Projects Agency, has been exploring near-term weapons systems options. The Air Force has also recently announced a new initiative to explore a reusable hypersonic vehicle, which will require investments to better characterize the materials properties, flight dynamics properties, and vehicle and wing structure that might be necessary for such a vehicle. The committee supports the goals of the Air Force initiative, and encourages the use of a consortium, including research universities, non-profit research institutes, industry partners, and other government laboratories, to focus on areas of thermal and mechanical load predictions through the use of computational models validated with limited hypersonic wind tunnel testing.

## Robust electrical power system for aircraft

The budget request contained \$104.5 million in PE 603216F for the development and demonstration of electrical power, thermal management, and distribution for aerospace applications.

The committee recognizes the Air Force is highly focused on developing directed energy weapons systems, both for aircraft self-protection as well as to provide offensive capability for future aircraft. In order to meet those goals, the Air Force will not just need a lasing system and optics with the size and weight to be incorporated into aircraft-sized systems, but it will also need a power generation system that can meet all of these new power demands in addition to all of the other electrical and avionics subsystems on these aircraft. The committee encourages the Air Force to focus developmental work on the aerospace electrical power for lightweight and efficient power technologies needed for those future aircraft concepts.

Therefore, the committee recommends \$109.5 million, an increase of \$5.0 million, in PE 603216F to enable the design, fabrication, and ability to test components in a ground demonstrator to support a robust electrical power system for future aircraft needs.

# Technology transition efforts

The budget request contained \$840.7 million in PE 604858F for efforts to demonstrate technologies and concepts to accelerate the transition to acquisition programs of record and operational use.

The committee recognizes the need to provide more opportunities to mature and demonstrate technology in order to improve acquisition outcomes and get new technology in the hands of the warfighter more rapidly. The committee also recognizes that without some dedicated funding to help bridge the "valley of death" between research efforts from the labs and acquisition programs of record, the warfighter will continue to be challenged with maintaining technological superiority and keeping a qualitative technological advantage over potential future adversaries. The committee encourages the Air Force to continue using this program element line to conduct large scale demonstrations, as well as to take greater advantage of cost-matching with its industry, academic, and other Government partners in order to support key technology areas, like system performance modeling and simulation, additive manufacturing, demonstrations, and rapid evaluation of systems-of-systems prototypes.

Therefore, the committee recommends \$850.7 million, an increase of \$10.0 million, in PE 604858F for cost-matched technology

transition efforts.

RESEARCH, DEVELOPMENT, TEST, AND EVALUATION, DEFENSE-WIDE

# Items of Special Interest

# Accumulation of section 219 funds

The committee is aware that section 219 of the Duncan Hunter National Defense Authorization Act for Fiscal Year 2009 (Public Law 110–417) provided new authorities to allow the Department of Defense laboratories to set aside funds for activities to improve the labs' ability to conduct defense missions. That authority included the use of these funds for some minor military construction projects that would help alleviate the backlog in modernization needed to keep the labs at the cutting edge of research. The provision was further modified by section 262 of the National Defense Authorization Act for Fiscal Year 2014 (Public Law 113–66) to allow these funds to be accumulated for up to 5 years.

However, the committee is aware that to date, no actions have been taken to implement the new authority allowing the accumulation of funds among any of the military services. While there has been some discussion about difficulty in establishing the accounting procedures to account for these funds, the committee is not aware of any formal determination or explanation of the reasons for not implementing this authority. The committee is concerned that the Department, despite the widespread support for these authorities among the Department of Defense laboratories, has not provided sufficient attention to this issue to work through any difficulties.

Therefore, the committee directs the Secretary of Defense, in coordination with the Secretaries of the military departments, to provide a briefing to the House Committee on Armed Services by January 15, 2018, on the status and challenges of implementing subsection (b)(3) of section 219 of Public Law 110–417, including recommendations for actions that might support implementation.

# Additive manufactured parts

The committee is aware of the significant possibilities that additive manufacturing, or 3–D printing, will provide to the Department of Defense, both in revolutionizing the industrial supply chain, as well as in providing radically new technological capabilities. The ability to utilize new materials in new ways, such as titanium or explosives, or to develop new manufacturing processes, has the potential to transform how the Department does business. The establishment of new Defense Manufacturing Innovation Institutes, as well as the growing prevalence of 3-D printers at tactical levels, indicates the Department sees that potential as well. Additive manufacturing could also greatly improve the organic industrial base's ability to respond to demands that original equipment manufacturers are unable to meet or to fabricate obsolete parts that are no-longer manufactured.

The committee understands that an inhibitor to seeing the full potential of this technology will be the need to do quality assurance and validation of additive manufactured parts, especially for those in flight or safety-critical systems. Until the Department can develop the standards and processes for assuring quality, 3-D printing will be limited in its application. Also, substantial room remains across the force to add more capacity for this capability, both to repair out-of-date equipment and to speed repair in order to

meet urgent operational requirements.

Therefore, the committee directs the Secretary of Defense to provide a briefing to the House Committee on Armed Services not later than December 1, 2017, on the Department's plans to develop and improve additive manufacturing. The briefing shall include the Department's plans to: develop military and quality assurance standards as quickly as possible; leverage current manufacturing institutes to conduct research in the validation of quality standards for additive manufactured parts; and further integrate additive manufacturing capabilities and capacity into the Department's organic depots, arsenals, and shipyards.

Briefing on improving overseas security from UAS threats and existing authorities to use countermeasures

The committee is aware that servicemembers and operational security are threatened by the global proliferation of unmanned aerial systems. Adversaries ranging from ISIS to North Korea have employed UAS of varying sophistication in capacities including offensive operations and reconnaissance. Because of the commercial availability of these systems, their relative affordability and ease of use, this trend is likely to continue into the future.

The committee is also aware of developments in counter-UAS strategies which have the capability to reduce this threat. Options range from sophisticated EW jamming technologies to specially trained birds of prey, such as those used to protect the May meet-

ing of NATO leaders. The committee believes a tiered approach to installation self-protection including multiple defensive measures is ideal. However, the committee notes the authorities employed to interdict UAS can vary greatly by host country. Therefore, the committee requests a briefing from the Secretary of Defense no later than September 30, 2017, on emerging technologies and techniques for counter-UAS installation security and force protection at locations with such requirements and any challenges to meeting requirements due to host nation law, rules, and regulations.

# Common Analytical Laboratory System

The Common Analytical Laboratory System (CALS) would provide the U.S. military with a common platform across all the military services for analyzing, diagnosing, and investigating chemical, biological, radiological, and nuclear (CBRN) agents at home station or when forward deployed. Currently, each military service uses its own system requiring different training across each platform and differing sustainment resources and investments. The committee believes CALS will not only provide increased capability for analyzing, diagnosing, and investigating CBRN agents, but that commonality will also result in costs savings and other efficiencies. Therefore, the committee encourages the Department of Defense to continue its investment in CALS.

# Cyber Grand Challenge

The committee recognizes the value in researching, testing, developing, and wargaming autonomous systems, artificial intelligence, and cyber tools in order to enable the Department of Defense with advanced systems and platforms. The committee recognizes that the Cyber Grand Challenge conducted by the Defense Advanced Research Projects Agency is an excellent example of such an engagement, in which the construct was productive and the purpose was critical. It is imperative that lessons learned from the Cyber Grand Challenge and other such exercises are not forgotten and that the Department work to incorporate the technology, lessons learned, and process into future research, development, testing, and evaluation. The committee encourages the Department to harness these lessons and ensure increased collaboration with the operational cyber mission forces as a way to get those emerging technologies into the hands of the warfighter. The committee believes the Department should continue to develop the technological advances displayed at Cyber Grand Challenge, and to consider incorporating these lessons, ideas, and challenge opportunities into other exercises moving forward.

### Defense genomics research and training

Given recent advancements in genetic engineering, synthetic biology, and the genomic sciences, the committee is interested in advancing the genomics work performed by the U.S. Army Medical Research Institute of Infectious Diseases (USAMRIID) as a way to more effectively identify, monitor, and potentially counter emerging biological threats. The committee also notes that current research and development efforts underway in the Defense Advanced Research Projects Agency and the Defense Threat Reduction Agency may offer collaborative opportunities when combined with

USAMRIID's expertise and institutional knowledge. Therefore, the committee encourages a more robust and rapid collaborative effort between these organizations within the Department of Defense to more effectively deal with emerging biological threats.

# Department of Defense laboratories and engineering centers

The committee is aware that vital work is being conducted at Department of Defense laboratories and research and engineering centers, along with the laboratories of the military services. The committee has previously noted its concern about the state of research facilities, office space, and other infrastructure at some of the Nation's premier labs. That concern was reiterated in a January 2017 report from the Defense Science Board, titled "Defense Research Enterprise Assessment." This report quantified the average age of facilities being between 45-50 years, and "found examples of dysfunction regarding infrastructure planning and oper-

Modern buildings, equipment, and other resources are vital to ensuring that the military services stay at the cutting edge of technology and are recruiting and retaining the most talented scientific personnel, but are not adequately or comprehensively addressed by laboratory, science and technology, or military service leadership. Therefore, the committee encourages the Department and other services to prioritize recapitalizing, refurbishing, and otherwise modernizing facilities at military service research laboratories and research and engineering centers.

## Deployable assured position, navigation, and timing systems

The committee notes that the Department of Defense has several urgent research and development efforts underway to ensure that critical position, navigation, and timing (PNT) systems remain effective into the future as part of an assured PNT (A-PNT) program of record. The committee supports these efforts and believes that the threat to PNT capability is increasing and likely warrants an aggressive approach by the Department to stay ahead of the problem. The committee notes that the Army Rapid Capabilities Office is exploring a range of potential A-PNT alternatives in which existing technologies could efficiently meet near-term operational needs in the European theater. As the A-PNT program of record continues to progress, the committee expects that manufacturers of existing technologies will have the opportunity to bid on A-PNT contracts for the development of materiel solutions as part of the program of record.

Therefore, the committee directs the Under Secretary of Defense for Acquisition, Technology, and Logistics to provide a briefing to the House Committee on Armed Services by September 1, 2017, that includes the following: a summary of the Department's current programs related to assured PNT; the current requirements for the programs in terms of size, weight, power, resilience against kinetic and non-kinetic effects, and other factors; the current schedule and cost estimates for such programs; and any opportunities for poten-

tial acceleration of these efforts.

# Energy storage modules

The committee supports continued research and development of directed energy weapons, including those capable of use on high-altitude aircraft. In order to make that goal achievable, the committee notes its concern surrounding the availability of energy and pulsed power source for airborne directed energy weapons. The committee is aware of significant advances in the capabilities, size, and weight of new energy sources, such as those that combine lith-ium-ion batteries with phase change materials and an active heat transfer loop. The committee believes that with further research, these activities could develop enhancements to current technology that might include reduced weight and volume; improved battery longevity; reduced procurement, operations and maintenance, and sustainment costs; significantly improved safety and survivability; increased recharge as well as discharge rates; and robust and well-damped thermal management process controls.

## Enhancement of test and evaluation through modeling and simulation

The committee believes that advanced modeling and simulation (M&S) can moderate the rising costs associated with test and evaluation (T&E) of complex weapon systems. However, the committee notes there is no indication that the Department of Defense's T&E organizations are involved in any concentrated effort to reduce the cost of T&E activities through a coordinated M&S effort. The committee understands that significant investments have been made by program offices in M&S for their particular weapon system, and that some M&S is primarily for training uses and are proprietary or specifically designed for that weapon system. Therefore, these models cannot be easily integrated together in a complete war fighting fashion. The committee recommends that the Department aggressively pursue initiatives, like establishing a coordination group, to encourage the use of M&S more effectively by the T&E community in development and operational activities.

## Explosive Ordnance Disposal equipment technology upgrades

The committee notes that conventional Explosive Ordnance Disposal (EOD) units across the military services require upgraded equipment and technology enhancements, particularly for routine inspection and search activities. The committee believes that conventional Joint Service EOD units would benefit from rapid acquisition of EOD equipment, which have high-definition resolution and encrypted signals, among other upgraded capabilities. The committee understands that the Department of Defense cancelled the Explosive Ordnance Disposal/Low Intensity Conflict program element which formerly developed and delivered Joint Service EOD advanced capabilities. The committee understands the Combating Terrorism Technology Support (CTTS) program will absorb this mission area within the Improvised Defeat Device and Explosive Countermeasures subgroup activity. The committee encourages the Director of the CTTS program to prioritize funding toward delivering advanced capabilities for conventional Joint-Service EOD units.

Historically black colleges and universities and minority serving institutions

The budget request contained \$25.9 million in PE 61228D8Z for research work with historically black colleges and universities and

minority serving institutions (HBCU/MSI).

The committee recognizes the important role this program plays in bolstering the research capabilities and capacities at HBCU/ MSIs. Not only is such work important in meeting the defense research needs of the Department of Defense, but the committee also believes it provides an added benefit by diversifying the supply of scientists, engineers, and researchers working on defense problems. This diversity in people also provides diversity in thought and approach that can be immensely beneficial for research.

Section 233 of the National Defense Authorization Act for Fiscal Year 2016 (Public Law 114-92) required the Department of Defense to develop a strategy for improving engagement with HBCU/ MSIs. Among other things, this strategy outlined four objectives,

including:

(1) increasing efforts to include HBCU/MSIs in ongoing research programs and activities for which institutions of higher learning, in general, are the eligible entities;

(2) increasing the visibility of the Department of Defense programs and activities among HBCU/MSIs and their students;

(3) re-emphasize the need to include HBCU/MSI faculty and students in Department of Defense research activities; and

(4) ensuring HBCU/MSIs and their faculty and students are

mentored.

The committee applauds the Department for articulating a clear strategy, and encourages the Department to develop a scorecard for collecting and reporting metrics of success in achieving the components of this strategy.

Therefore, the committee recommends \$35.9 million, an increase of \$10.0 million, in PE 61228D8Z for additional research between historically black colleges and universities and minority serving institutions, as well and increased teaming opportunities between these institutions and other research universities with experience supporting defense needs.

#### Joint electronic warfare wargaming

The committee recognizes electronic warfare (EW) capabilities are a critical enabler of the U.S. military, and that the EW capabilities and countermeasures of our adversaries threaten our military's advantage on the battlefield. The committee believes effective and efficient management of joint EW capabilities are an essential element of addressing trans-regional, multi-functional, and multi-domain security challenges across the spectrum of conflict, and supports the Department of Defense's establishment of the Electronic Warfare Executive Committee (EW EXCOM) in 2015, and the development of an EW Strategy to that end.

However, the committee is concerned that the speed and scope

of progress on the strategy and joint development of warfighting capabilities is not keeping pace with threats and opportunities. The committee believes wargaming may provide an opportunity to thoroughly understand the current preparedness of the joint force to operate in a EW contested environment, and such knowledge will contribute to the overall management of joint EW capabilities and development of a strategy. Therefore, the committee encourages the Secretary of Defense to conduct an EW wargame to model and evaluate the preparedness of the joint force to operate in a contested environment based on current EW capabilities modeled against a selection of approved war plans and current intelligence estimates. The committee further encourages the Department to consider focusing on the challenges potentially posed by the Russian Federation or the People's Republic of China as part of any wargaming scenario.

# Joint U.S. Forces Korea Portal and Integrated Threat Recognition program

The committee notes the recent increase in political tensions on the Korean peninsula caused by the growing threat of the use of weapons of mass destruction (WMD) by the Democratic People's Republic of Korea (North Korea), and recognizes the importance of the Joint U.S. Forces Korea Portal and Integrated Threat Recognition (JUPITR) Advanced Technology Demonstration (ATD). While threats posed by North Korea's nuclear weapon and ballistic missile programs remain paramount, deterrence and defense requires a comprehensive strategy against all WMD. JUPITR compliments this mission by providing essential detection and identification of biological threats.

The committee recognizes the important role JUPITR plays in the protection of U.S. Forces Korea and the defense of the Republic of Korea. The committee encourages the Department of Defense to take actions to accelerate and enhance the JUPITR ATD and to establish an operational program of record for fielding and operating suitable equipment to protect U.S. Forces Korea from biological threats.

#### Latent and delayed-onset effects of traumatic brain injury

The committee is aware that traumatic brain injury (TBI) disproportionately affects the warfighter and veterans, with symptoms including memory loss, an inability to manage emotions, impulsivity, and depression. However, due to the lack of overt symptoms for many who suffer mild TBI or concussions, service members may be left untreated or dismissed due to delayed effects that may only manifest over time. The committee commends the Department of Defense on its efforts to promote research aimed at addressing symptoms of TBI in the acute stages after injury and prevention of such injuries. However, a key challenge facing the military is understanding how TBI impacts the brain, both in the short-term and long-term, and how to improve the function of the brain regions that have escaped damage. Therefore, the committee encourages the Department to continue its efforts and collaborate with public and private partners to accelerate the development of treatments for the latent and delayed-onset effects of TBI.

#### Light field display technology

The committee notes that the Defense Advanced Project Research Agency funded and developed a working prototype of a holographic display for real-time battle space visualization through a program called the "Urban Photonic Sandtable Display." Subse-

quent efforts through Small Business Innovation Research grants by the Department of the Navy, the Department of the Army, and the Department of the Air Force have advanced this technology to support warfighter situational awareness requirements, including an enhanced glasses-free 3-Dimensional common operating picture. The committee supports accelerated development of this technology, including rapid transitions into military service programs of record.

#### Low-power, long-endurance radar for force protection

The committee is aware that U.S. Special Operations Command has developed an ultra-low-power, rapidly deployable field radar to enhance force protection, surveillance, and reconnaissance missions for small teams operating in austere environments. This capability has also shown promise in traditionally difficult areas, including riverine environments, mountains terrain, and dense foliage. Therefore, the committee encourages the Department of Defense and U.S. Special Operations Command to continue to develop similar capabilities, and to transition mature technology into a program of record when appropriate.

## Machine learning

The committee applauds the Department of Defense's focus on machine learning in its Third Offset Strategy as a means of enhancing the safety of the warfighter, lowering costs and streamlining processes, and informing strategic decision making. The committee is aware that the exponential growth in data available globally, combined with evolving machine learning techniques and growing computational resources, are both an opportunity and a necessity. The committee recognizes that countries that make effective use of these data sets and tools will have strategic and tactical advantages over those who do not. As such, the committee urges the Department of Defense to continue to expand its exploration of commercial machine learning offerings, and in particular, to consider the promise of machine learning applied to non-traditional data sets, including financial markets, the Internet of Things, and global supply chains. These and other similar data sets encapsulate the actions and decisions of wide swaths of the world's population, and thus may provide enhanced situational awareness, as well as anticipatory signals on future events through crowd sourcing.

# Medical simulation research

The committee is aware that medical simulation systems can improve education, training, and skills development. While many of the current simulator manikins used for practical, hands-on training lack the tactile fidelity and accurate portrayal of multiple biological and organ systems, these systems hold greater promise in the future after further development and validation. However, recent advances in computational power, big data analytics, machine learning, and medical informatics also indicate promise for new forms of medical simulation that might be applied to other areas of clinical outcomes, including clinical decision support.

The committee is encouraged by advances in both areas, and believes the Department of Defense could do more to leverage these technological advances to support medical training. Therefore, the

committee directs the Secretary of Defense to provide a briefing to the House Committee on Armed Services by January 19, 2018, on current investments in medical simulation technology and research and Department-wide efforts to incorporate simulated learning techniques in defense medical training.

# Non-lethal directed energy technologies

The committee supports the need to minimize collateral damage, take all available avenues to reduce civilian casualties, and prevent damage to infrastructure in engagements abroad. The utilization of radio-frequency and microwave-based non-lethal directed energy technologies provides many opportunities in this regard. These technologies have matured through the science and technology phase, and are already employed by military service and combatant commands in the operational environment across the globe, providing a complementary asset and additional flexibility to the warfighter and U.S. security forces. These technologies have the capacity to stop ground vehicles, small vessels, and unmanned aerial vehicles from infringing upon protected spaces, or to deny access to secured facilities. The effects of these technologies are entirely reversible. The committee, therefore, encourages the Department of Defense to make greater efforts to utilize these technologies where appropriate, and sustain these integrated non-lethal directed energy technologies in order to minimize risk to U.S. forces, noncombatants, and critical infrastructure.

## Overseas waste disposal technology development

Section 317 of the National Defense Authorization Act for Fiscal Year 2010 (Public Law 111–84) required the Secretary of Defense to submit a report to the Committees on Armed Services of the Senate and House of Representatives regarding the use of open-air burn pits. The report submitted by the Secretary stated that "the introduction of incinerators, plus other thermal (to include waste-to-energy) and non-thermal waste disposal options, are intended to eventually displace the use of burn pits." The report concluded, "The Department of Defense must continue to explore viable technical solutions for waste reduction and waste disposal in all categories—solid, medical, and hazardous—and then make such solutions available through easily acquired commercial or Department of Defense provided equipment."

The committee directs the Under Secretary of Defense for Acquisition, Technology, and Logistics to provide a briefing to the House Committee on Armed Services by November 15, 2017, that provides an update on the progress made toward achieving the goals stated in the report required by section 317 of Public Law 111–84, as well as an update regarding how the Department is implementing lessons learned regarding waste-disposal technologies in overseas contingency operations.

Pilot program on modernization and fielding of electromagnetic spectrum warfare systems and electronic warfare capabilities

The committee notes that Section 234 of the Fiscal Year 2017 NDAA established a pilot program on modernization of electromagnetic spectrum (EMS) warfare systems and electronic warfare (EW) systems. This program was written to provide the Secretary

of Defense with flexibility in the use of appropriated funds, with the ultimate goal of developing and fielding more modern capabilities. As an example, some aircraft are currently operating with jammers and radar warning receivers developed in the 1980s which would be ideal candidates for inclusion in the pilot program. By using the authority granted in Section 234, the Department of Defense could then use appropriated sustainment funds to modernize these systems, delivering improved capability to the warfighter without additional appropriations. The committee directs the Secretary of Defense to deliver a report to the House Armed Services Committee no later than December 31, 2017 on implementation of the Section 234 pilot program, to include which EMS warfare and EW systems have been selected and any challenges encountered in modernization of these systems.

# Science, technology, engineering, and mathematics

The committee acknowledges science, technology, engineering, and mathematics (STEM) educated personnel are required for a significant portion of the Department of Defense workforce. Personnel with STEM degrees are especially important to the viability of the science and technology workforce now and in the future, including at national labs. The committee believes it is important that the Department of Defense grow the next generation of scientists and researchers to contribute to national defense and technology through funding STEM education programs and collaboration with academia.

#### Small turbine engines

The committee recognizes the importance of low cost turbine engines in powering munitions and unmanned aerial vehicles that support operations in the various combatant command areas of responsibility, and is aware that technology for high-efficiency, low-cost systems may be available. Low-cost is driven by competition, as well as small business participation. Therefore, the committee encourages the Department of Defense to adequately resource efforts to identify low-cost, small engine technologies capable of powering missiles and unmanned aerial vehicles, and directs the Under Secretary of Defense for Acquisition, Technology, and Logistics to provide a briefing to the Senate Armed Services Committee and House Armed Services Committee by September 1, 2018, on current research and development efforts and the industrial base which supports this area.

#### Space-based debris remediation in Low Earth Orbit

The committee is concerned about the increasing challenges of space debris and growing risk to defense and other satellites. The committee thereby directs the Director of the Defense Advanced Research Projects Agency (DARPA) to assess the viability of space-based debris remediation in Low Earth Orbit (LEO), and also whether such system could be used for additional purposes, including space situational awareness. The committee believes that remediation of debris smaller than what can currently be detected and tracked may help prevent catastrophic conjunctions and preserve orbital regimes for future operations.

The committee directs DARPA to provide a briefing to the House and Senate Armed Services Committees no later than January 15, 2018 on the results of the assessment.

Sterilization and inspection of medical instruments

The committee is aware that a new class of small diameter, nearfield inspection scopes and infection control systems, designed to provide ready access to and imaging of the interior chambers and working channels of medical and surgical devices and endoscopes, have been developed, and are commercially available on a competitive basis. The detailed inspection and focused sterilization they provide may be the most efficient and effective way to ensure that medical devices are safe when used on patients and compliant with the Association for the Advancement of Medical Instrumentation and American National Standards Institutes standards for surgical instrumentation sterilization. The committee is aware such advancements in technology would be beneficial to Department of Defense medical facilities, especially in forward deployed surgery centers. Therefore, the committee encourages the Assistant Secretary of Defense for Health Affairs, in coordination with the Surgeon Generals of the military departments, to explore deployment of these modern infection control systems.

Success metrics of the Defense Innovation Unit Experiment (DIUx)

The committee is aware of the Department of Defense's efforts to increase outreach to and collaboration with sources of commercial innovation throughout the United States. The committee is also aware that there is discussion about reorganizing the innovation organizations in the Office of the Secretary of Defense (OSD). The establishment of an Under Secretary of Defense for Research and Engineering under Section 901 of the National Defense Authorization Act for Fiscal Year 2017 (Public Law 114–328) would elevate the innovation function within the Department and provide a critical mass for all of the technology innovation functions within OSD, much like a Chief Innovation Office or a Chief Technology Officer would in a private sector organization. The committee recommends the Department look at the organization and functions of the Defense Innovation Unit Experiment (DIUx) as part of that holistic review, and encourages the Department to consider placing this organization under this new Under Secretary.

Further, the committee appreciates the DIUx report, dated January 16, 2016, which was submitted in response to requirements in the FY17 NDAA. However, additional information is necessary in order to fully evaluate the effectiveness of DIUx under the listed metrics. Lack of reporting on the metrics impacts the committee's ability to fully evaluate and understand if the DIUx program is meeting its mission of accelerating innovation to the warfighter.

Therefore, the committee directs the Secretary of Defense to submit to the congressional defense committees a report not later than March 1, 2018, on how DIUx activities will be sufficiently tied into the broader activities of the Department of Defense, including incorporating lessons learned to alleviate the systematic problems with technology access and timely contract execution. The report shall also contain results of DIUx's metrics of success, by year since DIUx establishment, that include complete data on the following:

(1) number of innovations delivered into the hands of the warfighter;

(2) return on investment for all DIUx projects, including both "demonstration effect" and incorporation of piloted technology if applicable;

(3) whether DOD access to technology leaders has increased as a result of DIUx, with specific examples;

(4) number of non-traditional companies doing business with DOD as a result of DIUx

(5) whether other DOD components have elected to adopt DIUx practices, with specific examples.

The report shall also include information on:

- (1) how the Department plans to integrate, field and sustain capabilities acquired through the private sector to ensure maximum utility and value to the department through a capability's lifecycle; and
- (2) how the Department is notifying its internal components about participation in DIUx.

System for reviewing and monitoring industrial base transactions

The budget request contained \$10.9 million in PE 67210D8Z for

industrial base analysis and sustainment support.

The committee is aware that the challenge of monitoring and analyzing foreign investments into the defense industrial base, including everything from mergers, acquisitions, joint ventures, strategic partnerships, and other transfers of intellectual property, is taxing the capabilities of the Department of Defense. Not only are the types of transactions becoming more opaque, but the use of tactics specifically to circumvent traditional regulatory mechanisms are making the situation increasingly difficult to identify and assess within a complex business environment. Recent reports in the news, as well as briefings to the committee, indicate a shortfall in our capabilities, especially for decision support systems to allow a limited number of highly trained analysts to be proactive and inform pending industrial base decisions before irreversible mergers or acquisitions are made. The committee believes that the Department should devote more resources to monitoring this complex business environment, utilizing both automated decision support systems, as well as use of more analysts to assess and make recommendations.

Therefore, the committee recommends \$15.9 million, an increase of \$5.0 million, in PE 67210D8Z for the development of an information technology systems to support the review and monitoring of industrial base transactions, especially those involving foreign transactions, as well as for additional analytical support.

Training ranges for electronic warfare experimentation

The committee is aware that electronic warfare is a field where the technology is undergoing rapid changes, based on both commercial pressures as well as tactical innovation on battlefields around the world. The resurgence of focus on this technical area is also a challenge to the Department of Defense, which must ensure that these new and quickly evolving capabilities can be adequately tested, trained with, and defended against. It also demands the capability to rapidly experiment with both new technologies and new

concepts to deliver capabilities to the warfighter that are relevant and effective. In order to do that, the Department needs to ensure it has sufficient range capabilities and space to perform important training. Therefore, the committee encourages the Secretary of Defense to review the efficacy of existing ranges for experimentation and testing of advanced electronic warfare technology and capability, as well as whether there is a need to increase investment and develop new approaches to testing, training, and experimentation for electronic warfare systems.

## Trusted microelectronics supply

The committee recognizes that microelectronics technology provides critical capabilities in Department of Defense, other Government organizations' systems, and the commercial marketplace. The committee is also aware that that the U.S. microelectronics industrial base faces global competitive challenges, including from foreign competitors that receive substantial support from their government. A recent report from the President's Council of Advisors on Science and Technology (PCAST) titled, "Report to the President Ensurin Long-Term U.S. Leadership in Semiconductors" highlighted many of these challenges, including:

(1) a concerted push by the People's Republic of China to reshape the semiconductor industry in its favor, using industrial policy backed by over \$100.0 billion dollars in government-directed funds, that threatens the competitiveness of U.S. industry;

(2) any presumption that existing market forces alone will yield optimal outcomes, particularly when faced with substantial industrial policies from other countries, is unwarranted;

(3) policy can slow the diffusion of technology, but it cannot stop its spread. The only way to retain leadership is to outpace the com-

petition: and

(4) the United States should act in the short-term to reduce the market-distorting behavior of Chinese policy by increasing transparency on Chinese actions; working with allies to coordinate and strengthen inward investment security and export control, and to respond firmly and consistently to Chinese violations of international agreements.

Further, the committee notes that the Department's current approach to ensure trusted microelectronics supply is characterized by a narrow definition for trust-only applicable to application-specific integrated circuits, but not to other classes of circuits like field programmable gate arrays. The committee supported the requirement in section 231 of the National Defense Authorization Act for Fiscal Year 2017 (Public Law 114-328) for a strategy for assured access to microelectronics that would address this definition for trust, as well as ensure there is comprehensive thought on the acquisition and industrial base concerns related to microelectronics. As the Department develops and codifies that strategy, the committee encourages a thorough review all of the Department's related guidance and instructions, to include a more comprehensive definition of the items requiring a trust policy, as well as ensuring that appropriate language is included in relevant solicitations and contracts for applicable systems.

# U.S. Special Operations Command SOFWERX initiative

The committee notes that the SOFWERX initiative within U.S. Special Operations Command (USSOCOM) has taken on several innovative projects that encourage collaboration between the private sector, and other Government agencies and organizations such as the Defense Advanced Research Project Agency, Defense Innovation Unit Experimental, and science and technology efforts within the military services.

The committee encourages these practices, specifically the continuation of the 1208 Rapid Prototyping Event (RPE) with its potential for cost efficiencies. RPE verified that the technology exists to supplement the 1208 counterterrorism authority in section 127e of title 10, United States Code, by equipping partner forces with commercial equipment in a cost effective manner. In a similar fashion, the committee also encourages USSOCOM and SOFWERX to advance the application of disruptive emerging technologies, including nano-technology, additive manufacturing, quantum computing, artificial intelligence, robotics, and the convergence of each, in fulfilling immediate and emerging special operations forces' requirements. The committee also encourages the military services to continue to monitor developments within this framework to leverage work being done through SOFWERX.

# Weapons and munitions science and technology roadmap

The committee recognizes that Department of Defense investments in science and technology (S&T) to counter emerging threats should be reflected in the science and technology portfolio and understands that the exigencies of ongoing operations required a focus on improving our systems for uncontested or asymmetrically contested environments. As a result, advances in weapons and munitions have received less attention in recent years. At the same time, potential adversaries have made advances in platforms, missiles, long-range guns, new propellants, and explosive combinations that could threaten U.S. forces and frustrate U.S. efforts at forcible entry into contested areas. The committee believes the Department must concentrate on developing new generations of weapons and munitions to counter those threats.

Therefore, the committee urges the Secretary of Defense to develop a focused weapons and munitions science and technology roadmap to comprehensively guide investment needs for this area. In developing this roadmap, the Secretary should address the following:

- (1) how have recent wargaming scenarios and exercises been used to identify key needs;
- (2) how have the integrated priorities lists of the combatant commands articulated their needs for new munitions types and delivery systems;
  - (3) how are current S&T efforts aligned with these needs; and
- (4) are there shortfalls in resources or capacity to address these needs.

#### LEGISLATIVE PROVISIONS

#### SUBTITLE A—AUTHORIZATION OF APPROPRIATIONS

Section 201—Authorization of Appropriations

This section would authorize appropriations for research, development, test, and evaluation at the levels identified in section 4201 of division D of this Act.

# SUBTITLE B—PROGRAM REQUIREMENTS, RESTRICTIONS, AND LIMITATIONS

# Section 211—Cost Controls for Presidential Aircraft Recapitalization Program

This section would fix the requirements for Presidential Aircraft Replacement (PAR) Program aircraft to those identified by the systems requirements document (SRD) for the Presidential aircraft recapitalization program version 7.0 dated December 14, 2016. This section would also limit changes to PAR requirements to only those approved by the Secretary of the Air Force following a written determination provided to the congressional defense committees that the change is necessary. This section would require that not less than 50 percent of the total amount of funds obligated or expended for contracts for engineering and manufacturing development (EMD) under the PAR Program shall be for fixed price type contracts. This section would authorize contracts other than fixed price type contracts for EMD only if such contract type is approved by the service acquisition executive. This section would also require the Secretary of the Air Force to provide quarterly briefings to the House Committee on Armed Services beginning no later than October 1, 2017 and continuing through October 1, 2022 on the efforts to control costs. The quarterly updates shall include the following:

- (1) schedule overview;
- (2) contract type and status;
- (3) development status;
- (4) modification status;
- (5) test status;
- (6) delivery status; and
- (7) sustainment status.

#### Section 212—Capital Investment Authority

This section would amend section 2208(k)(2) of title 10, United States Code, to raise the limit on capital purchases from defense working capital funds from \$0.25 million to \$0.5 million.

### Section 213—Modification of Authority To Award Prizes for Advanced Technology Achievements

This section would amend section 2374a of title 10, United States Code, to make permanent the Secretary of Defense's authority to award prizes for advanced technology achievements, to allow for the award of non-monetary awards, and to authorize the acceptance of non-monetary items from other parts of the Federal Government, from State government, and from non-governmental sources.

Section 214—Critical Technologies for Columbia Class Submarine

This section would deem certain *Columbia*-class ballistic missile submarine components as critical technologies.

Section 215—Joint Hypersonics Transition Office

This section would re-designate the "Joint Technology Office on Hypersonics" as the "Joint Hypersonics Transition Office," with the responsibility to coordinate and integrate programs, ensure coordination of current and future programs of the Department of Defense on hypersonics, and approve demonstrations.

Section 216—Hypersonic Airbreathing Weapons Capabilities

This section would allow the Secretary of Defense to transfer oversight and management of the Hypersonic Airbreathing Weapons Concept from the Defense Advanced Research Projects Agency to an entity of the Air Force.

Section 217—Limitation on Availability of Funds for MQ–25 Unmanned Air System

This section would allow only 75 percent of the funds authorized to be appropriated by this Act or otherwise made available for fiscal year 2018 for the MQ-25 unmanned air system to be obligated or expended until a period of 60 days has passed after the date on which the Secretary of the Navy certifies that the MQ-25 meets a validated capability gap; the Chief of Naval Operations has reviewed and approved the initial capabilities document (ICD) and the capability development document (CDD); and the ICD and CDD have been submitted to the congressional defense committees.

This section would also require the Assistant Secretary of the Navy for Research, Development, and Acquisition to submit a report to the congressional defense committees that includes key performance parameters, certification of performance parameters' achievement, as well as a description of requirements with respect to fuel transfer, equipment for intelligence, surveillance, and reconnaissance, electronic attack and electronic protection, communications equipment, weapons payload, range, mission endurance for unrefueled and aerial refueled operations, affordability, survivability, and interoperability.

#### Section 218—Limitation on Availability of Funds for Contract Writing Systems

This section would limit the amount of authorized funds available to be obligated or expended to not more than 75 percent for specified contract writing systems until the Secretary of Defense, in coordination with the Secretaries of the military departments, provides an assessment of the common requirements and potential use of shared information technology (IT) services as a means to provide that capability in a common, interoperable, and more cost effective manner.

The committee remains concerned that the Department of Defense continues to invest billions of dollars in systems that fail to provide integrated business solutions, timely and reliable information, and other important financial and business information for

the daily operations of the military. In fiscal year 2015, the Defense Business Council approved certification requests totaling \$6.9 billion for 1,182 business systems. Of these, more than 30 are service or component unique contracting, procurement, and solicitation management systems. While this ongoing redundancy diverts available funding from direct warfighting capability and decreases the Department's ability to manage its operations as an enterprise, the Department has made little progress in consolidating such business

Furthermore, the committee notes that the Government Accountability Office has repeatedly reported that the Department could achieve greater efficiency in defense business operations, including directing 49 related recommendations to the Department in 2011, 38 of which remain open and unresolved. The committee believes that more focus on implementing shared IT services may be helpful in overcoming the longstanding cultural barriers that continue to prevent more enterprise-wide management of defense business systems. It would also support the goal of the Secretary of Defense, as stated in his memorandum dated January 31, 2017, to achieve "horizontal integration across DOD components to improve efficiency and take advantage of economies of scale." As an example of where such efficiencies could be taken, the committee notes with skepticism the existence of multiple service and agency unique contract writing systems. The committee recommends the inclusion of this section to better understand the risks associated with eliminating or consolidating such systems and will rely on the information provided in assessing future support for such systems.

# TITLE III—OPERATION AND MAINTENANCE

#### ITEMS OF SPECIAL INTEREST

BUDGET REQUEST ADJUSTMENTS

#### Advanced Adversarial Air Training

The budget request included \$516.8 million for advanced adversarial air training. The committee noted in section 350 of the National Defense Authorization Act for Fiscal Year 2017 (Public Law 114-328) its concern that advanced tactical air training and advanced adversarial air training has diminished significantly over the past 20 years, at a time when foreign air forces are growing in technical capability and their pilots are growing in proficiency. The committee has assessed that maintenance of combat aircraft will not, in and of itself, restore combat efficiency to U.S. flight crews or their squadrons. The committee notes that senior leaders in the military services understand this and have sought to increase advanced flight training and to restore adversarial air training as integral to combat pilot proficiency. The committee also understands that, due to the cost of operating frontline aircraft and the need to train pilots in their primary roles with these aircraft, it is most beneficial to use capable aircraft of older vintage to perform adversarial air training and to contract out the adversarial air mission to former flight instructors and combat pilots in order to save finite hours of life limits to frontline aircraft, costs of adversarial air training, and to help address the 40,000 hours-per-year

shortfall in adversary air training. The committee endorses the movement by the services to integrate these capabilities into their training regimens and recognizes the 1-year budget programming lag resulting in insufficient funds being requested in the fiscal year 2018 budget request.

Therefore, the committee recommends \$527.0 million, an increase of \$10.2 million, in Operation and Maintenance, Air Force, for contractor support for advanced adversarial air training.

#### Civil Air Patrol

The budget request included \$26.7 million in Operation and Maintenance, Air Force, for the Civil Air Patrol (CAP) to execute support to Federal agencies and State and local communities. The committee recommends \$29.8 million, an increase of \$3.1 million, in Operation and Maintenance, Air Force, to allow the CAP to comply with the mandate by the Federal Aviation Administration to install the Automatic Dependent Surveillance-Broadcast (ADS-B) system across the CAP aircraft fleet, replace non-repairable radios used for emergency response search-and-rescue and disaster-relief missions, and implement cyber security upgrades to critical mission systems.

## Ship Repair in the Western Pacific

The budget request included no funds for providing additional dry-docking capability in the western Pacific theater. A business-case analysis commissioned by the U.S. Pacific Fleet indicated a savings to the U.S. Navy by maintaining a dry dock on the Territory of Guam. The Asia-Pacific rebalance has increased Navy forward deployment in the Western Pacific, including the deployment of a fourth attack submarine and a second submarine tender to Naval Base Guam. However, depot-level maintenance capabilities have not followed, and current Pacific U.S. dry-docking maintenance capabilities exist only in Hawaii and the west coast of the continental United States, requiring surface and subsurface vessels to be removed from the theater and from Pacific Fleet's strategic inventory for an additional 2-3 weeks. Further, the interport differentials, temporary duty costs, and impact on families are significant added costs to these repairs. The only other dry-docking options remain outside of the United States, requiring that U.S. naval vessels receive significant repairs using foreign labor and technology, potentially compromising the quality of work as well as national security interests. The committee, therefore, recommends an increase of \$9.5 million in Operation and Maintenance, Navy, Ship Depot Maintenance, for the chartering of a dry dock to meet maintenance requirement for the western Pacific Fleet.

#### **ENERGY ISSUES**

#### **Energy Resiliency for Mission Assurance**

The committee continues to believe that the Department of Defense must have the ability to sustain mission-critical operations during utility disruptions at its installations. The committee notes that the Department has placed a large emphasis on energy infrastructure investments that may reduce energy demand and provide

a financial return on investment. While the committee is supportive of these efforts, the committee is concerned that more emphasis is required on investments that reduce mission risk by increasing energy resiliency through on-installation energy generation, transmission, distribution, and storage. To that end, section 2805 of the National Defense Authorization Act for Fiscal Year 2017 (Public Law 114–328) expanded the authority of the Energy Conservation Investment Program (ECIP) to include energy resiliency projects. The committee encourages the Department to take further action, both through ECIP and other energy initiatives pursued through other authorities, to fully integrate energy resiliency with military value into their energy investment programs.

## **Energy Resilience of Overseas Military Installations**

As noted elsewhere in this report, the committee continues to assert that the Department of Defense must have the ability to sustain operations during energy supply disruptions, especially in the case of overseas military locations that rely on foreign-sourced energy. For example, the committee notes that a number of European countries that host permanent and rotational U.S. Armed Forces rely extensively on natural gas and oil from the Russian Federation. The committee believes that a policy of energy reliance through diversification is critical to maintaining a resilient U.S. overseas defense posture and presence.

Therefore, the committee directs the Secretary of Defense to provide a briefing to the House Committee on Armed Services by March 1, 2018, on potential vulnerabilities to energy supply disruptions at overseas locations that host permanent and rotational U.S. Armed Forces and on mitigation efforts aimed at protecting mission resiliency. The briefing must, at a minimum, assess the operational risk of energy supply disruptions, identify mitigation measures to sustain mission-critical operations, and assess the feasibility and cost and schedule impacts of including diversified energy solutions for future overseas military construction projects.

#### LOGISTICS AND SUSTAINMENT ISSUES

## Army Contracting Command Reachback Functions

The committee understands the Army Contracting Command has a policy by which contracting elements at Army installations are required to forward all contracts governing awards valued at more than \$750,000 to their regional service centers for resolution with the stated goals of improved continuity of workflow and the potential for more efficiencies. Despite this, the committee is aware of anecdotal evidence that it is not having the desired effect and is creating inefficiencies.

Therefore, the committee directs the Secretary of the Army to provide a briefing to the House Committee on Armed Services by October 2, 2017, on Army Contracting Command Reachback to include:

(1) The number of contracting actions that have been sent to the various Reachback groups across the contracting enterprise since the start of the Reachback program;

- (2) The percentage of contracting actions that were awarded on time;
- (3) Detailed impacts to installations due to late award of contracts;
- (4) The amount of cost savings realized attributed to the Reachback program, specifically, administrative savings; and
- (5) The amount of personnel reductions at each local contracting unit.

#### Corrosion Control and Prevention Executives for the Military Departments

The committee continues to be concerned that the military departments have not adequately addressed corrosion control and prevention in the military departments' sustainment plans for weapon systems. The committee believes that corrosion control and prevention must be addressed early in system design. To facilitate education, awareness, and prioritization of corrosion control and prevention, section 903 of the Duncan Hunter National Defense Authorization Act for Fiscal Year 2009 (Public Law 110-417) required each military department to identify a corrosion control prevention executive (CCPE). The committee has observed that the CCPEs are most effective when they have the time and seniority to manage corrosion control policy and resources across the military department, consistent with the requirements of section 903 of Public Law 110-417. The committee believes the Departments of the Navy and the Air Force have been most effective in corrosion control and prevention and notes they have assigned individuals whose primary responsibility is to perform the functions of the CCPE. The committee also notes that the Department of the Army has used a different model and implemented the requirements of section 903 of Public Law 110-417 by appointing a Deputy Assistant Secretary of the Army for Acquisition, Logistics, and Technology as the CCPE and having action-officer level individuals assist in those duties.

The committee directs the Secretaries of the military departments to provide a briefing to the House Committee on Armed Services, not later than September 30, 2017, on the steps the military departments have taken to comply with section 903 of Public Law 110–417. The briefing should describe the service corrosion executives' technical qualifications, duties, and responsibilities, including coordination with the Department of Defense Director of Corrosion Policy and Oversight and formulation of service-level guidance and policy regarding corrosion control and prevention as part of the development, procurement, and sustainment of the military services' weapon systems and infrastructure. Finally, the briefing should include the Secretaries' assessments as to the effectiveness of their corrosion control and prevention policies and the extent to which the CCPEs are taking steps to improve prioritization of this issue early in the planning of weapon systems.

# Improving Asset Tracking and In-Transit Visibility

The committee is supportive of the Department of Defense's ongoing efforts to improve asset tracking and in-transit visibility. The committee supports the goal of enhancing asset visibility through item-unique identification (IUID) and automatic identification technology/automatic identification and data capture processes because this initiative can help improve readiness, reduce waste, and increase oversight. However, the committee remains concerned with the Department's compliance with its own IUID policy as issued in 2015 in Department of Defense Instruction 8320.04 and believes that writing requirements into contracts fosters compliance with the IUID policy. The committee is also concerned that a briefing reguirement on this subject from the National Defense Authorization Act for Fiscal Year 2017 has not yet been delivered, and expects to receive this briefing in a timely manner. Additionally, the committee directs the Director of the Defense Contract Management Agency (DCMA) to brief the committee not later than December 1, 2017, on the DCMA's plan to foster the adoption, implementation, and verification of the revised IUID policy across the Department and the defense industrial base.

## Inventory Management and Demand Planning Software Pilot Program

The committee is aware that the Army completed a small test program using commercial-off-the-shelf (COTS) software on 27 various Army Black Hawk helicopter parts. This small-sample study showed significant cost savings and increased readiness when leveraging the Army's enterprise resource planning system, the Logistics Modernization Program (LMP), to manage inventory, particularly unserviceable assets. The committee remains interested in not only the cost savings and readiness increases found in the Army's Black Hawk inventory management, demand planning, and readiness-based sparing software application to LMP, but also cost savings and readiness increases if the Army were to apply this tool across Army Materiel Command's (AMC's) spare parts management portfolio.

The committee also seeks information on Naval Sea Systems Command's (NAVSEA's) views regarding the benefits of COTS product lifecycle management software to help with its growing challenge in managing its critical databases across the NAVSEA enterprise. Currently, two NAVSEA databases, the Naval Ships Engineering Drawing Repository (NSEDR) and the Naval Logistics Technical Data (NAVLOGTD), are growing faster than the antiquated and expensive system that manages them can handle.

The committee directs the commander of Army Materiel Command and the commander of Naval Sea Systems Command to provide briefings to the House Committee on Armed Services not later than February 7, 2018, on separate initial assessments of following:

- (1) the extent to which AMC explored the use of COTS software as an add-on to LMP to improve its spare parts and inventory control management;
- (2) the extent to which NAVSEA has explored the use of COTS product lifecycle management software to improve managing its NSEDR and NAVLOGTD databases; and
- (3) the extent to which AMC and NAVSEA have found cost savings and readiness improvements for their programs by using this software and believe these cost savings and readiness increases could be expanded.

#### Joint Minimum Standards for Protective Covers

The committee recognizes and supports the military departments and the Office of the Secretary of Defense's efforts to identify and address the adverse readiness impacts of exposing critical military equipment to corrosive environmental conditions. However, the committee is concerned that there is no minimum U.S. military standard for protective covers. Subsequently, a wide range of covers has been procured, many of which do not adequately protect against corrosion. The committee understands that there are commercial, off-the-shelf protective covers that can address corrosion and thus improve the life of covered equipment.

Therefore, the committee directs the Secretary of Defense to provide a briefing to the congressional defense committees, not later than December 1, 2017, on the Department's efforts across the military services and within the Office of the Secretary of Defense to develop joint minimum standards for commercial, off-the-shelf protective covers. This briefing shall include a detailed description of plans and priorities for both the active and reserve components to use such covers to protect equipment, including but not limited to equipment returned from operational theaters, pre-deployed assets, and those items currently in storage within the United States and its territories. At a minimum, this briefing shall address requirements regarding the following: water, particulate, mold, and mildew intrusion; hydrophobic, oleo-phobic, and ultra-violet resistance; flexure; and temperature.

## Logistics Management Business Systems Modernization

The committee is aware of the military services' challenges in developing, acquiring, and fielding integrated supply, maintenance, logistics and financial resource planning systems that work across the enterprise. The committee notes that the Department of the Army has achieved a measureable level of success with the Logistics Modernization Program (LMP), a commercially developed enterprise resource planning system (ERP) used by the Army to integrate its Working Capital Fund missions. The committee encourages the Secretaries of the Navy and the Air Force to explore alternative resource planning systems associated with Working Capital Fund operations and consider future implementation of LMP. The committee directs the Secretary of the Navy and the Secretary of the Air Force to provide a briefing to the committee, no later than December 1, 2017, on the following in regard to Navy, Marine Corps, and Air Force Working Capital Fund ERPs:

(1) The ERP or other systems the military services are currently using to integrate their Working Capital Fund business systems across the services' logistics enterprises;

(2) The annual cost of modernizing and maintaining their current

Working Capital Fund business systems;

(3) How the three military services' current ERPs are contributing to the national security of the United States or to the efficient management of the Department of Defense, including auditability compliance;

(4) Options the military services have explored to find alternatives to their current systems which would provide equal or

greater capability at a lower cost, including consideration of the Army LMP; and

(5) Whether the existing acquisition management structure for the military services' current ERPs is adequate to manage and control program costs into the future.

#### Opportunities To Consolidate Printing Services

The committee notes that the Department of Defense requested funding for printing services that totaled more than \$440.0 million in the fiscal year 2017 budget request. Department of Defense Instruction 5330.03 establishes the Defense Logistics Agency (DLA) Document Services as the preferred provider for document automation services to the Department, which includes printing services, scanning and conversion, office device support, and electronic content management. In addition, the Defense Business Board's February 2015 report "Transforming DOD's Core Business Processes for Revolutionary Change" noted that actions such as moving to managed printing services and consolidating print management services could achieve significant savings in related activities. Furthermore, the committee has noted that the printing budgets for active service components are excessive and that portions of these budgets should be realigned to address unfunded readiness priorities of the Department and the military services.

In light of the above, the committee directs the Comptroller Gen-

eral of the United States to assess the following:

(1) what is the nature and scope of printing activities financed by Department components, including the military services and DLA;

(2) how have estimated costs for printing activities compared to

actual costs since fiscal year 2012;

(3) what options, if any, has the Department considered in adjusting its approach to printing services to achieve greater efficiencies or reduced costs for related activities; and

(4) any other issues the Comptroller General determines appro-

priate with respect to consolidation of printing services.

The committee further directs the Comptroller General to provide a briefing to the House Committee on Armed Services not later than December 1, 2017, on the Comptroller General's preliminary findings and to submit a final report to the Senate Committee on Armed Services and House Committee on Armed Services on a date agreed to at the time of the briefing.

#### Report on Operation of the Transportation Working Capital Fund

The committee notes that the Airlift Readiness Account (ARA), which maintains military airlift capacity during peacetime to be prepared for the higher level of activity needed during contingency operations, has received varying levels of funding in past years. The committee is concerned about how the Transportation Working Capital Fund (TWCF) can effectively operate and set reasonable rates with such fiscal uncertainty. Therefore, the committee directs the Comptroller General of the United States to submit a report to the congressional defense committees by August 1, 2018, regarding allocation of the ARA in conjunction with the TWCF during fiscal years 2007 to 2016, inclusive. The report should include:

(1) a review of the U.S. Transportation Command (TRANSCOM) oversight of the TWCF, including the command's adherence to statutory authorities related to the TWCF and ARA;

(2) a review of the rate-setting procedure used by TRANSCOM, including procedures to lower the TWCF rate once fixed costs of the program are covered and how ARA funding is used to fund airlift capacity not being fully utilized during peacetime but required to support contingency operations;

(3) how the Air Force pays its ARA bill during years in which ARA funding is not requested, authorized, or appropriated or years

in which ARA funding is cut; and

(4) what steps the Air Force has taken to ensure the Air Force Working Capital Fund receives the appropriate funding if a cash shortfall occurs because of a lack of fiscal year ARA funding.

## Revising Depot Carryover Calculations

Department of Defense regulations limit the amount of carryover allowable at the military depots at the end of a fiscal year. These regulations require that carryover be calculated in a way that routinely exceeds allowable carryover ceilings, resulting in decrements to the military services' appropriations. While the committee believes there should be limits on the amount of carryover workload held by a depot, the committee is concerned that the current calculation of allowable carryover has indirectly affected military readiness and the ability of the depots to sustain core workload as required by section 2464 of title 10, United States Code. As a result, the committee would like to understand the Department's calculation of allowable carryover.

Therefore, the committee directs the Secretary of Defense, in consultation with the Secretaries of the military departments, to submit a report to the House Committee on Armed Services by December 31, 2017, on workload carryover to include:

- (1) an explanation of how the carryover formula is currently calculated, and how each military service manages carryover;
- (2) what exclusions from carryover are currently in place and how they were determined;
  - (3) how carryover has been affected by the late receipt of funds;
- (4) the level of carryover of parts and materiel needed to support depot maintenance programs compared to direct labor hours;
- (5) what portion of total carryover is for inter-service workload; and
- (6) recommendations to modify the existing carryover formula.

The Secretary of Defense may also include other related matters as deemed appropriate in order to provide a comprehensive examination of carryover policies.

The committee further directs the Secretary of Defense to provide a briefing to the House Committee on Armed Services not later than October 31, 2017, on preliminary findings of the Secretaries' evaluation.

#### READINESS ISSUES

#### Advanced Adversarial Air Training Program

The committee notes that the Air Force testified it is at its lowest state of full-spectrum readiness in its history, particularly when confronting near-peer adversaries. The Air Force has publicly stated its need for contracted adversarial air support. The committee is concerned about the disparity between the significance that senior Air Force leadership assigns to increased combat pilot training and the lack of budgetary and programmatic attention to addressing it. The fiscal year 2018 Air Force budget approach delays the entrance of new combat pilot training capabilities not currently available to the Air Force. Specifically, the current adversarial air training capability flies subsonic, single engine aircraft that address a portion of lower-end training requirements; it does not address supersonic training, which U.S. pilots will face when engaging near-peer adversaries.

In the absence of commercially supplied supersonic adversarial air capability, the Air Force will continue to rely on front-line aircraft and pilots to meet this need, which the committee notes is expensive, reduces the life of the fleet, and takes pilots away from practicing their intended missions.

The committee believes the Air Force should move aggressively to meet the adversarial air combat training requirements. Therefore, the committee directs the Secretary of the Air Force to brief the House Committee on Armed Services by September 1, 2017, on the status of near-peer training utilizing advanced adversarial air capabilities.

# Advanced Foreign Language Proficiency

The committee recognizes the importance of advanced foreign language and cultural proficiency for military readiness and national security. When proficient language speakers effectively communicate with non-English speakers, individually or via the broadcast media, they become a major force multiplier and key component of national defense. The committee is aware that, in partnership with universities across the country, the National Security Education Program provides critical training for service members and government officials in a number of languages and strategic cultures, including those of the Arab world, Afghanistan, China, Russia, and Iran. The committee understands that the Language Flagship Program has successfully recruited language-proficient students by utilizing partnerships with K-12 schools devoted to creating articulated pathways into the program. The committee is concerned that the Department of Defense has not sufficiently prioritized these language readiness programs.

The committee is further concerned that the Department of Defense allowed access to authentic, copyrighted foreign language broadcast services media to lapse in 2015. Despite the continued need, the committee understands that a competitive request for proposal has not yet been released to begin the process of con-

tracting for a suitable solution.

Therefore, the committee directs the Secretary of Defense to provide a briefing to the House Committee on Armed Services by December 1, 2017, that assesses:

(a) Whether the National Security Education Program meets the current need for language and culture training so that warfighters and national security professionals can complete their missions effectively, whether current partnerships with K–12 schools are sufficient to provide language-proficient students to the Language Flagship Program, and whether the need would warrant an expansion of the language and cultural training programs; and

(b) The status of whether access to authentic, copyrighted foreign

language content should be restored for the joint force.

#### Alternative-Source F/A-18 Depot-Level Maintenance

The committee understands that the Department of the Navy awarded an alternative-source contract for F/A-18A/B/C/D depotlevel maintenance in February 2016. This award is another step toward addressing the backlog of F/A-18A/B/C/D depot-level maintenance requirements in a manner that leverages the range of relevant resources within the national technology and industrial base, and the committee encourages the Navy to induct aircraft to meet this contract's maximum authorization within each contract year. While the committee expects the Department of the Navy to workload its organic aviation depots to the maximum extent possible and in accordance with Federal law, the committee encourages the Navy to make maximum use of this contract to help eliminate the remaining backlog of F/A-18A/B/C/D depot-level maintenance requirements. Additionally, to improve efficiency of the aircraft maintenance process under this contract, the committee encourages the Navy to provide authorizations for engineering disposition and alternate supply chain as appropriate, with accompanying contractual changes.

The committee directs the Secretary of the Navy to submit a report to the House Committee on Armed Services not later than September 15, 2017, that includes, but is not limited to, plans to maximize the F/A–18A/B/C/D workload at its organic aviation depots; an evaluation of ongoing F/A–18A/B/C/D alternative-source depot-level maintenance efforts; plans for maximizing the number of aircraft authorized under the existing contract by contract year; plans for establishing a follow-on multiple-award contract for F/A–18A/B/C/D depot-level maintenance, as required to address the maintenance backlog; and confirmation that Navy officials are providing engineering disposition and other improvements to allow for optimal efficiency and throughput of aircraft.

## Counter-UAS Briefing

The committee believes that the importance of counter-unmanned aerial systems (C–UAS) will continue to increase due to the proliferating threat of commercially available and homemade hostile unmanned aerial systems used for reconnaissance and as flying Improvised Explosive Devices.

The committee is concerned that there is a shortage of C–UAS range space in the United States. Currently, there is only one site where test and training activities can take place, which is at the

Army's Yuma Proving Ground in Arizona. The committee notes it is important that training locations have sufficient contiguous and unimpeded ground and air space so that radio frequency jamming, directed energy, and kinetic capabilities can be utilized without

concern for impact outside of the range.

The committee directs the Secretary of Defense to provide a briefing to the House Committee on Armed Services not later than December 1, 2017, on the potential of using additional military installation ranges for C-UAS testing and training. To address this critical need, the committee encourages the Department of Defense to consider a number of additional sites that could be used for the testing and training of C-UAS capabilities.

# **Expediting the Security Clearance Process**

The committee notes that the Department of Defense and the Office of Personnel Management have undertaken significant steps to improve the security clearance review process. While some progress has been made, the security clearance backlog continues to prevent the Federal Government and the national security industrial base from hiring otherwise qualified personnel. The committee believes more needs to be done to address this backlog, including reviewing current security clearance procedures. For example, the Questionnaire for Public Trust Positions Standard Form 85 requires nearly the same information as the Standard Form 86, Questionnaire for National Security Positions. The committee believes positions requiring access to classified information are inherently positions of public trust, and requiring an individual with a favorably adjudicated security clearance based on the Standard Form 86 to undergo an additional nearly identical background check based on the Standard Form 85 is redundant, and likely adds to the significant backlog of background investigations throughout the U.S. Govern-

The Department risks losing new hires, particularly qualified linguists, engineers, computer scientists, and cyber professionals, who find jobs elsewhere while their security clearance review takes months to complete. However, the committee does note that the Federal Government already has options to expedite the security clearance process to bring in personnel that have linguistic and cultural competencies that are critical to the warfighter. Authority under title 5, United States Code, allows the government, in certain circumstances, to expedite hiring persons with specialized

skills.

The committee directs the Secretary of Defense, in consultation with the Office of Personnel Management, to provide a briefing to the Senate Committee on Armed Services and the House Committee on Armed Services by December 1, 2017, on efforts to shorten the security clearance review process. The briefing shall address potential time-savers such as using Standard Form 86 in lieu of Standard Form 85, allowing industry to provide certified initial background materials, reducing the number of contractors who require a clearance, returning to interim secret clearances for lowrisk hires, standardizing the process to allow civilians and contractors to move to new jobs within an agency without a lengthy wait for an additional security review, and standardizing adjudication measures. The briefing provided should also include information

about how the Federal Government uses other authorities to hire linguists and cultural experts where there are workforce gaps.

## Explosive Ordnance Disposal Budget Display

The committee received a briefing in accordance with a directive in the National Defense Authorization Act for Fiscal Year 2017 (Public Law 114–328) that included budget data for all explosive ordnance disposal (EOD) activities throughout the Department of Defense. The committee notes that this information, collected from all of the services' budgets and including operation and maintenance, procurement, and research, development, test and evaluation accounts, was not easily found yet was useful in identifying where EOD funding originated. Given the increasing importance of EOD units and congressional interest in EOD activities, the committee expects that in all future Department and service budget justification documents EOD activities will be clearly marked and identified.

## Explosive Ordnance Disposal Organization and Support to Operational Plans

Improvised explosive devices (IEDs) have been the enemy's weapon of choice in the Republic of Iraq, the Syrian Arab Republic, and the Islamic Republic of Afghanistan and, according to the Department of Defense, will probably be a mainstay in any future conflict, given their low cost to develop coupled with their potential for strategic impact. Since 2003, under the aegis first of the U.S. Army's Improvised Explosive Device Task Force, then of the Joint Improvised Explosive Device Defeat Organization, and now of the Joint Improvised-Threat Defeat Organization, the Department of Defense has sought to counter IED threats to U.S. forces. Integral to this effort, among other things, are explosive ordnance disposal (EOD) units which, despite a spike in growth since 2002, remain in high demand relative to the limited number of units throughout the Department. Moreover, the committee is concerned about the degree to which EOD requirements and capabilities have been integrated into standing operational plans. In light of the above, the committee directs the Comptroller General of the United States to assess the following:

- (1) the extent to which EOD requirements and capabilities are integrated into operational plans, including those for potential support of civil authorities;
- (2) the extent to which the Department's EOD capabilities, including manning and equipment, are sufficient to meet combatant commander requirements;
- (3) what, if any, steps are being taken to identify and mitigate any EOD capability gaps in operational plans;
- (4) the extent to which the Department conducts oversight of Department-wide EOD functions; and
- (5) any other issues the Comptroller General determines appropriate with respect to EOD capability support to operational plans.

The committee further directs the Comptroller General to provide a briefing to the House Committee on Armed Services not later than December 1, 2017, on the Comptroller General's preliminary findings and to submit a final report to the congressional de-

fense committees on a date agreed to at the time of the briefing. The committee also directs the Secretary of Defense, the Secretaries of the military departments, and the combatant commanders, to share any pertinent information about EOD units, requirements, and capabilities, including EOD units required to support operational plans, with designated representatives of the Government Accountability Office assigned to this review commensurate with applicable classification guidance.

#### Joint Force Training and Exercises

The budget request contained \$583.6 million in Operation and Maintenance, Defense-Wide, for the Combatant Commanders Exercise Engagement and Training Transformation (CE2T2) program.

The committee understands that the CE2T2 program supports combatant command and service joint training, from individual specialized skills to large-scale joint exercises, and is a critical enabler to improving joint readiness and warfighting capabilities. However, since 2011, the CE2T2 program has been reduced by 38 percent.

The committee recognizes that the 2016 National Military Strategy emphasizes the four-plus-one security challenges of the Russian Federation, the People's Republic of China, the Democratic People's Republic of Korea, the Islamic Republic of Iran, and violent extremism. The committee remains concerned about the readiness of the joint force to address the full spectrum of security challenges. The committee believes that greater resources for joint force training and exercises that span the combatant commands and allow for experimentation with new concepts of operations are essential to improving the effectiveness and readiness of the joint force, and for maintaining an appropriate balance within the joint force.

Therefore, the committee recommends \$603.6 million, an increase of \$20.0 million, in Operation and Maintenance, Defense-Wide, for the Combatant Commanders Exercise Engagement and Training Transformation program to enhance joint training and exercises that span combatant commands and address the four-plus-one challenges identified in the 2016 National Military Strategy.

#### Military Mission Line Moratorium

The committee notes that the military departments utilize ranges and operating areas in the Gulf of Mexico for a variety of testing and training missions. These include high altitude, supersonic air combat training, air-to-air missile testing, electronic warfare, drone targeting, naval sub-surface, air-to-surface, and surface-to-surface testing, including mine and counter-mine operations. These ranges and operating areas east of the Military Mission Line in the Gulf of Mexico provide approximately 120,000 square miles of ranges and operating areas that are essential to maintaining the maritime and airborne readiness of the military services. Furthermore, the ranges and operating areas east of the Military Mission Line in the Gulf of Mexico provide the military departments with critical airspace essential to 5th generation capabilities and provides for hypersonic weapons testing and space launch.

The Gulf of Mexico Energy Security Act (GOMESA) of 2006 (Public Law 119–432) established a moratorium on oil and gas leasing, pre-leasing, or any related activity in the ranges and operating areas east of the Military Mission Line in the Gulf of Mexico. This moratorium expires on June 30, 2022. With no comparable test and training area within the United States, the committee is concerned that the expiration of this moratorium may adversely impact the Department of Defense's ability to meet its military testing and training missions. Therefore, the committee directs the Secretary of Defense to deliver a report to the House Committee on Armed Services and the House Committee on Natural Resources not later than March 1, 2018. At a minimum the report shall address the following:

(1) The scope of military test and training events conducted in the area east of the Military Mission Line in the Gulf of Mexico;

(2) Comparable testing and training areas within the United States and its territories that can replicate the capabilities of the ranges and operating areas east of the Military Mission Line in the Gulf of Mexico;

(3) Comparable testing and training areas outside the United States which are available for United States military testing and training activities that can replicate the capabilities of the ranges and operating areas east of the Military Mission Line in the Gulf of Mexico;

(4) The number of test events, exercises, and military operations conducted annually in the ranges and operating areas east of the Military Mission Line in the Gulf of Mexico from 2006 to time of

report:

(5) The extent to which the services will be unable to meet training and test requirements necessary to be prepared to support Operational Plans should the moratorium on oil and gas leasing, pre-leasing, or any related activity east of the Military Mission Line in the Gulf of Mexico not be extended.

#### NASA Armstrong Flight Research Center F/A-18 Chase Aircraft

The committee is concerned about the availability of chase aircraft at NASA Armstrong Flight Research Center, which provides total flight safety during developmental and operational tests. The committee notes the NASA Armstrong Flight Research Center's proximity to Edwards Air Force Base, China Lake Naval Weapons Station, Marine Corps Air Station 29 Palms, and other associated desert and offshore test ranges, which makes the Center a regular provider of test missions for the Air Force, Navy, and Marine Corps. The committee believes these missions are critical to helping the U.S. military maintain its technological superiority.

The committee notes that chase aircraft maintain constant radio contact with research pilots, serve as an extra set of eyes during test flights, and provide a camera platform for research missions that must be photographed or videotaped. The committee understands that F/A–18F have the ideal high-speed test bed capacity and mold lines, can maintain safe, long-term, high-speed test operations, and do not confront the same maintenance issues as the current Armstrong Flight Research Center chase aircraft. The committee believes that Department of Defense-wide test missions are adversely impacted by the current aircraft availability at the Cen-

ter, and that the Department should consider replacing current NASA chase aircraft to support an aggressive future test schedule

as the Department modernizes its overall aircraft fleet.

Accordingly, the committee directs the Secretary of the Navy to submit a report to the House Committee on Armed Services, not later than 90 days after the enactment of this Act, on its plans to consider the transfer of aircraft and the timeline associated with such plans. The report should include:

(1) The number of aircraft planned for transfer;

(2) The minimum number of remaining flight hours of each aircraft to be transferred; and

(3) The radar capabilities, centerline and wing station stores management system, and advanced targeting forward looking infrared equipment of such aircraft.

#### Naval Shipyard Development Plans

The Department of the Navy operates and maintains four public shipyards in the United States: Norfolk Naval Shipyard, Virginia; Portsmouth Naval Shipyard, Maine; Puget Sound Naval Shipyard, Washington; and Pearl Harbor Naval Shipyard, Hawaii. The committee recognizes the vital role these shipyards play in generating readiness, supporting the Navy's surface and submarine fleet by performing depot- and intermediate-level maintenance, modernization, emergent repairs, and inactivations. However, the committee notes that the infrastructure at these shipyards has not been properly sustained, modernized, or configured to efficiently and effectively support the Navy's future force structure and shipyard workload. The committee believes that long-term underfunding of the Navy's infrastructure investment accounts has created capability gaps in shipyard infrastructure that will result in the public shipyards being unable to properly complete assigned and projected work. In fact, disturbing delays in ship overhaul work have already occurred.

The committee also notes that the public shipyards are supported by more than 34,000 employees and the Navy is planning to expand the workforce by another 2,000 employees by 2020 to accommodate anticipated workload. The committee notes that almost half of the entire public shipyard workforce has less than 5 years of experience and lacks the journeyman skills associated with a more experienced workforce. The Navy has testified that the manpower shortfall and inexperience in the public shipyard workforce may result in extended maintenance availabilities, thus affecting operational availability of combat-ready ships. This comes at a time when existing maintenance backlogs have expanded due to the increased operational tempo of the fleet, and continuing delays in receipt of appropriations have further affected the public shipyards' ability to execute work on time.

The shortage of journeyman-level experience and the insufficient industrial capacity have led to severe throughput issues at the public shipyards, highlighted by six nuclear attack submarines languishing in the shipyards for years beyond their scheduled completion date. As a result, some crews have spent their entire submarine assignment rotation pier-side, which degrades military personnel readiness and operational effectiveness. Further, insufficient capacity has led the Navy to decertify the USS *Boise* (SSN 764) for

diving operations until this submarine can be inducted for its engineered overhaul. Other attack submarines are likely to experience similar operational limitations until sufficient public-sector throughput can be provided. The committee is disappointed by the Navy's failure to respond in a timely and effective manner to growing backlogs and to implement corrective actions. The committee believes that significant workforce, workload planning, and infrastructure management changes should occur to enable more efficient planning and execution of maintenance availabilities.

While the public sector is expanding to accommodate the growing maintenance requirements, the committee also notes that private-sector shipyards currently have infrastructure and workforce capacity to help mitigate the shortfalls in nuclear maintenance availabilities. The committee believes that the Naval Sea Systems Command has moved away from the "One Naval Shipyard" concept that it had previously embraced at a time when it should be fully leveraging the entire industrial base. Furthermore, the committee notes that a significant private-sector workload expansion is programmed in conjunction with the start of the Columbia-class program. To reduce risk associated with the delivery of the Columbiaclass ballistic missile submarine, the committee believes that the Navy should analyze the feasibility of moving additional workload to the private sector until the public sector can establish a higher workload throughput baseline. At the same time, the Navy must not divert funding from or delay the public shipyards' modernization and workforce expansion that are necessary to meet future Navy requirements. This will allow the private sector to build up its workforce gradually prior to commencing work on the first *Columbia*-class submarine rather than rapidly expanding its workforce in 2021. The committee further believes that this temporary move may lead to a more efficient private-sector workforce and eventually lower program costs associated with the Columbia-class program, which, at a cost of \$100.2 billion, is the second largest acquisition program in the Department of Defense. Naval Sea Systems Command should examine ways to eliminate the barriers between the public- and private-sector nuclear shipyards and consider innovative ways to share resources and infrastructure across the enterprise while the public yards recapitalize.

Finally, the committee notes that the deficiencies within the public shipyard enterprise will be further exacerbated by the Navy's goal to expand ship force structure. The committee believes that the growth in the public shipyard enterprise should be paced by the anticipated growth in the Navy force structure, as detailed by the administration's 30-year shipbuilding plan, required annually

pursuant to section 231 of title 10, United States Code.

Therefore, the committee directs the Secretary of the Navy to provide a report to the congressional defense committees, by March 1, 2018, on a comprehensive plan to address shortfalls in the public shipyard enterprise. Specifically, this plan shall address the following elements:

(1) Personnel Roadmap: Prepare an employment development plan by shippard that estimates resourcing shortfalls and full-time equivalent allotments, including overtime and contracting support, workforce hiring targets, and the numbers and types of employees needed. To the degree possible include the number of apprentices by trade skill, the number of engineers, and the number of overhead disciplines; and the training initiatives and time needed to meet the emerging workload requirements for fiscal year 2019 and beyond.

(2) Infrastructure Development Plan: Identify current infrastructure deficiencies at U.S. naval shipyards and prepare a detailed master plan for each shipyard that includes a list of specific infrastructure projects, scope of work, cost estimates, and schedule associated with the current and 30-year force structure projections.

(3) Metrics Assessment Plan: Develop holistic workload metrics to better assess the efficiency of the entire shipyard versus a nar-

row review by maintenance availability.

(4) Workload Management Plan: Using the limitation currently imposed by the shortfall of personnel and the existing material condition of the public shipyards, prepare a 5-year workload management plan to include the entirety of the nuclear maintenance enterprise, both public- and private-sector capacities, that limits lost operational days.

(5) Funding and Authority Plan: Each plan shall identify the additional funding and any legislative authority needed to achieve an end state, as quickly as practicable, of elimination of all ship maintenance backlogs and a return to predictable, sustainable, and affordable ship maintenance availabilities, including for the anticipated growth in News force atmention

pated growth in Navy force structure.

#### Readiness of Coastal Riverine Forces

Following an incident involving the temporary detention of 10 U.S. Navy sailors aboard two riverine patrol boats by Iran's Revolutionary Guard in January 2016, the Comptroller General of the United States conducted a comprehensive review of the readiness of the Navy's Coastal Riverine Force, whose operational responsibilities range from defending high-value assets and critical maritime infrastructure to conducting offensive combat operations. The Comptroller General's report on the readiness of the Coastal Riverine Force highlights manning, training, and equipping challenges the force faces in maintaining its warfighting readiness. However, the committee notes that the Navy's response to the report failed to describe the steps the Navy will take to address the challenges identified. The committee is concerned that the challenges outlined in the Comptroller General's report will continue to worsen without correction, particularly the manning challenges facing the force. Accordingly, the committee directs the Secretary of the Navy to:

(1) develop manning strategies tailored to the Coastal Riverine Force's unique needs to address gaps in critical skills and com-

petencies:

(2) evaluate what human capital flexibilities the Navy could implement to support strategies to address Coastal Riverine Force's manning shortfalls; and

(3) develop a strategic human capital plan that addresses Coastal

Riverine Force manning shortfalls.

Further, the committee directs the Secretary of the Navy to provide a briefing to the House Committee on Armed Services and the Senate Committee on Armed Services not later than January 12, 2018, on the results of these efforts.

## Remotely Piloted Aircraft Training Strategy

The committee notes with concern that the Air Force's Active and Reserve Component MQ-1 and MQ-9 aircrews within the Air Force's remotely piloted aircraft (RPA) enterprise have limited access to unit training resources such as proficiency simulators and continuation training sorties because they are stretched to meet the operational demands of combatant commanders supporting deployed forces. The committee also notes that RPA aircrews are able to meet some training and proficiency requirements during the conduct of operational missions, but believes that this practice should be exercised only when absolutely necessary.

Therefore, the committee directs the Secretary of the Air Force to brief the House Committee on Armed Services not later than September 28, 2017, on the service's approach to RPA aircrew training, with a particular focus on how the Air Force plans to field simulator capability and training capacity among Active and Reserve Component units supporting RPA operations.

#### Report on Army Aviation Restructure Initiative

The committee is concerned about the status of Army attack aviation following the decision to execute the Aviation Restructure Initiative in 2013. The committee is aware that the decision to reduce attack and reconnaissance aviation battalions by 37 percent and realign most attack helicopters from the Army National Guard to the active component was made to meet the demands of strategic planning at the time. However, the committee notes there is a shortfall of both warrant officer and commissioned officer pilots in the active component. Meanwhile, there is a cadre of experienced and qualified Guard pilots that can help bridge this gap. The committee is concerned that this cadre may not remain a viable option, as the nation is facing a pilot shortage crisis and commercial airlines are now specifically targeting helicopter pilots. This mismatch of resources has created a situation where aircraft are assigned to bases with no pilots to fly them. The committee believes this scenario could negatively affect the ability of the Army to support combatant commanders' future needs. Furthermore, the committee needs to gain a better understanding of the overall operational impacts for National Guard Apache battalions given the current plan to retain 18 aircraft per unit in the National Guard instead of the 24 that their active-duty counterparts will have.

Accordingly, the committee directs the Secretary of the Army, in coordination with the Director of the National Guard Bureau, to provide a briefing to the House Committee on Armed Services, not later than December 31, 2017, on the status of Army attack aviation readiness. The briefing should also provide updates on new factors that affect the Army's ability to maintain a robust attack aviation capability over the next 3 years, including a plan to recruit and retain the required number of qualified attack helicopter pilots.

#### Report on Military Training for Rotary-Wing Aviation

Ongoing readiness challenges with rotary-wing aviation in the U.S. Armed Forces have raised a number of questions around the maintenance, training, manpower, safety, and deployability of these aircraft. For example, both the Army and Marine Corps have cited a lack of funding for training and maintenance, including spare parts, as a critical concern for their rotary-wing aviation communities. Further, the military services have cited pilot shortages and the lengthy duration of new pilot training as issues affecting rotary-wing aviation readiness. These issues have been further exacerbated by increased civilian hiring competition for experienced rotary-wing pilots. The committee has expressed concern about the effect these readiness challenges have had on the frequency of accident mishaps in rotary-wing aviation over the past 5 years and has urged the military services to prioritize funding for rotary-wing aviation in order to ensure that the United States maintains this crucial capability into the future.

Given these concerns, the committee directs the Comptroller

General of the United States to assess the following:

(1) to what extent have the military services met annual training requirements for rotary-wing aircraft, and identified any factors that have limited this training;

(2) what is known about the relationship between the amount and type of training completed on rotary-wing aircraft and the

number of accident mishaps;

(3) to what extent have the military services utilized virtual training devices to meet training requirements for rotary-wing aircraft; and

(4) any other issues the Comptroller General determines appro-

priate with respect to rotary-wing aviation training.

The committee further directs the Comptroller General to provide a briefing to the House Committee on Armed Services not later than February 1, 2018, on the Comptroller General's preliminary findings and to submit a final report to the Senate Committee on Armed Services and the House Committee on Armed Services on a date agreed to at the time of the briefing.

## Report on Multi-Domain Battle Concept

Over the past decade, the Russian Federation, the People's Republic of China, and other potential adversaries have developed sophisticated intelligence, surveillance, and reconnaissance; air defense; artillery; information operations; and other capabilities that pose significant challenges to U.S. ground forces entering the theater and, once in place, would leave them exposed to counterattack. In February 2017, the Army and Marine Corps published a concept paper describing an approach for ground combat operations in the face of such challenges. This approach, named "multi-domain battle," would synthesize ground maneuver, fires, and information operations capabilities to project power from the land and into the air, maritime, and cyber domains. In doing so, land forces would be able to consolidate gains, deny the adversary freedom of movement, and create temporary windows that the joint force could then exploit for decisive operations.

The committee appreciates the Army and Marine Corps publication of the multi-domain battle concept and is encouraged by the Army's forward thinking on the next steps to bring multi-domain battle to the warfighter. The committee is aware of additional, planned Army concept development, experimentation, and potential force structure changes that are intended to translate the concept into a warfighting capability. However, significant work remains. Importantly, the committee notes that multi-domain battle has implications for the Navy and Air Force, whose involvement will be instrumental in the concept's warfighting success. Bringing the multi-domain battle concept to fruition will require changes in warfighting doctrine, organization of new warfighting formations at multiple echelons, investment in key technologies, leader education, force training, and readiness evaluation.

Therefore, the committee directs the Comptroller General of the United States to review the Army's progress and plans in developing the concept. As part of the review, the Comptroller General should examine the extent to which the Army and Marine Corps have engaged with each other and with the other services to develop multi-domain battle concepts and doctrine, and set priorities for organizing, training, and equipping the force in the concept. Ad-

ditionally, the review should assess:

(1) the services' priorities and plans for fielding new multi-domain battle capabilities over the next 2 to 5 years;

(2) the implications for the Army's near-term and long-term mod-

ernization plans;

(3) plans for educating, training, and evaluating the readiness of Army formations to execute multi-domain battle operations; and

(4) any other matters related to multi-domain battle the Comp-

troller General determines are appropriate.

The committee further directs the Comptroller General to provide a briefing to the House Committee on Armed Services by July 1, 2018, on preliminary findings of the review and to submit a final report to the Senate Committee on Armed Services and the House Committee on Armed Services by a date agreed to at the time of the briefing.

#### Report on Unit-Level Training Costs to Build Full-Spectrum Readiness

The Department of Defense uses operation and maintenance (O&M) funding to train U.S. military forces in order to build combat readiness, among other purposes. However, in recent years, the military services have raised concerns about the level of O&M funding available to support unit-level training programs. For example, in 2016 the Assistant Commandant of the Marine Corps stated that given available resource levels, the Marine Corps was accepting prolonged readiness risks and focusing the training of some units to their more limited rotational missions versus full-spectrum training. The Vice Chief of Staff of the Army also stated that the Army took actions to enable the effective and efficient use of training resources in order to mitigate the risk posed by the fact that less than one-third of Army units were at acceptable levels of readiness.

The military service chiefs have identified rebuilding the readiness of the armed forces to prevail across a full range of potential contingencies as a top priority and, in recent budget requests, have recommended funding for training that had been cut due to budget constraints. The committee is aware that the military services use various approaches and models to determine funding requirements for training as part of the Department's planning, programming, budgeting, and execution processes. The committee is further

aware that the Department's annual budget requests include some information about the military services' O&M funding estimates for training. However, this information is not sufficiently detailed to determine unit training costs and the amount of readiness that is expected to be generated by annual O&M expenses. Therefore, it is difficult to determine the benefits that would be gained from additional O&M funding for unit-level training.

To better understand the military services' budgeting processes to build unit-level training readiness, and to achieve greater transparency over the military services' O&M funding requests, the committee directs the Comptroller General of the United States to as-

sess the following:

(1) how the military services determine annual O&M budget esti-

mates for unit-level training;

(2) the extent to which the Department of Defense and the military services established mechanisms to monitor the amount of O&M obligations for unit-level training and used data on actual O&M costs to develop future funding requests; and

(3) the extent to which the military services established processes and metrics to systematically evaluate unit training costs and the amount of readiness that is generated from O&M training expendi-

tures.

The committee further directs the Comptroller General to provide a briefing to the House Committee on Armed Services not later than February 1, 2018, on the Comptroller General's preliminary findings and to submit a final report to the congressional defense committees on a date agreed to at the time of the briefing.

## Small Arms Weapons Simulation Training

The committee recognizes the benefits gained from the use of simulation and synthetic training systems to maximize military training and readiness requirements. As the use of such systems increases to supplement live training exercises and to meet critical warfighter readiness requirements, the committee is concerned that the Department of Defense has not implemented clear performance evaluation metrics, data collection requirements, and validation standards to accurately assess and document whether each command's chosen training system is transferring required skills proficiency to live fire and real-world combat scenarios.

Therefore, the committee directs the Secretary of Defense to provide a briefing to the House Committee on Armed Services by December 1, 2017, that includes, at a minimum: a detailed description of the evaluation metrics that each service plans to use to ensure all new small arms simulation training systems and programs of instructions are tested to demonstrate clear and repeated live fire transfer proficiency and combat readiness prior to system acquisition; an assessment of the live fire performance results of existing simulation and synthetic small arms training systems being utilized; a plan to ensure future systems are capable of data collection that gives commands the ability to maintain and track individual and squad-level training records, provide trend analysis and forecast models to reduce training time and accurately determine live fire transfer readiness, and train to multiple proficiency levels and threat evolutions; and, examples of current simulation and synthetic small arms training systems that are documenting cost savings in ammunition, travel, training time, and expedited and improved qualification and remediation rates.

Training for Air Force Combined Air Operations Center Personnel

The committee recognizes that a top priority for the Air Force Chief of Staff is to qualify personnel to serve in joint task forces and combined air operations centers (CAOCs). This qualification relies in part on the opportunity for Air Force personnel to train in command and control procedures within the physical environment of a CAOC. Most Air Force CAOC training occurs during occasional large-force training and mission-rehearsal exercises, where the primary focus of the exercise is not the training of CAOC personnel. The committee believes that adequate command and control training of CAOC staffs is essential to safe, secure, and effective air operations in theaters and contingency environments around the world

Additionally, the committee is aware that regional CAOC training centers provide effective training with reduced costs. The Air Combat Command (ACC) Crisis Action Center, where ACC staff plans and commands ACC forces responding to a national crisis, and the CAOC Exercise (CAOC–X), designed to support planning and execution of joint forces when ACC is the air component commander supporting an engaged combatant commander or a joint task force commander leading a crisis response, are two such regional centers. In those cases, the CAOC provides actual current intelligence and targeting and produces the daily air tasking order. The committee strongly encourages the Chief of Staff of the Air Force to ensure that CAOC–X and other regional CAOCs are resourced, manned, and fully utilized to serve as a training venue for the planning, execution, and command and control of joint forces taking part in major regional joint exercises.

Training Range Inventory, Capacity, and Configuration in Europe

As the committee asserts elsewhere in this report, the committee believes there is operational and strategic value in maintaining forward presence of United States military forces by providing rapid response capabilities to geographic combatant commanders, serving as a deterrent to potential adversaries, assuring partners and allies, and facilitating cooperative efforts to build and develop partner-nation security capabilities. The committee notes that permanently stationed U.S. forces presently are located primarily at legacy, enduring locations in Western Europe, while rotational U.S. forces have primarily been deployed to support exercises and assurance activities in the Baltic countries, as well as Central and Eastern Europe. With these rotational forces exercising in new locations, the committee is concerned that training requirements to build and sustain readiness may not be adequately met by current training range capabilities in the region.

Therefore, the committee directs the Secretary of Defense, in coordination with the Commander, U.S. European Command, to provide a report to the congressional defense committees by April 1, 2018, on the location, capabilities, and capacities of air and ground ranges, range complexes, military training routes, and special-use areas in the European Command's area of responsibility. At a minimum, the report should address the following:

(1) an inventory of current air and ground ranges, range complexes, military training routes, and special-use areas the U.S. Armed Forces currently utilize or have access to in the U.S. European Command's area of responsibility;

(2) an overview of the current capabilities and capacity of these training areas to support permanent and rotational forward pres-

ence of U.S. military forces;

(3) an assessment of any capability gaps at these training areas that limit the ability to meet training requirements to U.S. standards: and

(4) details of current or planned investments in training infrastructure to mitigate identified capability gaps, help meet U.S. training requirements, or required to support additional permanent or rotational forces in Europe, funded either by the United States, NATO, or foreign partners.

#### Undergraduate Pilot Training

The committee supports the Air Force's efforts to increase pilot production as a critical enabler to rebuilding readiness. Given current and future training demands, existing undergraduate pilot training (UPT) facilities are reaching maximum throughput capacity. The Air Force currently utilizes nearby civilian airfields to meet operational flight requirements. Therefore, the committee directs the Secretary of the Air Force to provide a briefing to the House Committee on Armed Services by October 27, 2017, on the following:

- (1) A business case analysis to identify efficient ways to maximize current UPT activities including use of proximate civilian airfields;
  - (2) Efforts to maximize current UPT activities;
- (3) Efforts to optimize the pilot instructor training force including use of retired-to-reserve, Air Force Reserve, Air National Guard, and civilian contract instructors;
- (4) An assessment of availability of civilian aviation facilities proximate to current UPT installations including runway capacity, ramp space, access to military operating areas, hangars, other aviation operation infrastructure, facilities for administrative and support functions, and availability of instructors, maintainers, and other support personnel;

(5) A summary of currently shared operations and activities between each Air Force UPT installation and proximate civilian aviation facilities, and a list of other proximate civilian aviation facili-

ties with potential utilization capabilities; and

(6) An evaluation of the feasibility and efficiency of increasing the use of proximate civilian aviation facilities to expand UPT capacity to meet throughput requirements and create additional surge capacity, including expanding operations at currently utilized civilian aviation facilities and increasing utilization of additional proximate civilian aviation facilities.

#### OTHER MATTERS

## Combatant Command Policies on Open-Air Burn Pits

The committee notes that the Department of Defense has in place Department of Defense Instruction (DODI) 4715.19 that establishes policies, responsibilities, and procedures regarding the use of open-air burn pits in contingency environments. The committee notes that U.S. Central Command is currently the only geographic combatant command that has issued implementation policies and procedures for waste management. In September 2016, the Government Accountability Office (GAO) recommended that the commanders of U.S. Africa Command, U.S. European Command, U.S. Pacific Command, and U.S. Southern Command also issue implementation policies and procedures for waste management. The committee notes that the Department concurred with this recommendation and understands that the Department is currently in the process of revising DODI 4715.19. As the Department revises DODI 4715.19, the committee encourages the Department to incorporate the above GAO recommendation.

#### Consideration of the Domestic Textile Industrial Base in Contracting for Uniforms

The committee is aware of an August 2016 Department of the Navy directive altering mandatory seabag requirements, including elimination of the wool peacoat and the all-weather coat. The committee is concerned this decision was made without considering upgrades or alternatives to the traditional peacoat or the impact to the nation's domestic textile industrial base. As the Department of the Navy works to streamline military uniforms, the committee notes the importance of a stable domestic textile industrial base to produce garments such as these and encourages the Department to take into consideration, when making decisions about uniform changes, such an impact upon the domestic textile industrial base, including the small businesses that provide critical contributions.

The committee directs the Secretary of the Navy to provide a briefing to the House Committee on Armed Services not later than October 1, 2017, that addresses the following:

- (1) an explanation of why the Navy removed the peacoat from the mandatory seabag requirements;
- (2) what consideration of alternatives was given to upgrades or improvements to the peacoat;
- (3) any evaluation of the costs of the cold-weather parka compared to both the peacoat and the all-weather coat; and
- (4) an assessment of the impact to the domestic textile industrial base of these changes.

## Dioxin-Based Herbicides Review Related to Guam

Agent Orange, a dioxin-based herbicide now known as a carcinogen, was used by the United States during the Vietnam war to defoliate trees and shrubs that provided cover for opposition forces. The committee is concerned that additional exposures to Agent Orange may have occurred in the U.S. Territory of Guam, where persistent questions have been raised about the use of locations on Guam as a transshipment point for Agent Orange intended for use

in Vietnam. The committee therefore directs the Comptroller General of the United States to conduct a review of the Federal Government's handling of Agent Orange on Guam and submit a report of the findings to the House Committee on Armed Services by March 22, 2018. The Comptroller General's study should address the following:

(1) what is known about where the Federal Government stored, transferred, and used Agent Orange or its components on Guam, and what is known about related contamination at these locations, including what is known about the storage or transfer of Agent Orange on Guam;

(2) the number of known and suspected environmental "hot spots" from dioxin contamination associated with Agent Orange

that are on Guam;

(3) what is known about the current dioxin levels and threats to human health and the environment at these sites;

(4) the plans that are in place to remediate these sites, and the

status of these plans; and

(5) the sum of money the Department of Defense spent to date to clean up these sites and the projected remaining costs associated with these cleanup efforts.

# Ensuring Proper Fitting of Athletic Footwear

The committee is aware of the Department of the Navy's use of specific foot imaging technology to properly gauge the individual foot type (overpronated, neutral, or underpronated) and appropriate shoe type (motion control, stability, or cushioned/neutral) for recruits entering basic training. The committee notes a Department of the Navy study demonstrating the effectiveness of its Recruit Training Command's standardized physical training program including injury prevention initiatives, such as matching individuals with appropriate shoe types, in lowering the rate of recruit injury by nearly 70 percent. The committee supports the Department of the Army and the Department of the Air Force's efforts to fit recruits with appropriate athletic footwear to reduce injury and encourages both departments to ensure that all recruit training facilities are equipped with foot imaging technology to prevent injury.

#### **Environmental Restoration**

The committee notes that the Department of Defense has responsibility for more than 34,000 sites under the installation restoration program at active installations, Formerly Utilized Defense Sites, and BRAC locations. The Department has set a goal of achieving response complete at 90% of these sites by the end of fiscal year 2018 and 95% of these sites by the end of fiscal year 2021. The committee understands that the Department is currently on track to achieve these goals. However, the committee notes that even after the Department meets these goals, more than 1,700 sites will still not have achieved response complete status. Based on current estimates, many of these locations will require significant time and resources to achieve response complete.

The committee is concerned that current funding may be insufficient and result in inefficient remediation efforts, delays and overall higher costs. Therefore, the committee directs the Secretary of Defense, in coordination with the secretaries of the military departments, to provide a report to the House Committee on Armed Services no later than December 31, 2017, on efforts to reach 100% response complete for sites under the installation restoration program. At minimum, the report should provide a list of sites that have not yet achieved response complete, a total estimated cost for achieving response complete at these sites, the number of years that it will take at current annual funding levels to achieve response complete at these sites, and current efforts the Department is taking to ensure the installation restoration program is resourced to maximize efficiency and minimize the total time required to reach response complete at these sites including the feasibility of public-private partnerships to expedite clean up.

#### Fabric and Membrane Technology for Footwear

The committee expresses its ongoing support for Department of Defense research and testing of cutting-edge fabric and membrane technologies to improve service members' comfort, effectiveness, and mission readiness. The report (S. Rept. 114-49) accompanying the National Defense Authorization Act for Fiscal Year 2016 included a requirement for the Secretary of Defense to submit a report to the Senate Committee on Armed Services on fabric-based respiratory protective equipment, including evaluations of emerging technologies to minimize service member exposure to inhalation of particulates and pollutants. Additionally, in the report (S. Rept. 114-255) accompanying the National Defense Authorization Act for Fiscal Year 2017, the Senate Committee on Armed Services directed the Secretary of the Army to report similarly on footwear technologies that incorporate new polytetrafluoroethylene (ePTFE) and other membrane technologies. In light of these directives, the committee understands that the Army is currently evaluating the referenced technologies and that the evaluations are yielding positive results.

Recognizing the importance of these technologies to warfighter readiness, the committee directs the Secretary of the Army to provide a briefing to the House Committee on Armed Services not later December 15, 2017, on the suitability of the aforementioned technologies to military applications. Specifically, the briefing shall provide an evaluation of the fabric-based filter protective equipment technologies reviewed under the reporting requirement in S. Rept. 114–49, identification of specific applications for integration of the technology, and a plan for transitioning the technology into such applications and programs. In line with the Army's review of footwear technologies as required in S. Rept. 114-255, the briefing shall provide a detailed evaluation of new ePTFE membranes, laminates, and other membrane technologies. Additionally, the briefing shall include suggested revisions to current requirements and product descriptions that could be implemented to expand access to these membrane technology advancements. Finally, the briefing shall address a plan for transitioning membrane technologies into military applications, including Army boot modernization programs such as the jungle combat boot program, the cold-weather and extreme cold-weather boot programs, and future cold-weather clothing systems.

#### Flame-Resistant Military Uniform Postures

In the committee report (H. Rept. 114–537) accompanying the National Defense Authorization Act for Fiscal Year 2017, the committee directed the military services to provide a joint briefing to the committee that outlined the plan and process, including costs, for providing flame-resistant (FR) uniform protection postures for all military personnel. The committee encouraged all military services to consider implementing FR uniform protective postures based on an assessment of the threat and the operating environment. In light of this report, the committee encourages the services to continue to update military requirements and implementation of FR protective postures based on the threat and the operating environment.

#### Former Naval Weapons Industrial Plant Bethpage

The committee notes that from 1942 until 1996, the Naval Weap-ons Industrial Reserve Plant (NWIRP) at Bethpage, New York, was a government-owned, contractor-operated facility. Since its inception, the plant's primary mission supported the research, prototyping, testing, design, engineering, fabrication, and primary assembly of military aircraft. The committee is aware of the environmental concerns related to soil and groundwater contamination in the vicinity of NWIRP Bethpage. There are other responsible parties and non-Navy sources that have contributed to regional groundwater contamination, including the contractor which operated the NWIRP and owned and operated adjacent facilities.

To guide remediation actions associated with the historic operations, the committee notes that the Navy has signed three separate records of decision (ROD) for the NWIRP Bethpage dated 1995, 2003, and 2015. To date, the U.S. Government has spent approximately \$94 million to implement and comply with the RODs. The U.S. Government currently estimates that it will spend approximately \$2.5 million to \$10.0 million per year over the next 30 years. This funding supports a range of response actions including extensive off-property groundwater monitoring, construction, operation, maintenance and monitoring of public water supply treatment systems and hot spot mass removal systems. Funding is also being used to remove contaminated soil, construct and operate soil vapor extraction systems to treat contamination in solid and control vapor intrusion, and to conduct community and regulatory outreach through restoration advisory board and quarterly technical meetings. The committee is aware that the Navy intends to continue efforts to remediate soil and groundwater contamination while also putting in place land use controls to prevent human exposure to contaminated soil and groundwater.

The committee is supportive of the Navy's remediation efforts as outlined in the RODs and believes it is important for the Navy to continue to dedicate adequate resources to ensure timely and effective remediation of the former NWIRP Bethpage site. The committee also believes working with State and local governments to timely and efficiently execute the Navy's responsibilities under its RODs may help reduce the financial burden stemming from remediation efforts. As additional resources or new technologies are

made available, the committee encourages the Navy to seek opportunities to expedite the current remediation schedule.

### Guam Micronesian Kingfisher Recovery Habitat

The committee is aware that the Department of the Navy and the U.S. Fish and Wildlife Service signed a Memorandum of Agreement (MOA) on June 11, 2015 regarding the conservation of the Guam Micronesian kingfisher. The committee notes that this MOA was put in place to support the relocation of U.S. Marines to Guam as well as to ensure a sufficient amount of suitable survival recovery habitat is conserved and managed for the reintroduction and recovery of the Guam Micronesian kingfisher. Under the MOA, 5,234 acres of land under the control of the Department of Defense was identified and designated for enhanced management activity to ensure the continued suitability of the recovery habitat until such time as the species can be reintroduced on Guam. The committee notes that this MOA was signed by the Deputy Assistant Secretary of the Navy, as the Department of the Navy serves as the executive agent for installation management for Joint Region Marianas. However, the committee is concerned about the potential impacts this MOA may have on current and future military infrastructure development, training, and operational requirements on Guam as well as the limitations unrelated to the Department of Defense that affect the feasibility of reintroduction of the species. Therefore, the committee directs the Secretary of the Navy and the Secretary of the Air Force to provide a briefing to the House Committee on Armed Services not later than September 30, 2017, regarding the near- and long-term operational impacts of the MOA. At minimum, the briefing should address land use needs at Andersen Air Force Base, impacts on the operations master plan for future mission growth, any identified property deemed potentially in conflict with current land designations, and any other relevant information.

#### Personal Protection Equipment Awards Program

The Army's Personal Protection Equipment Awards program recognizes soldiers whose lives were saved by their personal protective equipment. The award consists of a demilitarized piece of protective equipment that the soldier was wearing when injured, mounted on a wooden plaque or mount. The committee understands that the Secretary of the Army chose to limit eligibility for these awards to only those soldiers under the jurisdiction of the Secretary of Defense at the time of the award. The committee believes that the program is important to both soldiers and former soldiers and, when feasible, should be available to both groups. The committee supports the Army's Personal Protection Awards program for all recipients, including former soldiers who have earned the award.

#### Polyfluoroalkyl Substances

The committee notes that perfluorooctanesulfonic acid (PFOS) and perfluorooctanoic acid (PFOA) are part of a class of man-made chemicals that are used in many industrial and consumer products to make the products resist heat, stains, water, and grease. In the 1970s, the Department of Defense and commercial airports began using aqueous film forming foam (AFFF), which contained these

chemical compounds, to extinguish petroleum fires. The committee notes that on May 19, 2016, the U.S. Environmental Protection Agency (EPA) issued new Lifetime Health Advisories (LHAs) under the Safe Drinking Water Act for combined PFOS and PFOA concentrations at 70 parts per trillion. Since EPA issued these new LHAs, the Department of Defense has completed testing of the 480 drinking water systems at locations where the Department supplies drinking water. In addition, the Department is currently working through The Comprehensive Environmental Response, Compensation, and Liability Act (42 U.S.C. 9601) (CERCLA) process to conduct preliminary assessments and site inspections to identify sites where PFOS and PFOA may have been released by the Department of Defense. This activity includes performing tests of privately owned drinking water wells near military installations where warranted. These efforts will be used to inform future cleanup actions, and the Department incorporates LHA information when assessing risk to human health under CERCLA.

The committee understands that the Department of Defense spent approximately \$200.0 million through December 31, 2016, in response to PFOS and PFOA. This funding has been used to conduct preliminary assessments and site inspections, test drinking water systems, and provide mitigations such as bottled water or drinking water filtration systems where water systems tests indicate PFOS/PFOA above the LHA levels. The committee notes that the Department was unable to program funds specifically for these actions in the fiscal year 2016 or fiscal year 2017 budget requests and have been funding their response to PFOS/PFOA using existing funds originally programmed for other response actions. The committee is supportive of the Department's near-term efforts to respond to PFOS and PFOA and believes it is critical for the Department to continue its outreach and engagement with local communities with drinking water systems that have PFOS/PFOA detected above the LHAs and may have been impacted by the Department's activities. Furthermore, the committee believes it is important for the Department to fully plan, program, and budget for actions related to PFOS and PFOA in order to meet its responsibilities under the CERCLA, the Safe Drinking Water Act (42 U.S.C. 300f), and other applicable Federal statutes, rules, and regulations.

Finally, the committee directs the Secretary of Defense to provide a briefing to the House Committee on Armed Services not later than September 30, 2017, on the Department's response to PFOS/ PFOA. The briefing should provide the following:

(1) the locations on or in proximity to current and former military installations where the Department has conducted testing of military, public, and private drinking water systems and a summary of the results of those tests where PFOS/PFOA levels were detected in excess of the LHA levels;

(2) the locations on or in proximity to current and former military installations where the Department has conducted groundwater testing where PFOS/PFOA may have been released and a summary of the results of those tests where PFOS/PFOA levels were detected in excess of the LHA levels;

(3) short-term mitigations that have been funded and provided by the Department, both on military installations and in the surrounding communities, where PFOS/PFOA levels were detected in excess of the LHA levels;

- (4) the process and timeline for identifying and resourcing long-term remediation on military installations or in the surrounding communities where PFOS/PFOA levels were detected in excess of the LHA levels; and
- (5) research conducted in pursuit of less environmentally harmful AFFF blends containing less or no PFOS/PFOA.

#### Recurrent Flooding and Sea Level Rise

The committee is aware that several Department of Defense installations and facilities are experiencing recurrent flooding events and encroachment from sea level rise. These events have the potential to adversely impact military operations, training, and readiness. The committee is aware that the Department of Defense and the military departments have initiated several studies and collaborations with academic, research, and intergovernmental institutions to model recurrent flooding and sea level rise and examine options for enhancing mission resiliency at impacted military installations. The committee supports these collaborations and encourages the Department of Defense to continue and expand these research efforts.

The committee directs the Secretary of Defense, in coordination with the Secretaries of the military departments, to provide a briefing to the House Committee on Armed Services not later than March 1, 2018, on recurrent flooding and sea level rise impacting military installations. At a minimum, the briefing should address the findings and recommendations of the research collaborations that have been undertaken to date, a discussion of areas where the Department of Defense believes additional research is needed, and ongoing and planned mitigations to ensure the continued operational viability and mission resilience of affected military installations.

#### Standard-Issue Garments for Women

In the committee report (H. Rept. 114–537) accompanying the National Defense Authorization Act for Fiscal Year 2017, the committee directed the Secretary of Defense to provide a briefing to the committee outlining plans to provide personal protective equipment (PPE) and organizational clothing and individual equipment (OCIE) developed specifically for female service members. The committee notes that it has not yet received this briefing. The committee further directs the Secretary of the Army to provide a briefing to the House Committee on Armed Services not later than September 30, 2017, on efforts to ensure that standard-issue garments, such as the Army Combat Shirt, are meeting the unique body types of female service members. This briefing should include a discussion of how the Army is seeking to leverage advancements in flame-resistant technology and integrate them into standard garments.

#### Water Quality Trading

The Committee recognizes that the Department of Defense must comply with post-construction water quality requirements under

the Federal Water Pollution Control Act (Clean Water Act) when conducting construction activities on military installations. Water quality requirements may include, but are not limited to, those associated with the control and reduction of storm water runoff, total maximum daily loads, water quality standards and criteria, National Pollution Discharge Elimination System permits, or similar state or local permits. The committee is aware that some states are developing Water Quality Trading Program, where the purchase of water quality credits, generated by third parties and certified by the appropriate federal, state, or local agency, may help reduce costs while meeting water quality compliance requirements in a transparent and accountable manner. Therefore, the committee directs the Secretary of Defense, in coordination with the secretaries of the military departments, to provide a briefing to the House Committee on Armed Services not later than March 1, 2018, on the potential use of water quality credits to comply with applicable federal and state laws and regulations. At minimum, the briefing should address the Department's policy with respect to purchasing water quality credits, examples of where such credits have been used by the Department of Defense, as well as the financial costs, benefits, and challenges associated with such credits.

#### LEGISLATIVE PROVISIONS

#### SUBTITLE A—AUTHORIZATION OF APPROPRIATIONS

Section 301—Authorization of Appropriations

This section would authorize appropriations for operation and maintenance activities at the levels identified in section 4301 of division D of this Act.

#### SUBTITLE B—ENERGY AND ENVIRONMENT

Section 311—Codification of and Improvements to Department of Defense Clearinghouse to Coordinate Department Review of Applications for Certain Projects That May Have Adverse Impact on Military Operations and Readiness

This section would amend chapter 7 of title 10, United States Code, by inserting a new section that would update the authorities of the Department of Defense Clearinghouse established by section 358 of the Ike Skelton National Defense Authorization Act for Fiscal Year 2011 (Public Law 111–383).

This section would also change the name of the Clearinghouse to the "Military Aviation, Range, and Installation Assurance Program Office" would repeal section 358 of Public Law 111–383 upon enactment.

#### Section 312—Energy Performance Goals and Master Plan

This section would amend section 2911 of title 10, United States Code, to add future energy demand, energy resiliency, and opportunities to leverage third-party financing to the special considerations the Secretary of Defense must consider when developing and implementing the energy performance goals and energy performance master plan.

Section 313—Payment to Environmental Protection Agency of Stipulated Penalty in Connection With Umatilla Chemical Depot, Oregon

This section would authorize the Secretary of the Army to transfer a specified amount to the Hazardous Substance Superfund to satisfy a stipulated penalty assessed by the Environmental Protection Agency against the Umatilla Chemical Depot, Oregon, under a Federal Facility Agreement entered into by the Army and the Environmental Protection Agency in 1989.

Section 314—Payment to Environmental Protection Agency of Stipulated Penalty in Connection With Longhorn Army Ammunition Plant, Texas

This section would authorize the Secretary of the Army to transfer a specified amount to the Hazardous Substance Superfund to satisfy a stipulated penalty assessed by the Environmental Protection Agency against Longhorn Army Ammunition Plant, Texas, under a Federal Facility Agreement entered into by the Army and the Environmental Protection Agency in 1991.

Section 315—Department of Defense Cleanup and Removal of Petroleum, Oil, and Lubricant Associated With the Prinz Eugen

This section would authorize removal and cleanup of petroleum, oil and lubricants from the heavy cruiser Prinz Eugen, which was transferred from the United States to the Republic of the Marshall Islands in 1986.

SUBTITLE C—LOGISTICS AND SUSTAINMENT

Section 321—Reauthorization of Multi-Trades Demonstration Project

This section would amend section 338 of the National Defense Authorization Act for Fiscal Year 2004 (Public Law 108–136) to extend the multi-trades demonstration project through 2024.

Section 322—Guidance Regarding Use of Organic Industrial Base

This section would direct the Secretary of the Army to maintain the arsenals with sufficient workloads to ensure affordability and technical competence in all critical capability areas.

#### SUBTITLE D—REPORTS

Section 331—Quarterly Reports on Personnel and Unit Readiness

This section would amend section 482 of title 10, United States Code, to change the matters reported in the Quarterly Readiness Reports to Congress (QRRC). Reports for the first and third quarters of a fiscal year would contain information on Department of Defense and military service readiness status while those for the second and fourth quarters of a fiscal year would contain Department of Defense mitigation plans for readiness deficiencies identified in the previous quarter's QRRC.

Section 332—Biennial Report on Core Depot-Level Maintenance and Repair Capability

This section would amend section 2464 of title 10, United States Code, to improve existing biennial reporting requirements on core depot-level maintenance and repair capabilities by clarifying what specific data should be included in such reports.

Section 333—Annual Report on Personnel, Training, and Equipment Needs of Non-Federalized National Guard

This section would amend section 10504 of title 10, United States Code, to require an annual report on the personnel, training, and equipment needs of the non-federalized National Guard.

Section 334—Annual Report on Military Working Dogs Used by the Department of Defense

This section would establish an annual reporting requirement on Military Working Dogs used by the Department of Defense.

Section 335—Annual Briefings on Army Explosive Ordnance Disposal

This section would require an annual briefing to the Committees on Armed Services of the Senate and House of Representatives on the Army's explosive ordnance disposal program.

Section 336—Report on Effects of Climate Change on Department of Defense

This section would state findings related to climate change, express the sense of Congress regarding climate change and national security, and would require the Secretary of Defense to provide a report on vulnerabilities to military installations and combatant commands from climate change related effects.

#### SUBTITLE E—OTHER MATTERS

Section 341—Explosive Safety Board

This section would amend section 172 of title 10, United States Code, to change the name of the Ammunition Storage Board to the Explosive Safety Board while also changing the membership requirements of that board.

Section 342—Department of Defense Support for Military Service Memorials and Museums That Highlight the Role of Women in the Armed Forces

This section would allow the Secretary of Defense to provide financial support for the acquisition, installation, and maintenance of exhibits, facilities, historical displays, and programs at military service memorials and museums that highlight the role of women in the Armed Forces.

The budget request included \$5.0 million for financial support for the acquisition, installation, and maintenance of exhibits, facilities, historical displays, and programs at military service memorials and museums that highlight the role of women in the military in accordance with section 2833 of the National Defense Authorization Act for Fiscal Year 2017 (Public Law 114–328). As noted in the justification materials accompanying the budget request, the committee expects these funds and the authority provided by this section to enable the memorial to address program shortfalls and chart a path to financial independence by end of year fiscal year 2018.

Section 343—Limitation on Availability of Funds for Advanced Skills Management Software System of the Navy

This section would require the Secretary of the Navy to brief the committee on needed enhancements to the Advanced Skills Management software system. This section would also withhold funding for this software system until 60 days after the Secretary of the Navy has provided the committee with the results of a formal request for information that considers commercial-off-the-shelf solutions.

Section 344—Cost-Benefit Analysis of Uniform Specifications for Afghan Military or Security Forces

This section would require a cost-benefit analysis of uniform specifications as a condition of the contract whenever the Secretary of Defense enters into a contract for the provision of uniforms for Afghan military or security forces.

# TITLE IV—MILITARY PERSONNEL AUTHORIZATIONS

#### LEGISLATIVE PROVISIONS

SUBTITLE A—ACTIVE FORCES

Section 401—End Strengths for Active Forces

This section would authorize the following end strengths for Active Duty personnel of the Armed Forces as of September 30, 2018: Sec. 401.

Service	FY 2017 Authorized	FY 2018		Change from	
		Request	Committee Recom- mendation	FY 2018 Request	FY 2017 Authorized
Army	476,000	476,000	486,000	10,000	10,000
Navy	323,900	327,900	327,900	0	4,000
USMC	185,000	185,000	185,000	0	0
Air Force	321,000	325,100	325,100	0	4,100
DOD Total	1,305,900	1,314,000	1,324,000	10,000	18,100

#### Section 402—Revisions in Permanent Active Duty End Strength Minimum Levels

This section would establish new minimum Active Duty end strengths for the Army, Navy, Marine Corps, and Air Force as of September 30, 2018. The committee recommends 486,000 as the minimum Active Duty end strength for the Army, 327,900 as the minimum Active Duty end strength for the Navy, 185,000 as the minimum Active Duty end strength for the Marine Corps, and 325,100 as the minimum Active Duty end strength for the Air Force.

#### SUBTITLE B—RESERVE FORCES

## Section 411—End Strengths for Selected Reserve

This section would authorize the following end strengths for Selected Reserve personnel, including the end strength for Reserves on Active Duty in support of the Reserves, as of September 30, 2018:

Sec. 411.

Service	FY 2017 Authorized	FY 2018		Change from	
		Request	Committee Recom- mendation	FY 2018 Request	FY 2017 Authorized
Army National Guard	343,000	343,000	347,000	4,000	4,000
Army Reserve	199,000	199,000	202,000	3,000	3,000
Navy Reserve	58,000	59,000	59,000	0	1,000
Marine Corps Reserve	38,500	38,500	38,500	0	0
Air National Guard	105,700	106,600	106,600	0	900
Air Force Reserve	69,000	69,800	69,800	0	800
DOD Total	813,200	815,900	822,900	7,000	9,700
Coast Guard Reserve	7,000	7,000	7,000	0	0

## Section 412—End Strengths for Reserves on Active Duty in Support of the Reserves

This section would authorize the following end strengths for Reserves on Active Duty in support of the Reserves as of September 30, 2018:

Sec. 412.

Service	FY 2017 Authorized	FY 2018		Change from	
		Request	Committee Recom- mendation	FY 2018 Request	FY 2017 Authorized
Army National Guard	30,155	30,155	30,155	0	0
Army Reserve	16,261	16,261	16,261	0	0
Navy Reserve	9,955	10,101	10,101	0	146
Marine Corps Reserve	2,261	2,261	2,261	0	0

Service	FY 2017 Authorized	FY 2018		Change from	
		Request	Committee Recom- mendation	FY 2018 Request	FY 2017 Authorized
Air National Guard	14,764	16,260	16,260	0	1,496
Air Force Reserve	2,955	3,588	3,588	0	633
DOD Total	76,351	78,626	78,626	0	2,275

## Section 413—End Strengths for Military Technicians (Dual Status)

This section would authorize the following end strengths for military technicians (dual status) as of September 30, 2018:

Sec. 413.

Service	FY 2017 Authorized	FY 2018		Change from	
		Request	Committee Recom- mendation	FY 2018 Request	FY 2017 Authorized
Army National Guard	25,507	25,507	25,507	0	0
Army Reserve	7,570	7,427	7,427	0	-143
Air National Guard	22,103	21,893	21,893	0	-210
Air Force Reserve	10,061	10,160	10,160	0	99
DOD Total	65,241	64,987	64,987	0	- 254

# Section 414—Fiscal Year 2018 Limitation on Number of Non-Dual Status Technicians

This section would establish the maximum end strengths for the Reserve Components of the Army and Air Force for non-dual status technicians as of September 30, 2018:

Sec. 414.

Service	FY 2017 Authorized	FY 2018		Change from	
		Request	Committee Recom- mendation	FY 2018 Request	FY 2017 Authorized
Army National Guard	1,600	1,600	1,600	0	0
Air National Guard	350	350	350	0	0
Army Reserve	420	420	420	0	0
Air Force Reserve	90	90	90	0	0
DOD Total	2,460	2,460	2,460	0	0

## Section 415—Maximum Number of Reserve Personnel Authorized To Be on Active Duty for Operational Support

This section would authorize, as required by section 115(b) of title 10, United States Code, the maximum number of Reserve

Component personnel who may be on Active Duty or full-time National Guard duty during fiscal year 2018 to provide operational support. The personnel authorized here do not count against the end strengths authorized by section 401 or section 412 of this Act unless the duration on Active Duty exceeds the limitations in section 115(b)(2) of title 10, United States Code.

Sec. 415.

Service	FY 2017 Authorized	FY 2018		Change from	
		Request	Committee Recom- mendation	FY 2018 Request	FY 2017 Authorized
Army National Guard	17,000	17,000	17,000	0	0
Army Reserve	13,000	13,000	13,000	0	0
Navy Reserve	6,200	6,200	6,200	0	0
Marine Corps Reserve	3,000	3,000	3,000	0	0
Air National Guard	16,000	16,000	16,000	0	0
Air Force Reserve	14,000	14,000	14,000	0	0
DOD Total	69,200	69,200	69,200	0	0

#### SUBTITLE C—AUTHORIZATION OF APPROPRIATIONS

## Section 421—Military Personnel

This section would authorize appropriations for military personnel at the levels identified in the funding table in section 4401 of division D of this Act.

#### TITLE V—MILITARY PERSONNEL POLICY

## ITEMS OF SPECIAL INTEREST

### **Bystander Intervention Training**

The committee notes that research in the use of evidence-based bystander intervention training and education has yielded promising results in helping to decrease the number of sexual assaults. The committee encourages the Department of Defense to continue to employ evidence-based training and education methods and to leverage civilian research centers in developing new and effective ways to reduce sexual assaults in the military.

#### Comptroller General Report on Race Data in the Military Justice System

The committee is aware of a recent report that concluded that racial disparities may exist in the military justice system. The committee notes that the report relies on incomplete information because of differences in the way in which the military services collect and maintain data on this subject. Therefore, not later than January 30, 2019, the committee directs the Comptroller General of the United States to submit a report to the Armed Services Committee of the House of Representatives containing the following

components: (1) how the military services record and maintain the race and gender of service members convicted of violations of the Uniform Code of Military Justice; (2) the reason for any differences in collection and maintenance of this data among the military services; (3) recommendations to improve the collection of this data; (4) data and analysis to assist the committee in determining whether there is a racial disparity in the prosecution of cases under the Uniform Code of Military Justice; and (5) any other matters the Comptroller General believes are relevant to this issue.

## Digital Transformation of the Recruiting Process

The committee understands that the Department of Defense and the military departments are working to improve and modernize the military recruiting process. However, the committee is aware that additional modernization is required to optimize recruiting and entrance processing. Therefore, the committee directs the Secretary of Defense, in consultation with the military services, to provide a briefing to the Committee on Armed Services of the House of Representatives no later than April 1, 2018, on the plan to modernize military recruiting and entrance processing. The briefing shall include:

- (1) how the enlistment and commissioning workflow process can be modernized to improve workflow by minimizing paperwork and maximizing paperless transactions;
- (2) how the military services measure effectiveness and return on investment for recruiting and advertising; and
- (3) how the military services are using data analytics to improve recruiting.

#### Female Propensity To Serve in the Armed Forces

The committee recognizes that a broad talent pool is critical to attaining qualified recruits with the requisite skill sets in demand by the armed services. An analysis of Joint Advertising Market Research and Studies data conducted for the Defense Advisory Committee on Women in the Services estimated that only 29% of youth ages 17 to 24 meet eligibility criteria for military service. Over half of that population is comprised of women; however, women account for less than 15% of today's active duty force. Increasing the propensity of women to serve is an important step to achieving meaningful access to that eligible population and vital to meeting longterm readiness requirements. Therefore, the committee directs the Secretary of Defense to brief the House Armed Services Committee by January 31st, 2018 on the following:

(1) female propensity to serve in each of the Armed Services, including historical trends in propensity from 9/11 through the opening of remaining combat arms MOSs and units to women;

(2) a review of proactive measures the services have taken to in-

crease the propensity of women to serve;

(3) an assessment of programs, policies, or incentives that could help increase the propensity of women to serve including an evaluation of how successful previous efforts been in this regard;

(4) service efforts to recruit women applicants, including measures of success weighted against the varying propensity of men and women to serve, funding directed towards gender diversity initiatives, and statistics related to female-targeted advertising and outreach to female athletes and high school students as a percentage

of overall recruiting efforts in these areas; and

(5) an assessment of the impact of service culture on the propensity of women to serve, including departmental and service efforts to build environments of respect and inclusion and counter negative impressions of military service stemming from recent social media scandals.

#### Gender Double Standards

The committee embraces the service of all qualified service members and believes that a single standard should apply to all service men and women to the degree practicable. While the committee supports the continuance of gender and age specific physical fitness evaluations, the committee is concerned that female service members are sometimes perceived to be held to different standards than their male service members. The committee is particularly concerned with the differences in basic training, such as the differing haircut standards for men and women in all services' initial entry training. The committee also believes that gender neutral physical standards should be adopted through the services for each occupation. Such standards would ease the gender neutral assignment policies to all duty positions, which should be the norm.

To begin the process of eliminating the perception of double

To begin the process of eliminating the perception of double standards as much as possible, the committee directs the Secretary of Defense, in coordination with service secretaries and the chiefs of the armed services, to review instances where men and women are held to different standards across the services and brief the House Committee on Armed Services by February 1, 2018 on any such differences the Secretary recommends retaining. Such a briefing should include discussion on appearance standards; a gender neutral assignment policy; gender neutral training and occupa-

tional standards, and any separate gender training.

## Gender Integration of United States Marine Corps Basic Recruit Training

The committee notes that on January 24, 2013 the Secretary of Defense rescinded the 1994 Direct Ground Combat Definition and Assignment Rule and directed the service to open all occupations and units to women as expeditiously as possible, but no later the 1 January 2016. The committee also recognizes that the military services have transitioned to gender-neutral occupational standards, but the military has retained different standards for men and women for the service's physical fitness test and encourages the services to continue to explore options for gender-neutral standards in this regard. The committee also notes that the United States Marine Corps is the only military service that has not integrated men and women at basic recruit training. Therefore, the committee directs the Commandant of the Marine Corps, not later than one year after enactment, to report to the Committees on Armed Services of the Senate and the House of Representatives on the required changes and cost the Marine Corps would require to execute a fully integrated basic recruit training, to include the construction or renovation of barracks.

#### GI Bill Benefit Review

The committee recognizes the substantial benefit the Post 9-11 GI Bill provides service members to further their or their dependent's education. Due to the length of service requirements to earn the benefit or transfer the benefit to a dependent, many service members have experienced difficulty understanding how much of the benefit they have earned. The committee is aware that service members, both Active Duty and in the Reserve Components, have had to reimburse the government for unauthorized use of the benefit due to not meeting the length of service requirements. Therefore, the committee directs the Secretary of Defense to provide a briefing to the House Committee on Armed Services by November 30, 2017, on whether providing service members information on their remaining entitlement upon discharge from service would be feasible and appropriate. The committee believes relevant information would include the amount of the Post 9-11 GI Bill benefit each service member has earned prior to separation, retirement or release from military service, including whether or not they have completed any additional service obligation for transferring the benefit to a dependent.

#### Military Child Custody Protections

The committee remains concerned that service members are not receiving necessary information related to State child custody laws governing their dependents. While the Secretaries of the military departments are currently required to provide notice of child custody protections under the Servicemembers Civil Relief Act, the military departments do not have uniform requirements to provide information on State child custody laws. Therefore, the committee directs the Secretary of Defense, in consultation with the Secretaries of the military departments, to provide a briefing to the Committee on Armed Services of the House of Representatives not later than March 1, 2018, on the information and resources currently provided to service members regarding State child custody laws. The briefing shall include an analysis of how best to standardize the dissemination of this information to all affected service members, as well as an analysis of when, and how often, the information should be provided to these service members.

#### Military Officer Diversity

The Committee is concerned with the lack of diversity within commissioned officers and believes a new evaluation of military service academy attendees is necessary to obtain data in order to evaluate future policy. Therefore, the Committee directs the Secretary of Defense to evaluate the recruiting, retention, and persistence rates of military service academy candidates, current cadets/midshipmen, and graduates. The Secretary of Defense shall provide the results of the evaluation in a briefing to the Committee on Armed Services of the House of Representatives no later than December 1, 2018.

#### Military Service Academy Applications and Reserve Officer Training Corps Scholarship Programs

The committee recognizes that the selection opportunity for a position at a military service academy is a very selective process and the number of applications vastly outnumbers the available military service academy positions. Due to an abundance of well-qualified applicants for military service academies and their potential interest and qualification for a Reserve Officer Training Corps (ROTC) scholarship, the committee highly encourages the Secretaries of the military departments to forward all military service academy non-select applications to their respective ROTC commands for consideration for an ROTC scholarship. In so doing, the Secretaries should also inform the applicant of the full range of options for which he or she may be qualified.

#### Pilot Shortage Assessment

The committee recognizes that the services are having difficulty addressing shortfalls in critical career fields that are vital for the readiness of our Armed Forces, specifically in the pilot career field. The committee is concerned about the Air Force's retention and recruitment issues within the fighter pilot community. The committee notes that the Air Force provided written testimony to the committee on February 7, 2017, stating that the Air Force was short 723 fighter pilots below requirement and 1,555 pilots short across all mission areas.

Therefore, the committee encourages the Secretary of the Air Force to evaluate all options for improving the recruitment and retention of Air Force pilots. As part of such an assessment, the committee directs the Secretary of the Air Force to provide a briefing to the Committee on Armed Services of the House of Representatives by December 1, 2017, on the extent to which moving pilot or other aviation billets to the Active Guard and Reserve Components would address these shortages.

## Pre-Command Audit Training Course

The committee believes that good financial management and auditability are important responsibilities of military leaders at all levels and is concerned that responsible officers receive inadequate training on these matters in the course of their careers. Therefore, the committee directs the Secretary of Defense to submit a report to the Committees on Armed Services of the Senate and the House of Representatives by March 1, 2018, on the current programs of education used to train those officers assuming a command billet or a billet directly responsible for financial management on their responsibilities regarding financial management and auditability.

Additionally, the committee directs the Comptroller General of the United States to submit a report to the Committees on Armed Services of the Senate and the House of Representatives by June 1, 2018, that provides an assessment of the programs identified in the Secretary's report. The report of the Comptroller General shall also include an overview of current law and the Department of Defense's financial management and audit efforts to be in compliance with statutory guidance, as well as general financial management

training requirements for command billets or billets requiring management of Department of Defense funds.

#### Provision of Services at Department of Defense-Run Child Development Centers (CDC)

The committee is concerned about staffing shortages at childcare centers on military installations. These facilities provide important services to the families of our men and women in uniform and allow the military to tap the potential of important demographics of society that otherwise might not be able to contribute to our national defense. On-base childcare is also an important workplace benefit that servicemembers and their families depend on as part of their total military compensation. The committee is further concerned that the civilian hiring freeze issued by the Administration in January 2017 has furthered these shortages. Therefore the committee directs the Secretary of Defense to brief the House Armed Services Committee by December 1, 2017 on:

(1) current staffing deficiencies at service-run child development centers (CDCs), to include part-time and preschool programs;

(2) whether the hiring freeze created any collateral effects on the services' ability to fill child-care positions (e.g. reduced administrative staff at personnel offices, etc.);

(3) how long the hiring process takes for filling individual childcare positions including information on what kinds of background checks are involved;

(4) an assessment of whether streamlined hiring authorities help fill vacancies faster;

(5) a discussion of the kinds of incentives that would help recruit child-care workers in areas where filling these positions is a challenge;

(6) how child care fee assistance programs could be improved to

fill any gaps in availability; and

(7) how the Department intends to ensure that non-installation Child Development Centers address the unique developmental needs of servicemember families should military families have to seek outside care.

#### Report on the Feasibility of Establishing a Military Family Service Corps

The committee directs the Secretary of Defense to submit a report to the Committees on Armed Services of the Senate and the House of Representatives by February 1, 2018, on the feasibility of the U.S. Department of Defense entering into an agreement with the Corporation for National and Community Service to establish a Military Family Service Corps as an AmeriCorps Affiliate.

Participants in such a Corps would focus on service in a military community in activities selected by the installation commander from a list of options drawn from a survey of need in the military community. Potential activities could include the following: military spouse career support, transition support for members departing military service; integration of new military families into the military community and installation; development and implementation of morale and recreation activities for the installation; service as a liaison with local schools for military children; support for military

families with children of special needs, wounded warrior transition support, and any additional activities the Secretary deems appropriate.

#### Review of Resourcing of Trial Defense Services

The committee is aware of the integral role that an independent and adequately resourced military trial defense service plays in the military justice system. Accordingly, the committee directs the Secretary of Defense, in coordination with the Secretaries of the military departments, to conduct a review of the trial defense services resourcing, and to provide a briefing to the Committee on Armed Services of the House of Representatives not later than April 1, 2018. The review will include:

(1) whether military defense counsel require independent investigators in order to adequately defend their clients, and the costs associated with providing such investigators;

(2) whether trial defense offices are adequately resourced with

personnel and equipment;

(3) the feasibility and advisability of providing independent funding and approval authority to trial defense services for expert witnesses; and

(4) the programs in place to ensure that lead defense counsel in complex cases, such as murder and sexual assault, have the appropriate experience and training required to effectively defend their clients.

#### Review of the Court Martial Appeals Process

The committee recognizes the significant efforts made to modernize the Uniform Code of Military Justice in order to maintain good order and discipline in the armed forces while providing service members due process protections. However, the committee is aware that certain service members are unable to appeal their court-martial cases to the United States Supreme Court. Under existing law, the Supreme Court lacks jurisdiction to hear appeals in which the Court of Appeals for the Armed Forces (CAAF): declined review; denied extraordinary relief; or, in some cases, denied interlocutory appeals. In these cases, service members have less access to Supreme Court review than civilians operating in the civilian court system. Therefore, the committee directs the Secretary of Defense to review restrictions on service member appeals to the United States Supreme Court and whether these restrictions should be eliminated and provide a briefing to the Committee on Armed Services of the House of Representatives no later than April 30, 2018.

## Social Media Policy for Recruits

The committee notes that DOD Instruction 1304.26, March 23, 2015, ENCLOSURE 3 contains a section, "Character/Conduct," that reads as follows: "The underlying purpose of these enlistment, appointment, and induction standards is to minimize entrance of persons who are likely to become disciplinary cases, security risks, or who are likely to disrupt good order, morale, and discipline. The Military Services are responsible for the defense of the Nation and should not be viewed as a source of rehabilitation for those who

have not subscribed to the legal and moral standards of society atlarge." The committee understands that DD FORM 4/1, OCT 2007, ENLISTMENT/REENLISTMENT DOCUMENT ARMED FORCES OF THE UNITED STATES, states, "If my behavior fails to meet acceptable military standards, I may be discharged and given a certificate for less than honorable service, which may hurt my future job opportunities and my claim for veteran's benefits."

The committee is troubled by recent high-profile cases involving the nonconsensual sharing of intimate images. In addition, the committee is concerned that the military departments continue to have varying policies outlining appropriate social media conduct. The committee believes that all service members must be explicitly notified, upon enlistment or reenlistment, that online harassment, bullying, or hazing, including sexual harassment, bullying, or hazing, will not be tolerated and, if verified, may lead to a less than honorable discharge.

Therefore, the committee directs the Secretary of Defense to provide a briefing to the House Committee on Armed Services by January 31, 2018, on the best method to ensure uniform high standards across the military services for social media use by service members, and to require notification and acknowledgment by all enlistees of the existence of these policies and the potential consequences for violations of these standards.

#### LEGISLATIVE PROVISIONS

SUBTITLE A—REGULAR AND RESERVE COMPONENT MANAGEMENT

Section 501—Modification of Requirements Relating to Conversion of Certain Military Technician (Dual Status) Positions to Civilian Positions

This section would amend section 1053 of the National Defense Authorization Act for Fiscal Year 2016 (Public Law 114–92), as amended by section 1084 of the National Defense Authorization Act for Fiscal Year 2017 (Public Law 114–328), to reduce the clerical and administrative dual status technician conversions to title 5, United States Code, civilians required by those sections from 20 percent to 10 percent and would extend the date of completion of those conversions for 1 year until October 1, 2018. Additionally, this section would require the Secretary of Defense to submit a report to the Committees on Armed Services of the Senate and the House of Representatives not later than March 1, 2018, containing recommendations for revisions to section 709 of title 32, United States Code.

Section 502—Pilot Program on Use of Retired Senior Enlisted Members of the Army National Guard as Army National Guard Recruiters

This section would authorize the Secretary of the Army to carry out a pilot program under which retired senior enlisted members of the Army National Guard would serve as contract recruiters for the Army National Guard. Section 503—Equal Treatment of Orders To Serve on Active Duty under Section 12304a and 12304b of Title 10, United States Code

This section would amend sections 1074(d)(2) and 1145(a) of title 10, United States Code, to authorize Reserve Component members activated under the authority provided by either section 12304a or 12304b of title 10, United States Code, to receive pre-mobilization and transitional TRICARE health care.

Section 504—Direct Employment Pilot Program for Members of the National Guard and Reserve

This section would authorize the Secretary of Defense to conduct a pilot program to provide job placement assistance to members of the National Guard and Reserves. This section would also require the Secretary to provide a report to the Committees on Armed Services of the Senate and the House of Representatives by January 31, 2022 describing the results of the pilot. The authority to conduct the program would expire on September 30, 2020. The Secretary would be further authorized to extend the pilot program for not more than 2 fiscal years.

SUBTITLE B—GENERAL SERVICE AUTHORITIES AND CORRECTION OF MILITARY RECORDS

Section 511—Consideration of Additional Medical Evidence by Boards for the Correction of Military Records and Liberal Consideration of Evidence Relating to Post-Traumatic Stress Disorder or Traumatic Brain Injury

This section would amend section 1552 of title 10, United States Code, to require Boards for the Correction of Military Records to review medical evidence of the Secretary of Veterans Affairs and civilian healthcare providers in cases in which the application is based on matters relating to post-traumatic stress disorder (PTSD) or traumatic brain injury (TBI). In addition, it would require the boards to review the case with liberal consideration to the former member that PTSD or TBI potentially contributed to the discharge or dismissal, or discharge characterization.

Section 512—Public Availability of Information Related to Disposition of Claims Regarding Discharge or Release of Members of the Armed Forces When the Claims Involve Sexual Assault

This section would amend sections 1552(h) and 1553(f) of title 10, United States Code, to add a requirement to publicly disclose statistics related to applications to the Boards for the Correction for Military Records and Discharge Review Boards in which sexual assault is alleged to have contributed to the original characterization of the discharge or release of the claimant.

Section 513—Pilot Program on Use of Video Teleconferencing Technology by Boards for the Correction of Military Records and Discharge Review Boards

This section would authorize the Secretary of Defense to conduct a pilot program on the use of video teleconferencing technology by boards for the correction of military records and discharge review boards so that, when authorized, applicants may appear before the board without being physically present.

Section 514—Inclusion of Specific Email Address Block on Certificate of Release or Discharge From Active Duty (DD Form 214)

This section would require the Secretary of Defense to modify the Certificate of Release or Discharge from Active Duty (DD Form 214) to include a specific block for the service member's email address.

Section 515—Provision of Information on Naturalization Through Military Service

This section would direct the Secretary of Defense to ensure certain service members are informed of the availability of naturalization through military service under section 328 of the Immigration and Nationality Act (8 U.S.C. 143).

SUBTITLE C-MILITARY JUSTICE AND OTHER LEGAL ISSUES

Section 521—Clarifying Amendments Related to the Uniform Code of Military Justice Reform by the Military Justice Act of 2016

This section would make clarifying amendments to the Uniform Code of Military Justice, including clarifying that petitions for writs of mandamus by victims have priority in both the Court of Criminal Appeals and the Court of Appeals for the Armed Forces; expanding the pre-referral matters that a military judge may consider to include appointment of a certain individual to assume the rights of certain victims and pre-referral matters related to a petition for a writ of mandamus by a victim; clarifying that the President may establish the types of sentences that require automatic reduction in enlisted rank; and extending the due date of the Military Justice Review Panel's assessment on sentencing data from 2020 to 2021.

Section 522—Minimum Confinement Period Required for Conviction of Certain Sex-Related Offenses Committed by Members of the Armed Forces

This section would amend section 856(b)(1) of title 10, United States Code (article 56(b)(1) of the Uniform Code of Military Justice) to include a two-year mandatory minimum period of confinement for service members convicted of certain sex-related offenses.

Section 523—Prohibition on Wrongful Broadcast or Distribution of Intimate Visual Images

This section would amend the Uniform Code of Military Justice to insert a new section (article) prohibiting wrongful broadcast or distribution of intimate visual images.

Section 524—Information for the Special Victims' Counsel or Victims' Legal Counsel

This section would amend section 1044e(b)(6) of title 10, United States Code, to require that, if there is a prosecution of an alleged sex-related offense, the special victims' counsel or victims' legal

counsel representing the victim shall receive a copy of all case information in the possession of the trial counsel, unless the information is privileged.

Section 525—Special Victims' Counsel Training Regarding the Unique Challenges Often Faced by Male Victims of Sexual Assault

This section would require that baseline Special Victims' Counsel training include training on how to recognize and deal with the unique challenges often faced by male victims of sexual assault.

Section 526—Garnishment To Satisfy Judgement Rendered for Physically, Sexually, or Emotionally Abusing a Child

This section would amend section 1408 of title 10, United States Code, to authorize the garnishment of service member retired pay to satisfy a judgement rendered for physically, sexually, or emotionally abusing a child.

Section 527—Inclusion of Information in Annual SAPRO Reports Regarding Military Sexual Harassment and Incidents Involving Nonconsensual Distribution of Private Sexual Images

This section would amend section 1631(b) of the Ike Skelton National Defense Authorization Act for Fiscal Year 2011 (Public Law 111–383) to require inclusion of information on reports of sexual harassment and incidents involving nonconsensual distribution of private sexual images involving members of the Armed Forces in the annual Department of Defense Sexual Assault Prevention and Response Office Report.

Section 528—Inclusion of Information in Annual SAPRO Reports regarding Sexual Assaults Committed by a Member of the Armed Forces against the Member's Spouse or Other Family Member

This section would require inclusion of information regarding sexual assaults committed by service members against their spouse, intimate partner, or other dependent in an annual report required by section 1631 the Ike Skelton National Defense Authorization Act for Fiscal Year 2011 (Public Law 111–383), which is issued on or after March 1, 2018.

Section 529—Notification of Members of the Armed Forces Undergoing Certain Administrative Separations of Potential Eligibility for Veterans Benefits

This section would require that service members being separated from the military with an other than honorable discharge be informed, in writing, that they may petition the Veterans Benefits Administration of the Department of Veterans Affairs for certain benefits despite their characterization of service.

Section 530—Consistent Access to Special Victims' Counsel for Former Dependents of Members of the Armed Forces

This section would direct the Secretary of the Navy to revise the Navy Victims' Legal Counsel policy to allow certain former dependents of service members to receive Victims' Legal Counsel representation.

## SUBTITLE D—MEMBER EDUCATION, TRAINING, RESILIENCE, AND TRANSITION

Section 541—Prohibition on Release of Military Service Academy Graduates To Participate in Professional Athletics

This section would amend sections 4348(a), 6959(a), and 9348(a) of title 10, United States Code, to require that any graduate from a military service academy program must fulfill their military service commitments without exception before being released to participate in professional sports.

## Section 542—ROTC Cyber Institutes at the Senior Military Colleges

This section would authorize the Secretary of Defense to carry out a program to establish a Reserve Officers' Training Corps Cyber Institute at each of the senior military colleges.

## Section 543—Lieutenant Henry Ossian Flipper Leadership Scholarship Program

This section would require the Secretary of the Army to establish the Lieutenant Henry Ossian Flipper Leadership Scholarship Program. The scholarship program would provide financial assistance to an individual pursuing a recognized post-secondary credential at a minority-serving institution, who enters into an agreement for active duty service with the Army. This section would also require the Secretary to report to the congressional defense committees within one year following the date of enactment of this Act on the progress of the program.

## SUBTITLE E—DEFENSE DEPENDENTS' EDUCATION AND MILITARY FAMILY READINESS MATTERS

Section 551—Continuation of Authority to Assist Local Educational Agencies That Benefit Dependents of Members of the Armed Forces and Department of Defense Civilian Employees

This section would authorize \$30.0 million for the continuation of Department of Defense assistance in fiscal year 2018 to local educational agencies that are impacted by the enrollment of dependent children of military members and Department of Defense civilian employees. Elsewhere in this Act, the funding table in Division D would authorize an additional \$20.0 million, for a total of \$50.0 million, for such purposes.

#### Section 552—Education for Dependents of Certain Retired Members of the Armed Forces

This section would amend section 2164 of title 10, United States Code, to allow dependents of retired members of the Army, Navy, Air Force, and Marine Corps residing on military installations in the United States to attend Department of Defense schools on those bases.

Section 553—Codification of Authority to Conduct Family Support Programs for Immediate Family Members of Members of the Armed Forces Assigned to Special Operations Forces

This section would make permanent the authority provided by section 554 of the National Defense Authorization Act for Fiscal Year 2014 (Public Law 113–66), as modified by section 574(a) of the National Defense Authorization Act for Fiscal Year 2016 (Public Law 114–92) by adding a new section to chapter 88 of title 10, United States Code. The section would provide the Commander, U.S. Special Operations Command the authority to conduct programs for immediate family members of members of the Armed Forces assigned to special operations forces.

Section 554—Reimbursement for State Licensure and Certification Costs of a Spouse of a Member of the Armed Forces Arising from Relocation to Another State

This section would amend section 476 of title 37, United States Code, to permit the Secretary of a military department or the Secretary of Homeland Security to reimburse a member of the Armed Forces up to \$500 for a spouse's expenses related to obtaining licensing or certification in another State incident to a permanent change of station. This section would also require the Secretary of Defense and the Secretary of Homeland Security to work with States to improve the portability of licenses and certifications between States.

#### SUBTITLE F—DECORATIONS AND AWARDS

Section 561—Replacement of Military Decorations at the Request of Relatives of Deceased Members of the Armed Forces

This section would amend section 1135 of title 10, United States Code, to require the Secretary of Defense to replace the military decorations of a deceased recipient to certain relatives at no cost to the Department of Defense.

Section 562—Congressional Defense Service Medal

This section would amend chapter 57 of title 10, United States Code, to establish the Congressional Defense Service Medal. The medal would be awarded by the Secretary of Defense on the behest and behalf of Congress to groups or other entities that have distinguished themselves by exemplary service or achievement advancing the defense or national security of the United States. The committee believes that Congress will direct the Secretary to bestow these awards by passage of a law or concurrent resolution and that all awards will be approved on a bipartisan basis.

Section 563—Limitations on Authority to Revoke Certain Military Decorations Awarded to Members of the Armed Forces

This section would amend chapters 357, 567, and 857 of title 10, United States Code, to limit the authority of the President or Secretary of a military department to revoke certain military decorations after the presentation of the award to the service member.

#### SUBTITLE G-MISCELLANEOUS REPORTS AND OTHER MATTERS

Section 571—Expansion of United States Air Force Institute of Technology Enrollment Authority to Include Civilian Employees of the Homeland Security Industry

The section would amend section 9314a of title 10, United States Code, to allow homeland security industry employees employed by a private firm in one of the critical infrastructure sectors identified in Presidential Policy Directive 21 to attend the United States Air Force Institute of Technology.

#### Section 572—Servicemembers' Group Life Insurance

This section would amend section 1967(f)(4) of title 38, United States Code, by striking the second sentence of such paragraph, regarding the failure to notify a member's spouse in a timely manner of certain elections and beneficiary designations.

#### Section 573—Voter Registration

This section would amend section 705 of the Servicemembers Civil Relief Act (50 U.S.C. 4025), to allow service members stationed in a State pursuant to military orders to vote in Federal, State and local elections in that State instead of their State of permanent residence.

Section 574—Sense of Congress regarding Section 504 of Title 10, United States Code, on Existing Authority of the Department of Defense To Enlist Individuals, Not Otherwise Eligible for Enlistment, Whose Enlistment is Vital to the National Interest

This section would express a sense of Congress that there is currently a statute, specifically paragraph (2) of subsection (b) of section 504 of title 10, United States Code, that allows the Secretary concerned to authorize the enlistment of certain non-citizens if the Secretary determines that such enlistment is vital to the national interest.

# TITLE VI—COMPENSATION AND OTHER PERSONNEL BENEFITS

### ITEMS OF SPECIAL INTEREST

Local Purchasing Contracts for the Defense Commissary Agency

The committee is aware that significant savings in Second Destination Travel costs may be realized by the Defense Commissary Agency (DeCA) by pursuing contracts with local distributors and vendors in the Pacific region. The Department of Defense Inspector General has recently verified that DeCA can maintain quality, selection and cost savings by exercising local purchase with Fresh Fruits and Vegetable. The committee believes that DeCA should explore every opportunity available to reduce second destination transportation cost and that utilizing existing contracts could provide commissary customers with greater variety while providing significant transportation savings to the Department of Defense. Additionally, an expansion of local products and distributor con-

tracts will strengthen local economic partnerships with DeCA. Therefore, the committee directs the Secretary of Defense to provide a briefing to the committee not later than January 1, 2018, on the following:

(1) The current percentage of goods that are provided by local vendors, to include commodity category and dollar value of sales, and an analysis of historical data for the past five years.

(2) The cost of Second Destination Transportation to provide com-

missary goods to the Commissaries on Guam.

(3) The feasibility of whether using local distributors for items other than Fresh Fruits and Vegetables will reduce the cost of Second Destination Transportation while maintaining savings to beneficiaries.

(4) Initiatives undertaken or explored that seek to encourage and promote local vendor and distributor access to commissaries on Guam.

#### Morale, Welfare, and Recreation Assessment

The committee recognizes that the continued support for service members and families is vital to their quality of life as operational requirements and budgetary pressures continue unabated. The committee is concerned that the military services have not complied with established Department of Defense policy to ensure appropriate financial support of family, welfare, and recreational programs for the past several years, particularly for programs within Category B, which relies on both appropriated and nonappropriated

funding.

The committee recognizes that all programs, including Morale, Welfare, and Recreation (MWR) programs, need to be constantly reviewed to ensure that they are necessary, effective, and cost efficient. Therefore, the committee directs the Comptroller General of Do the United States to conduct a review of the Department of Defense's MWR programs by category to assess the Department's current Category A, B, and C appropriated and nonappropriated funding policies and priorities. The review should include a baseline assessment of the programs; the budgeting, funding, and accounting processes used by the services; an analysis and assessment of the review process by which services ensure that programs continue to be effective and cost-effective; and whether the organizational structure of the services are adequate to provide the appropriate oversight of these important programs. The committee further directs the Comptroller General to submit a report to the House Committee on Armed Services not later than April 1, 2018, on the results of the assessment.

#### Reserve Component Benefits Parity Under 12304b Mobilization Authority

The committee recognizes that Reserve Component units ordered to Active Duty should receive the same benefits for the same duty as their Active Duty counterparts. The committee understands that Reserve Component units involuntarily ordered to Active Duty under the authority provided by section 12304b of title 10, United States Code, are not entitled to several benefits that other deployed service members are provided, including the Post 9/11 GI Bill, premobilization TRICARE health care, reduced age for retirement, Federal civilian differential pay and high deployment allowance. Even though this mobilization authority was established by Congress at the Department of Defense's request to support non-contingency operations, the committee believes that these benefits should be made available to the Reserve Component units that are ordered to Active Duty under any authority. Section 515 of the National Defense Authorization Act for Fiscal Year 2016 (Public Law 114–92) required the Secretary of Defense to assess the viability of consolidating the number of authorities to order members of the Reserve Components to perform duty. Once the recommendation from the Secretary of Defense is received, the committee expects that the benefits disparity will be corrected.

#### Review of Department of Defense Debt Collection Practices

The committee notes that the Department of Defense operates a debt collection process to recoup erroneous payments. While debt collection is sometimes necessary, the committee is concerned that some Department of Defense debt collection practices may place an undue burden on service members and their families. The committee therefore directs the Comptroller General of the United States to submit a report to the Committees on Armed Services of the Senate and the House of Representatives not later than June 1, 2018, on debt collection procedures of the Department of Defense. The report shall include an analysis of the following:

(1) policies of the Department that govern such overpayments and debt collection actions, including the extent to which such policies ensure uniform enforcement and due process for members of

the Armed Forces;

(2) the extent to which the Department has processes or controls in place to ensure compliance with applicable laws related to debt collection;

(3) means by which the Department may be flexible in the enforcement of debt collection practices regarding members of the Armed Forces, including the ability to grant debt forgiveness or provide other forms of debt relief;

(4) how the Department reports such overpayments and related debt collection actions to credit rating agencies, including whether and how such agencies distinguish between types of delinquency;

and

(5) policies and procedures of the Department that allow members of the Armed Forces to challenge alleged overpayments or debt collection actions by the Department before the Department reports such overpayments or actions to credit rating agencies.

#### Service Member Financial Planning

The Committee is concerned with the ensuring the Department of Defense provides sufficient assistance to service members retiring under the new Blended Retirement System beginning in January 2018. Specifically, current service members will have the option to opt into the Blended Retirement System and will be authorized to elect to take a lump sum disbursement of their retirement pay. The Committee remains concerned about ensuring service members are fully aware of their options and able to make the best choice

for themselves and their families. Therefore, the Secretary of Defense will provide a briefing to the Committee on Armed Services of the House of Representatives, no later than March 1, 2018, on the number of financial planners the Department has available to service members and how service members are informed or advised concerning professional financial planning and the availability of professional financial planners.

## LEGISLATIVE PROVISIONS

#### SUBTITLE A—PAY AND ALLOWANCES

Section 601—Annual Adjustment of Basic Monthly Pay

This section would direct that the rates of basic pay under section 203(a) of title 37, United States Code, be increased in accordance with section 1009 of title 37, United States Code, notwithstanding a determination made by the President under subsection (e) of section 1009.

Section 602—Limitation on Basic Allowance for Housing Modification Authority for Members of the Uniformed Services Residing in Military Housing Privatization Initiative Housing

This section would amend section 403(b) of title 37, United States Code, to temporarily prohibit the Secretary of Defense from further reducing the basic allowance for housing (BAH) below the current level for service members residing in Military Housing Privatization Initiative (MHPI) housing until 2019. The committee remains concerned about the reduction in BAH and its effect on the recapitalization of these housing units. The committee believes that military families must be provided with on-base housing that is safe and periodically modernized. Therefore, this section would also require the Comptroller General of the United States to submit a report to the Committees on Armed Services of the Senate and the House of Representatives not later than March 1, 2018, on the Department of Defense's management of MHPI, and plans and alternatives considered for ensuring the continued viability of MHPI projects for the life of the housing project.

Section 603—Housing Treatment for Certain Members of the Armed Forces, and Their Spouses and Other Dependents, Undergoing a Permanent Change of Station Within the United States

This section would amend chapter 7 of title 37, United States Code, to allow a member of the Armed Forces undergoing a permanent change of station within the United States to request that their spouse or other dependents continue to reside at the current duty station or move ahead of them to the new duty station if it is advantageous to the member and their family due to spousal employment, dependent schooling needs, dependent special medical needs or immediate family long term care needs.

#### Section 604—Per Diem Allowance Policies

This section would prohibit a Secretary of a military departments from implementing a flat rate per diem policy for long term temporary duty described in a certain policy memorandum. This section would also prohibit a Secretary of a military department from implementing a new per diem allowance policy under section 474 of title 10, United States Code, until a report is issued by the Secretary of Defense to the congressional defense committees and the Committee on Homeland Security and Governmental Affairs of the Senate and the Committee on Oversight and Government Reform of the House of Representatives and until a period of 30 days has elapsed after notifying such congressional committees regarding any new policy.

SUBTITLE B—BONUSES AND SPECIAL AND INCENTIVE PAYS

Section 611—One-Year Extension of Certain Bonus and Special Pay Authorities for Reserve Forces

This section would extend the authority, through December 31, 2018, for the Selected Reserve reenlistment bonus, the Selected Reserve affiliation or enlistment bonus, special pay for enlisted members assigned to certain high-priority units, the Ready Reserve enlistment bonus for persons without prior service, the Ready Reserve enlistment and reenlistment bonus for persons with prior service, the Selected Reserve enlistment and reenlistment bonus for persons with prior service, the authority to reimburse travel expenses for inactive duty training outside of normal commuting distance, and income replacement payments for Reserve Component members experiencing extended and frequent mobilization for Active Duty service.

Section 612—One-Year Extension of Certain Bonus and Special Pay Authorities for Health Care Professionals

This section would extend the authority for the nurse officer candidate accession program, repayment of educational loans for certain health professionals who serve in the Selected Reserve, the accession and retention bonuses for psychologists, the accession bonus for registered nurses, the incentive special pay for nurse anesthetists, the special pay for Selected Reserve health care professionals in critically short wartime specialties, the accession bonus for dental officers, the accession bonus for pharmacy officers, the accession bonus for medical officers in critically short wartime specialties, and the accession bonus for dental specialist officers in critically short wartime specialties, until December 31, 2018.

Section 613—One-Year Extension of Special Pay and Bonus Authorities for Nuclear Officers

This section would extend the authority for the special pay for nuclear-qualified officers extending a period of active service, the nuclear career accession bonus, and the nuclear career annual incentive bonus until December 31, 2018.

Section 614—One-Year Extension of Authorities Relating to Title 37 Consolidated Special Pay, Incentive Pay, and Bonus Authorities

This section would extend the general bonus authority for enlisted members, the general bonus authority for officers, the special bonus and incentive pay authority for nuclear officers, special aviation incentive pay and bonus authorities, the special health profes-

sions incentive pay and bonus authorities, contracting bonus for Senior Reserve Officers' Training Corps cadets and midshipmen, hazardous duty pay, assignment pay or special duty pay, skill incentive pay or proficiency bonus, and the retention bonus for members with critical military skills or assigned to high-priority units, until December 31, 2018.

Section 615—One-Year Extension of Authorities Relating to Payment of Other Title 37 Bonuses and Special Pays

This section would extend the authority for the aviation officer retention bonus, assignment incentive pay, the reenlistment bonus for active members, the enlistment bonus for active members, the incentive pay for members of precommissioning programs pursuing foreign language proficiency, the accession bonus for new officers in critical skills, the incentive bonus for conversion to military occupational specialty to ease personnel shortage, the incentive bonus for transfer between Armed Forces, and the accession bonus for officer candidates, until December 31, 2018.

Section 616—Reimbursement for State Licensure and Certification Costs of a Member of the Armed Forces Arising from Separation from the Armed Forces

This section would authorize the Secretary of Defense and the Secretary of Homeland Security to reimburse a service member up to \$500 for relicensing costs incurred upon separation from the Armed Services. The section would also require the Secretaries to work with States on improving portability of licenses between States and to report recommendations on this matter to appropriate congressional committees and the States.

Section 617—Increase in Maximum Amount of Aviation Bonus for 12-Month Period of Obligated Service

This section would amend section 334(c)(1)(B) of title 37, United States Code, to increase the statutory limits for the aviation retention bonus to \$50,000 and allow the Secretary concerned the flexibility to increase the aviation incentive pay limit set forth in regulations issued by the Secretary of Defense under section 374 of title 37, United States Code. The Secretary of Defense should revise applicable regulations as required.

Section 618—Technical and Clerical Amendments Relating to 2008 Consolidation of Certain Special Pay Authorities

This section would make technical and clerical corrections to titles 10, 14, 37, and 42, United States Code, as part of the Department of Defense's transition to the consolidated authorities described in section 661 of the National Defense Authorization Act for Fiscal Year 2008 (Public Law 110–181), which provided eight consolidated statutory special and incentive pay authorities to replace those currently in use.

## Subtitle C—Disability Pay, Retired Pay, and Survivor Benefits

Section 621—Findings and Sense of Congress regarding the Special Survivor Indemnity Allowance

This section would express the sense of Congress that the Special Survivor Indemnity Allowance was created as a stop gap measure to assist widowed spouses by reducing the Survivor Benefit Plan/Dependency Indemnity Compensation offset required by law. This section would also state that the dollar-for-dollar reduction in payment to surviving spouses should be fully repealed at the first opportunity.

#### SUBTITLE D—OTHER MATTERS

Section 631—Land Conveyance Authority, Army and Air Force Exchange Service Property, Dallas, Texas

This section would allow the Secretary of Defense to authorize the Army and Air Force Exchange Service (AAFES) to divest itself of real property owned by AAFES at 8901 Autobahn Drive, Dallas, Texas, as part of its consolidation into one headquarters building in Dallas, Texas. Additionally, this section would authorize AAFES to retain the nonappropriated funds derived from the divestiture since AAFES acquired the property with nonappropriated funds.

Section 632—Advisory Boards regarding Military Commissaries and Exchanges

The section would require the Secretary of Defense to direct installation commanders to establish an advisory board regarding the interests of patrons and beneficiaries of military commissaries and exchanges.

## TITLE VII—HEALTH CARE PROVISIONS

#### ITEMS OF SPECIAL INTEREST

Educational Opportunities for Certified Registered Nurse Anesthetists

The committee encourages the Secretary of Defense to establish educational opportunities for Certified Registered Nurse Anesthetists (CRNAs) to attend accredited CRNA post graduate pain management fellowships.

Force of the Future Pilot Program on Cryopreservation of Gametes

The committee is aware that nearly 2,000 servicemembers suffered injuries to the genitourinary tract while deployed to Iraq and Afghanistan. These injuries and other blast injuries to the spine and brain can have a profound impact on servicemembers' reproductive health.

In order to preserve the ability to start a family, some servicemembers have elected to freeze reproductive material predeployment, paying for the cost out of pocket. Recognizing this demand, the Department of Defense proposed a pilot program to

allow individuals to cryopreserve gametes, but has not moved forward with this initiative. The committee is supportive of this pilot program because it preserves deploying servicemembers' options for the future in the event of a catastrophic injury, and provides deploying servicemembers with important peace of mind. Therefore the committee directs the Secretary of Defense, not later than January 31, 2018, to brief the House Armed Services Committee on the program and the status of implementation.

#### Improving Access to Para Health Professional Extenders

The committee notes the Department of Defense continues to seek ways to improve health care delivery and facilitate access to health care services for military beneficiaries and lower the total cost of care. The committee is aware that certain para health professionals may be used as physician and health professional extenders within the Military Health System if they meet and comply with specific professional qualification and licensing criteria. However the Committee is concerned that the Department does not have a common standard for hiring or reimbursing para health professionals. The Committee is also concerned with the delineated process that reviews the feasibility of using certain para health professionals or adding them to the list of individual professional providers of medical care who are authorized to provide services to TRICARE beneficiaries on an annual basis. Therefore, the committee directs the Secretary of Defense to submit a report not later than 1 April 2018 to the House Committee on Armed Services, outlining the process used by the Department to include para health professionals as healthcare providers within the Military Health System. The review shall also determine the feasibility of incorporating physical therapist assistants, occupational health therapy and mental health counselors, and other para health professionals determined by the Secretary into the Military Health System to improve beneficiary access to health care services, while ensuring quality and outcome standards are maintained, supervision by appropriate health professionals, and reasonable reimbursement for services provided.

#### Medical Blood Volume Diagnostics

The committee is aware that medical research has shown improved patient outcomes when providers can access more accurate and faster direct blood-volume measurements. Recent breakthroughs in direct blood-volume analysis and management can improve care for congestive heart failure, sepsis, burns, trauma, and other life-threatening conditions by informing critical lifesaving medical decisions needing speedy resolution. The committee encourages the Secretary of Defense to fully leverage new direct blood-volume analysis to improve patient outcomes.

#### Medical Simulation and Training with First Responders

The committee notes the efforts of the Navy bioskills simulation training centers to provide state-of-the-art simulation based medical training and the continued need to maintain critical trauma care skills. The centers provided a unique and realistic environment for training medical personnel who treat critical battlefield injuries. In particular, the committee recognizes training center partnerships with local first responders and the local medical community to enhance training realism and provide train-the-trainer opportunities leveraging and sharing valuable real world experience. The committee encourages the Department of Defense to continue investing in this crucial capability and expanding local partnerships.

## Military Caregivers

The committee is aware that the Military Caregiver Heart of Recovery (MCHR) program provides much needed support to military caregivers, who are tireless in their support of their loved ones in uniform. The committee appreciates the value of military caregiver service and believes the MCHR is helping to lessen their burden. The committee has learned of several challenges facing the MCHR program as it develops, including ensuring a warm handoff to the Department of Veterans Affairs, approval of a critical caregiver survey, and stable funding and placement within the Department of Defense. The committee urges the Secretary of Defense to resolve these issues as quickly as possible.

#### Military Family Wellness and Suicide Prevention

The Committee is concerned with the behavioral health and wellness of service members to include suicide risk factors and believes that an evaluation must be done on ways to inform the dependents' of service members of the suicide risk factors. The Committee seeks a report on the methods and resources in order to train and educate dependents on suicide risk factors and ways to support their service member, promote healthy environments, and reduce the overall risk factors for suicide. Emphasis should be placed on dependents living with service members that have been diagnosed with post-traumatic stress disorder (PTSD). Therefore, the Committee directs the Secretary of Defense to evaluate the resources, methods, and approaches for such training and education of dependents. The Secretary of Defense shall provide the results of the evaluation in a briefing to the Committee on Armed Services of the House of Representatives no later than December 1, 2018.

#### Motion Sickness Research

The committee believes that motion sickness is a pervasive problem spanning a variety of mission sets across the services, and poses a real safety and readiness threat to aviation, seaborne, and ground combat missions, as well as simulator and remote vehicle operations. An estimated 11.5 percent of aviation training attrition is due to motion sickness. As the military moves towards smaller, leaner crews operating in complex, technological environments, the impacts of motion sickness are amplified as the loss of even a single crew member could cease operations or cause a human factors catastrophe.

The committee is encouraged by the Navy's efforts in developing and testing intranasal scopolamine (INSCOP) for use in operational environments in which cognitive and human performance must be maintained at high levels. INSCOP shows promise as a rapid-acting, safe, and effective treatment, and meets requirements for a medication that is easy for personnel to self-administer, has no special storage requirements, and has a long stable shelf life.

The committee encourages the Navy to accelerate the next stage of advanced INSCOP testing and development.

#### Opioid—Chronic Pain and Recruiting

The committee notes with concern the growing number of servicemembers with chronic pain and musculoskeletal disorders caused in part by the physical stress of heavy kits, body armor and strain associated with training and deployment-related activities. Chronic pain is particularly pronounced among younger veterans returning from deployments to the Middle East and older generations of veterans. The Committee is also concerned that growing rates of addiction among young Americans, especially those in rural communities, can impact current and future recruitment, threatening the overall readiness and operational effectiveness of our military. The Committee has previously expressed its concern about the growing opioid epidemic at the national level and has asked the Department of Defense to submit a report to the House Committee on Armed Services that describes DOD's efforts to prevent, educate and treat prescription drug abuse by military servicemembers (House Report 114–537).

The committee is aware that the Secretary of Defense is designing a gap-driven musculoskeletal and pain research portfolio which includes a diverse collection of studies examining improved management of pain from the point of injury to chronic pain management. The committee is also concerned with the potential challenges that opioid abuse may be having on recruitment. Therefore, the Committee directs Secretary of Defense to brief the House Armed Services Committee by December 31, 2017 on efforts underway to provide opioid-alternative treatments and therapies to manage chronic pain and to address the adverse side effects and consequences of classic opioid use and/or abuse. The briefing shall also address the emerging and ongoing challenges to recruitment by prescription opioid use and include any information regarding departmental collaboration with schools, law enforcement, and health care professionals.

## Osteopathic Manipulative Medicine

The committee is aware of research regarding the effectiveness of Osteopathic Manipulative Medicine (OMM) in reducing recovery time for injured athletes and as an adjunct therapy for pain management. OMM is a non-invasive, drug free treatment that can improve readiness and reduce the need for opioid pain medication in the armed services. While the committee understands that OMM has been used to limited degree in the Military Health System, the committee encourages the Department of Defense to further explore OMM as an adjunct to manage pain and expedite recovery for warfighters.

Personnel Policies Regarding Members of the Armed Forces Infected With Human Immunodeficiency Virus (HIV)

On September 22, 2014, the Department of Defense (DOD) submitted a report to Congress in response to section 572 of the Na-

tional Defense Authorization Act for Fiscal Year 2014 (Public Law 113–66) on personnel policies regarding members of the Armed Forces infected with human immunodeficiency virus (HIV) and hepatitis B (HBV). The Committee notes that while the report received did outline the current DOD policies, it failed to include how current policies reflect the evidence base and medical advances in the fields of HIV. The report also fell short in describing the criteria for which these policies are implemented throughout different branches and among commanding officers. Therefore, not later than March 1, 2018, the Secretary of Defense shall submit to the Committees on Armed Services of the Senate and the House of Representatives a report on Department of Defense personnel policies regarding members of the Armed Forces infected with human immunodeficiency virus (HIV). The report shall include the following:

(1) A description of policies addressing the enlistment or commissioning of individuals with these conditions and retention policies, deployment policies, discharge policies, and disciplinary policies regarding individuals with these conditions.

(2) An update on the status of the Department of Army's HIV policy, which was under review during the issuance of the 2014 report.

(3) An assessment of these policies, with reference to medical experts and literature, which includes how the policies reflect an evidence-based, medically accurate understanding of how this condition is contracted; how this condition can be transmitted to other individuals; the risk of transmission; and treatment regimens available.

(4) The feasibility of allowing an individual who is currently serving as an enlisted member of the Armed Forces to become a commissioned officer of the Armed Forces and what restrictions are different for an officer.

## Post-Traumatic Stress Disorder

The committee acknowledges the efforts of the Department of Defense and the military services to diagnose and treat military members suffering from post-traumatic stress disorder (PTSD). Despite the progress that has been made, the committee believes that more needs to be done to ensure service members seek and receive the treatment they deserve. The committee continues to believe PTSD is underreported and underdiagnosed, leading to unnecessary suffering and some service members receiving other than honorable discharges that are unwarranted. The committee wishes to stay informed of the Department's progress in addressing these concerns and directs the Secretary of Defense to provide a briefing to the Committee on Armed Services of the House of Representatives not later than December 1, 2017, on the extent to which service members are seeking PTSD treatment; steps the military services are taking to eliminate the stigma sometimes associated with seeking treatment; and efforts by the military services to ensure commanders carefully weigh a diagnosis of PTSD when adjudicating involuntary separations.

#### Post-Traumatic Stress Disorder and Traumatic Brain Injury Research Initiatives

The committee notes that the Defense Centers of Excellence for Psychological Health and Traumatic Brain Injury collaborate with a wide variety of research institutions, both military and civilian, to better understand the impacts and improve treatment for posttraumatic stress disorder (PTSD) and traumatic brain injury (TBI). The committee encourages the Secretary of Defense to continue to explore complementary and integrative PTSD therapies that benefit patients, such as art or music therapy, and to pursue research into appropriate therapy drugs that are under development. With regard to TBI, the committee is heartened by the creation of the Center for Neuroscience and Regenerative Medicine Brain Tissue Repository that will allow service members to donate their brain for research after death, but is concerned by the Department's slow pace in publicizing the effort and the process involved. Therefore, the committee directs the Secretary of Defense to provide a briefing to the Committee on Armed Services of the House of Representatives by June 1, 2018, on his plan for informing service members about the Brain Tissue Repository, donor qualifications, and the donation process.

## Promising Burn Therapies

The committee notes that deployed service members are at risk of suffering burn and smoke inhalation injuries in remote locations and are not yet benefiting from promising new burn treatment therapies using mesenchymal stem cells (MSCs). MSCs, which can come from a variety of sources, offer improved efficiency for wound healing and reduce long-term scarring, particularly with early application, and help treat multiple injuries simultaneously. The committee is heartened to learn that the Army and Defense Health Program recognize the value of MSCs and are conducting research into several potential applications. The committee urges the Secretary of Defense and the Secretary of the Army to develop and deploy these therapies to theaters of operation as soon as possible.

## TRICARE Pharmacy Pilot Program

The committee notes that section 743 of the National Defense Authorization Act for Fiscal Year 2017 (Public Law 114–328) authorizes the Secretary of Defense to conduct a pilot program to evaluate whether extending additional discounts for prescription drugs filled at retail pharmacies will maintain or reduce cost for the Department of Defense. This pilot gives the Secretary of Defense the authority to implement a pilot program that would test prescription drug acquisition cost parity in the TRICARE pharmacy program. The committee believes there is merit in executing the pilot program in order to determine if TRICARE pharmacy costs to the Department can be reduced through decreased acquisition costs, lower administrative fees, and competition, while restoring beneficiary access to brand-name maintenance prescription drugs at all dispensing retail pharmacies. Therefore, the committee encourages the Secretary to promptly utilize the authority granted under section 743 and implement the pilot program. In the event the Secretary declines to conduct the pilot, the committee directs

the Secretary to provide a briefing to the House Committee on Armed Services by September 15, 2017, on the analytical basis for that decision.

Use of Data Analytics Within the Defense Medical Surveillance System for Complex Epidemiology and Pathology Research

The Committee notes the persisting concerns of many veterans and current service members regarding possible linkages between their service and medically unexplained illnesses and/or diagnosed diseases with difficult to identify causes such as many forms of cancer. The committee supports the efforts of the Department to maximize data collection within the Defense Medical Surveillance System, as well as the use of this data by the Epidemiology and Analysis Section of the Armed Forces Health Surveillance Branch to improve our understanding of service member epidemiology.

Given recent advances in data processing and analytics, the Committee is hopeful that continued collection and improved analysis of the dataset within the Defense Medical Surveillance System will help confirm or disprove the statistical significance of a veteran's service as a causal factor in contracting certain diseases. However, the Committee also recognizes that the immense scale of the data contained within the Defense Medical Surveillance System would likely require significant processing power and advanced modeling systems to fully understand the patterns contained within its records.

Therefore, the Committee directs the Director of the Defense Health Agency to provide a briefing to the House Committee on Armed Services by December 31, 2017, on:

(1) the data processing systems currently employed to analyze records within the Defense Medical Surveillance System;

(2) any research completed or currently in progress using the Defense Medical Surveillance System to identify linkages between veterans' service and medically unexplained illnesses, and;

(3) current limitations or restrictions on research due to insufficient data processing capability.

# LEGISLATIVE PROVISIONS

SUBTITLE A—TRICARE AND OTHER HEALTH CARE BENEFITS

Section 701—Physical Examinations for Members of a Reserve Component Who Are Separating From the Armed Forces

This section would amend section 1145 of title 10, United States Code, to require the Secretary of Defense to provide a physical examination upon request to a member of a Reserve Component upon separation from service, provided that the member had deployed for more than 30 days within the last 2 years prior to the service member's separation date.

Section 702—Mental Health Examinations Before Members Separate From the Armed Forces

This section would amend section 1145 of title 10, United States Code, to require that service members receive a mental health examination, as well as a physical examination, before separation from active duty.

Section 703—Provision of Hyperbaric Oxygen Therapy for Certain Members of the Armed Forces

This section would amend chapter 55 of title 10, United States Code, to authorize the Secretary of Defense to furnish hyperbaric oxygen therapy at a military medical treatment facility to a covered member if such therapy is prescribed by a physician to treat post-traumatic stress disorder or traumatic brain injury.

### SUBTITLE B—HEALTH CARE ADMINISTRATION

Section 711—Clarification of Roles of Commanders of Military Medical Treatment Facilities and Surgeons General

This section would amend section 1073c of title 10, United States Code, to clarify that the commanders of military medical treatment facilities are responsible for the operation of the military medical treatment facility they supervise. This section would also amend sections 3036, 5137, and 8036 of title 10, United States Code, to clarify that the surgeons general are responsible for the medical readiness provided by the military medical treatment facilities and maintaining a ready medical force within their respective military departments.

Section 712—Maintenance of Inpatient Capabilities of Military Medical Treatment Facilities Located Outside the United States

This section would prohibit the Secretary of Defense from reducing inpatient capacity at military medical facilities located outside the United States. The committee understands that reductions are being considered and believes further review is required before such reductions may proceed.

Section 713—Regular Update of Prescription Drug Pricing Standards Under TRICARE Retail Pharmacy Program

This section would amend section 1074g of title 10, United States Code, to require that contracts with a TRICARE pharmacy program contractor include requirements to ensure regular updates to the provision of information regarding the pricing standard for prescription drugs.

Section 714—Residency Requirements for Podiatrists

This section would require the Secretary of Defense to ensure podiatrists in the Armed Forces have successfully completed a three year podiatric medicine and surgical residency.

### SUBTITLE C—OTHER MATTERS

Section 721—One Year Extension of Pilot Program for Prescription Drug Acquisition Cost Parity in the TRICARE Pharmacy Benefits Program

This section would amend section 743 of the National Defense Authorization Act for Fiscal Year 2017 (Public Law 114–328) to extend the authority of the Secretary of Defense to conduct a pilot program for prescription drug acquisition cost parity in the TRICARE pharmacy program until September 30, 2019.

Section 722—Pilot Program on Health Care Assistance System

This section would require the Secretary of Defense to carry out a pilot program for health care assistance services for certain TRICARE beneficiaries and that the Secretary provide the Committees on Armed Services of the Senate and House of Representatives an evaluation of the success of the pilot by January 1, 2021.

Section 723—Research of Chronic Traumatic Encephalopathy

This section would authorize not more than \$25.0 million in funds for the Defense Health Program to be appropriated for advanced development for research, development, test, and evaluation for early detection of chronic traumatic encephalopathy, as reflected in Division D of this Act.

Section 724—Sense of Congress on Eligibility of Victims of Acts of Terror for Evaluation and Treatment at Military Treatment Facilities

This section would amend section 717 of the National Defense Authorization Act for Fiscal Year 2017 (Public Law 114–328) to express the sense of Congress that civilians covered by this section would include United States victims of domestic and international terrorism.

# TITLE VIII—ACQUISITION POLICY, ACQUISITION MANAGEMENT, AND RELATED MATTERS

### ITEMS OF SPECIAL INTEREST

Accuracy of Pricing in Responses to Letters of Request for Pricing and Availability in Foreign Military Sales

The committee is concerned about the pricing and availability (P&A) process for foreign military sales. Therefore, the committee directs the Secretary of Defense to provide a briefing to the House Committee on Armed Services not later than November 1, 2017, on P&A responses. The briefing should address the process for contractors to provide input, feedback, and adjudication of any differences regarding the appropriateness of governmental P&A estimates prior to delivery to potential foreign customers of formal responses to letters of request for P&A as required by section 1297(b) of the National Defense Authorization Act for Fiscal Year 2017 (Public Law 114–328), as well as the methodology used to determine pricing for P&A responses.

# Best Value Criteria for Complex Acquisitions and Information Technology

Lowest price technically acceptable (LPTA) source selection criteria are legitimate and useful in acquisitions with well-defined and non-complex requirements that are not expected to evolve over the life of a contract. However, the committee remains concerned

that the Department of Defense continues to use LPTA criteria for other acquisitions, including those for innovative professional services and high-performance technologies. Maintaining our military's technological edge requires technical superiority rather than mere acceptability. As the Under Secretary of Defense for Acquisition, Technology, and Logistics noted in a memorandum on "Appropriate Use of Lowest Priced, Technically Acceptable Source Selection Process and Associated Contract Type" dated March 4, 2015, "If not applied appropriately, however, the Department can miss an opportunity to secure an innovative, cost effective solution to meet warfighter needs to help maintain our technological edge." Therefore, the committee encourages the Secretary of Defense to ensure that the Department's acquisition policies clearly specify that best value source selection criteria should be used in acquisitions for complex services, complex electronics, and advanced innovative technologies. The committee also encourages the Secretary to carefully consider whether lowest price technically acceptable source selection processes are appropriate for the award of contracts related to major defense acquisition programs, given the technological complexity of the weapon systems being acquired.

### Collecting Historical Data on Rescinded Solicitations

The committee is aware that the Government Accountability Office (GAO) released a report in June 2016 titled "Defense Contracting: Complete Historical Data Not Available on Canceled DOD Solicitations", in response to a provision in the National Defense Authorization Act for Fiscal Year 2016. In this provision, the committee specifically directed the Comptroller General to determine: (1) the number of solicitations that were canceled after bids were received, (2) whether these cancellations are increasing or decreasing and their distribution by Agency or military service and contracting command, (3) the bid and proposal incurred costs by the companies and the government resources committed to these solicitations, (4) the extent to which, if any, the bid and proposal costs for these solicitations have reduced the funding available for independent research and development, and (5) the reasons for the cancellation of the solicitations.

However, the committee is concerned that complete historical data are not available to assess patterns in the Department's cancellation of solicitations. The committee continues to be concerned with the significant cost of canceled solicitations to industry and government. Furthermore, the committee is concerned that the bid protest process is often an insufficient mechanism for contractors to contest circumstances of canceled solicitations. The GAO report noted that the federal business opportunities (FBO) webpage is the "best potential source for information on canceled solicitations"; however, "the FAR does not require contracting officials to publicize notices of canceled solicitations", and "the information from FBO is not available in a format that would allow for a reliable trend analysis of DOD's canceled solicitations".

Therefore, the committee directs the Administrator, General Services Administration, in coordination with the Undersecretary of Defense for Acquisition, Technology and Logistics, to provide a briefing to the House Committee on Armed Services not later than

December 1, 2017 regarding how this data could be collected via the FBO web page.

# Congressional Notification for Direct Commercial Sales

The committee notes that as part of the U.S. Export Control Reform initiative, the House Committee on Armed Services supports the review of Categories I–III of the U.S. Munitions List (USML) of International Traffic in Arms Regulations (ITAR) to describe more precisely the firearms and related articles controlled by the USML. Category I of the USML currently covers firearms with a caliber up to .50 inches (other than non-combat shotguns with barrel length of 18 inches or longer), combat shotguns, close assault weapons systems, and related parts, components, and accessories. The committee understands that draft regulations to revise this category were developed more than two years ago, but final interagency approval has not occurred and thus a draft rule has never been published. Under the Export Control Reform Initiative, only firearms that are designed, manufactured, and exported for military end-use and otherwise warrant control on the USML or, if it is a type common to non-military firearms applications, possess parameters or characteristics that provide a critical military or intelligence advantage to the United States should continue to be subject to ITAR controls. Those items not warranting USML control would shift to the more flexible licensing authorities of the Department of Commerce. Likewise, the committee supports review by the committee of jurisdiction of the current \$1 million Congressional notification threshold for exports of USML-controlled firearms. The committee directs the Secretary of Defense, the Secretary of Commerce, and Secretary of State to provide a briefing to the Committee on Armed Services of the House of Representatives and the Committee on Foreign Affairs of the House of Representatives by September 30, 2017, detailing how current export controls on firearms and ammunition, to include the processing of licenses for direct commercial sales, may impact U.S. businesses, U.S. national security and foreign policy interests, and provide for effective monitoring of the end-uses of USML-controlled firearms.

### Other Transaction Consortia

The committee remains committed to providing the Department of Defense needed flexibility to acquire advanced capabilities through streamlined and expedited processes. Toward that end, the committee directs the Secretary of Defense to provide a briefing to the House Committee on Armed Services not later than November 1, 2017, on ways to improve the use of other transactions (OT) authorized in section 2371 of title 10, United States Code. The briefing should address the value and successes of OT, including development of OT consortia of willing companies, non-profit organizations, and academic institutions; potential areas where OT consortia may enable more effective, flexible, and agile acquisitions; opportunities for OT consortia to be used for emerging research and prototyping to develop better modeling, simulation, and training tools; and recommendations the Secretary may have for improving OT authorities.

### **Outcome-Based Services Contracts**

The committee is aware that the Department of Defense awards input-oriented services contracts that require, for example, the number of personnel to be contracted, as well as the education and experience levels, skill sets, and work locations of the contracted personnel. An alternative approach to services contracting is to require the outcomes that must be achieved in a specified time, along with associated milestones and standards by which success will be measured. This outcome-based approach could allow contractors the flexibility to deliver services in the most cost-effective manner using advancements in business processes, including innovations in automation and other technology. The committee directs the Secretary of Defense to evaluate the use of outcome-based services contracts within the Department and provide a briefing to the House Committee on Armed Services by March 1, 2018, on the results. The evaluation and briefing should include a comparison of the Department's use of outcome-based services contracts versus input-based services contracts, the limitations of outcome-based services contracts, a description of the obstacles to the use of outcome-based requirements in lieu of specified personnel requirements, and an analysis of the cost implications of both approaches.

### **Procurement Technical Assistance Centers**

The committee is concerned about reports that for-profit companies are selling services to assist other businesses in registering in the System for Award Management of the General Services Administration (GSA), a service that Procurement Technical Assistance Centers (PTACs) offer for free. The committee directs the Secretary of Defense to provide a briefing to the House Committee on Armed Services not later than September 1, 2017, on ways to best inform businesses about free services available from PTACs. In developing the briefing, the Secretary should coordinate with the Administrator of GSA and the Administrator of the Small Business Administration.

### Report on Commercial Acquisition Transparency

The committee is concerned that some contractors of the Department of Defense may be disguising their identities and cost structures from procurement officers, in effect acting as hidden monopolists with unreasonable prices or establishing anonymous or opaque ownership structures for other benefits that are contrary to the government's interests. Therefore, the committee directs the Comptroller General of the United States to conduct a study of Department of Defense processes to determine the identities and cost structures of contractors, how anonymous or opaque ownership structures can circumvent these processes, potential abuses by companies with anonymous or opaque ownership structures, and means of improving such processes to enhance transparency and prevent such abuses. The committee further directs the Comptroller General to provide a briefing to the congressional defense committees by February 1, 2018, with a report to follow, on the results of the study.

# Review of Implementation of Online Marketplace Procurement

Elsewhere in this title, the committee includes a provision that would require the General Services Administration (GSA) to contract with multiple commercial online marketplaces for the procurement of certain commercial-off-the-shelf products. The committee anticipates that opportunities to purchase additional products through online marketplaces may arise as GSA gains familiarity with the use of online marketplaces. Toward that end, the committee directs the Administrator of GSA to provide a briefing to the House Committee on Armed Services and the House Committee on Oversight and Government Reform, not later than 6 months after the first contract with a marketplace is awarded, on the results of online marketplace purchasing. The briefing should address the dollar value of purchases through each marketplace, lessons learned from implementation, any limitations on product purchases that were established in implementation guidance, potential means of addressing or overcoming such limitations, and potential means of procuring through marketplaces products referenced in section 2410n of title 10, United States Code.

## Reviews of Acquisition Statute and the Federal Acquisition Regulation

The committee strongly supports efforts to thoroughly review the defense acquisition process by the Section 809 Panel on Streamlining and Codifying Acquisition Regulations, which was established in the National Defense Authorization Act for Fiscal Year 2016 (Public Law 114-92). The Panel produced an interim report in May, 2017, that recommended several revisions to acquisition statutes and regulations. Elsewhere in this Act, the committee includes provisions related to the recommended statutory changes. The committee directs the Administrator of the Office of Federal Procurement Policy to review the recommended changes to the Federal Acquisition Regulation (FAR) and provide a briefing to the House Committee on Armed Services and the House Committee on Oversight and Government Reform not later than December 1, 2017, on the findings of the review. The briefing should include recommendations for modifying the FAR consistent with the Panel recommendations or reasons that the Panel's recommendations cannot be adopted.

In addition to the Panel's recommendations, the committee is concerned that process requirements have built up in acquisition statutes over time and may now impair effective procurement practices and decision making. The committee recognizes that each individual process requirement was intended to effect a specific change in acquisition outcomes. However, the amalgamation of processes may contribute to a culture of compliance within the defense acquisition system and hinder agile acquisitions that provide

better capabilities to warfighters more quickly.

For example, section 2377 of title 10, United States Code, establishes a preference for acquisition of commercial items. However, it also stipulates processes for how requirements must be stated; how market research is to be conducted by government personnel and prime contractors; and required training. Section 2384a of title 10, United States Code, requires agencies to procure supplies in economically efficient quantities. However, it also requires solicitations to invite contractors to submit alternative quantities that may be economically efficient, which may increase proposal costs

and acquisition decision timelines.

The committee encourages the Panel to review such process requirements during its deliberations. It also directs the Secretary of Defense to conduct a review of process requirements in the acquisition sections of title 10, United States Code, and submit a report to the Committees on Armed Services of the Senate and the House of Representatives not later than April 1, 2018, on the findings of the review. The review should:

(1) identify process requirements in acquisition statutes that

hinder agile acquisitions;

(2) identify any obsolete statute (elsewhere in this Act, the committee includes an example provision to repeal an expired pilot program); and

(3) recommend any related statutory changes that should be considered to simplify or improve the agility of the defense acquisition system.

# Should-Cost Analysis Methodology and Transparency

Since 2010, the Department of Defense has promoted "shouldcost" management to identify process efficiencies and technical trade-offs that can reduce acquisition costs without compromising performance requirements. The committee is concerned, however, that the Department may not be sufficiently transparent with should cost-cost analyses, thereby reducing associated benefits to the Department. Therefore, the committee directs the Secretary of Defense to provide a briefing to the House Committee on Armed Services by September 30, 2017, on should-cost processes. At a minimum, the briefing shall address the following issues:

(1) a description of the features distinguishing should-cost re-

views from analyses of program direct and indirect costs;

(2) the process for communicating with the contractor the ele-

ments of a proposed should-cost review;

(3) the method for ensuring that every identified should-cost savings opportunity is based on accurate, complete, and current information and is tied to a specific engineering or business change that can be quantified and tracked;

(4) a description of the training, skills, and experience, including cross-functional experience, that Department and contractor offi-

cials carrying out a should-cost review should possess;

(5) the method for ensuring appropriate collaboration with the contractor throughout the review process; and

(6) a description of review process requirements that provide for sufficient analysis and minimize any impact on program schedule.

### Soldier and Marine Equipment Requirements

Ensuring that military service members receive the best available organizational clothing, individual equipment (OCIE), and personal protective equipment (PPE) without unnecessary delays has been a long-standing high priority for the committee. The committee believes that any OCIE and PPE solution must meet validated capability requirements and be certified through first article testing before being fielded to the warfighter. The committee commends the Army for actively pursuing process efficiencies and acquisition reform for PPE and OCIE where feasible. The committee encourages the Army to continue taking necessary actions to help streamline the requirements development and acquisition process. The committee encourages the Army to routinely solicit the industrial base, and when appropriate leverage commercial-off-the-shelf (COTS) and modified COTS that could potentially meet OCIE and PPE validated capability requirements.

# Technical Exchanges on Independent Research and Development Projects

The committee supports efforts to increase mutually beneficial communications between government and industry and ensure the vital flow of information on technology needs and areas of research. The committee is aware that exchanges of information on independent research and development (IR&D) projects currently occur in many areas. Contractors often seek out information about the technology needs of the Department of Defense and inform the Department about IR&D projects in order to enhance their competitiveness.

The committee is concerned, however, that a recent Defense Federal Acquisition Regulation Supplement (DFARS) rule links the technical exchange of information on IR&D projects to the determination of allowable costs for those projects. While having greater visibility of IR&D projects early in the process can be beneficial to the Department, the committee questions the necessity of creating a direct linkage between technical exchanges and the determination of allowable costs. Further, the committee believes this linkage results in practical difficulties in implementation for both the Department and industry that could potentially disrupt ongoing research and development efforts that are vital to improving our warfighters' technological edge.

Therefore, the committee directs the Secretary of Defense to provide a briefing to the House Committee on Armed Services by October 1, 2017, on technical exchanges for IR&D projects. The briefing should include:

- (1) the extent to which technical exchanges occur presently with contractors, including contractor IR&D reviews, and how the Department uses the information received through these reviews;
- (2) the extent to which IR&D information submitted to the Defense Technical Information Center database in accordance with the DFARS rule is used by the Department;
- (3) a description of the additional information that is expected to be obtained through the technical exchanges required by the DFARS rule and how this information would be used by the Department:
- (4) the rationale for linking the determination of cost allowability to technical exchanges and the advantages and disadvantages of such linkage; and
- (5) a detailed plan for how the Department would implement the DFARS rule, including staffing, IT infrastructure, the implementation timeline, and required funding.

The committee expects the Secretary will consider suspending implementation of the DFARS rule until this implementation plan and briefing is completed.

Transparency in Department of Defense Contract Negotiations

The Federal Government requires defense contractors to submit substantial cost and pricing data in proposals for major defense acquisition programs. Contractors are also required to submit substantial amounts of information for business case analyses that support Government decision making. The committee is concerned that the Department of Defense may not be, in turn, providing appropriate transparency for industry to understand, evaluate, and respond to departmental counteroffers and requests for additional information. Therefore, the committee directs the Secretary of Defense to provide a briefing to the House Committee on Armed Services not later than September 30, 2017, on efforts to improve transparency during contract negotiations and business case analyses.

### Vendor Vetting Process and Guidance

The committee continues to believe that a comprehensive vendor vetting process is essential to prevent the Department of Defense from awarding contracts to companies having ties to violent extremist organizations or other inappropriate entities. The committee is encouraged by the fact that two combatant commands, U.S. Central Command and U.S. Transportation Command, have established vendor vetting cells to determine whether potential vendors actively support any terrorist, criminal, or other sanctioned organization, but is concerned about the extent to which the Department has developed an approach to institutionalize vendor vetting across the Department and geographic combatant commands, including guidance and the information systems involved in vendor vetting. For example, the committee notes that the U.S. Government Accountability Office reported in December 2015 that the Department lacks guidance specifying conditions under which combatant commands should have a vendor vetting process or cell in place, and has identified other deficiencies in the vendor vetting process (GAO-16-105).

Therefore, the committee directs the Comptroller General of the United States to assess the Department's efforts to institutionalize vendor vetting across the Department and geographic combatant commands. At a minimum, the review shall address:

- (1) the extent to which the Department and its geographic combatant commands have developed guidance on vendor vetting;
- (2) the extent to which the Department and its geographic combatant commands have established and are implementing vendor vetting processes, including information systems involved in vendor vetting;
- (3) the sufficiency of the internal controls the Department has in place to ensure that the information used to make determinations of vendor risk is complete, accurate, and timely, including appeals processes, if any, available to vendors; and
- (4) the challenges, if any, the Department faces with regard to vendor vetting.

The committee further directs the Comptroller General to provide a briefing to the House Committee on Armed Services not later than January 31, 2018, on the Comptroller General's preliminary findings and to submit a final report to the congressional defense committees on a date agreed to at the time of the briefing.

### LEGISLATIVE PROVISIONS

SUBTITLE A—DEFENSE ACQUISITION STREAMLINING AND TRANSPARENCY

PART I—ACQUISITION SYSTEM STREAMLINING

Section 801—Procurement through Online Marketplaces

This section would require the General Services Administration (GSA) to contract with multiple commercial online marketplaces for the procurement of certain commercial-off-the-shelf (COTS) products. Marketplaces would be limited to those that are commonly used in the private sector; provide a dynamic selection of products and prices from numerous suppliers; provide procurement oversight controls, such as two-person approval for purchases; and can screen suppliers and products to ensure compliance with suspension and debarment, domestic sourcing, and other similar statutes. Online marketplaces primarily provide streamlined and automated access to various suppliers; suppliers therefore would be considered prime vendors for purposes of the Small Business Act. This section would require the Comptroller General to provide a report to the relevant congressional committees on small business participation in the marketplaces not later than 3 years after a contract with an online marketplace provider is awarded.

The committee expects that by contracting with numerous marketplaces, there will be competition between marketplaces for procurement of COTS products, and government personnel will have streamlined access to suppliers, products, and prices from varying marketplaces. The section therefore would not require GSA to use competitive procedures to contract with each marketplace. This section would require marketplaces to provide electronic access to information about products that are purchased, including the date of each purchase, the price paid, the person or entity within the department or agency that made the purchase, the delivery address, and the number of sellers that offered the same or similar product at the same time. The committee believes that such information would provide much better transparency into the Federal Government's purchasing and thereby enable more thorough oversight and accountability. This section would require each contract with a marketplace to prohibit the sale or other use of such purchase information to a third party in a manner that identifies the Federal Government, or any of its departments or agencies, as the pur-

The committee believes that online marketplaces provide a substantial opportunity to greatly streamline procurement of COTS products. Namely, marketplaces generally ensure competition and price reasonableness, and therefore would obviate many of the time-consuming government-unique procurement processes GSA and the Department of Defense perform today. Additionally, de-

partments and agencies would be required to accept the standard terms and conditions related to purchases on each marketplace. The committee understands, however, that it may be prudent to procure some commercial products through traditional acquisition processes. Therefore, this section would require the Department of Defense to purchase COTS products from the marketplaces only in appropriate circumstances. The committee expects the Secretary of Defense to issue implementation guidance that may limit the products that the Department of Defense may purchase on marketplaces. The committee expects, however, that opportunities to purchase additional products through marketplaces may arise as GSA gains familiarity with the use of online marketplaces. Elsewhere in this report, the committee includes an item directing the Administrator of GSA to provide a briefing to the House Committee on Armed Services and the House Committee on Oversight and Government Reform on the results of online marketplace purchasing.

### Section 802—Performance of Incurred Cost Audits

This section would require the Secretary of Defense to adhere to commercial standards for risk and materiality when auditing costs incurred under flexibly priced contracts. The committee is concerned that current incurred cost auditing processes in the Department of Defense are too slow, impede effective contract management, and may not provide good value to the taxpayer. The committee also understands that commercial auditors used by other Federal agencies may cost less and complete incurred cost audits

The section would authorize contract management personnel in the Department to choose either the Defense Contract Audit Agency (DCAA) or a qualified private auditor (QPA) to audit incurred costs, subject to guidelines of an audit planning committee. The section would require the Department to enter into an indefinite delivery-indefinite quantity task order contract with QPAs, and that QPAs audit at least 25 percent of incurred costs on flexibly priced contracts after September 1, 2020. The section would prohibit DCAA from further auditing audits performed by QPAs and would require the Secretary to treat DCAA and QPA audits equally. The section also would require DCAA to pass a peer review by a commercial auditor, which is consistent with commercial practice, to continue to issue unqualified audit findings after September 1, 2022. The section would require the Secretary of Defense to provide a briefing to the Committee on Armed Services of the House of Representatives not later than September 1, 2019, on the progress on finding a commercial auditor to perform the peer review.

This section also would specify a materiality standard for incurred cost audits effective September 1, 2020, based on private sector norms, for both DCAA and QPAs. The Comptroller General of the United States would be required to provide a report to the congressional defense committees not later than March 1, 2019, describing private sector and government standards for risk and materiality and providing recommendations as necessary to adjust the materiality standards in this section. On September 1, 2019, and every 5 years thereafter, the Department would be required to review private sector materiality standards and propose changes to

the materiality standards in this section, as necessary.

The section would require incurred cost audits to be completed within 1 year after receipt of qualified cost submissions, or the submissions would be accepted in their entirety, unless the Department could demonstrate that the contractor withheld information necessary to perform the audit. The committee intends for the Department to redefine its incurred cost backlog to include all audits that are not completed within 1 year of receipt of qualified incurred cost submissions. The committee further intends the Department to allocate DCAA and QPA audit resources to the highest risk audits consistent with completing incurred cost audits within 1 year.

Toward that end, the section would direct the Comptroller General of the United States to provide a report to the congressional defense committees by April 1, 2025, that evaluates the relative timeliness, costs, and quality of incurred cost audits performed by DCAA and QPAs; relative contractor costs of incurred cost audits performed by DCAA and QPAs; any effects on other types of audits; and the capability and capacity of commercial auditors to perform incurred cost audits for the Department.

### Section 803—Modifications to Cost or Pricing Data and Reporting Requirements

This section would amend section 2306a of title 10, United States Code, and section 3502 of title 41, United States Code, to raise contract dollar thresholds that require submission of certified cost and pricing data. The threshold for non-competitive prime contracts, modifications of such contracts, subcontracts, and modifications of subcontracts would increase from \$500,000 to \$2.5 million, while the threshold for modifications to legacy contracts would increase from \$100,000 to \$750,000. Raising certified cost and pricing data thresholds would reduce administrative burdens, improve process timelines for smaller contracts, and make thresholds approximately consistent with standard auditing thresholds. The section would further amend section 2306a of title 10, United States Code, to require offerors to submit other than certified cost or pricing data sufficient to determine price reasonableness when certified cost or pricing data is not required.

This section would also require the Comptroller General of the United States to submit a report to the congressional defense committees not later than March 1, 2022, on the implementation and effect of these modifications to cost or pricing data submission requirements.

This section also would amend section 2313a of title 10, United States Code, to revise reporting requirements of the Defense Contract Audit Agency (DCAA) to provide more clarity on the cost effectiveness of different types of audits. It would require DCAA to report separately for incurred cost, forward pricing, and other audits with regard to the number and dollar value of audits completed and pending, sustained questioned costs, the costs of performing audits, and the return on investment of conducting audits. This section also would change the inflation calculation for the thresholds for certified cost and pricing data, as well as covered contracts related to allowable costs, to be consistent with the inflation methodology in section 1908 of title 41, United States Code.

# PART II—EARLY INVESTMENTS IN ACQUISITION PROGRAMS

# Section 811—Requirement to Emphasize Reliability and Maintainability in Weapon System Design

This section would emphasize reliability and maintainability (R&M) in the system design of a major defense acquisition program (MDAP). First, the section would require the Secretary of Defense to include R&M as attributes of the existing key performance parameter on sustainment during the requirements development process. Second, when contracting for engineering and manufacturing development (EMD) or production of an MDAP, the program manager would be required to include clearly defined and measurable requirements for engineering activities and design specifications for R&M in the contract solicitation and contract terms unless he or she determines R&M should not be a contract requirement. Third, the section would require the Secretary to encourage the use of objective R&M criteria in the source selection process. Fourth, the section would authorize the use of incentive fees and would require the use of recovery options when practicable to encourage contractor performance in R&M for EMD and production contracts. The Department would be able to exercise incentive fees and recovery options until the date of acceptance of the last item under the contract. Finally, the section would establish a program through which program managers would compete for additional funding to invest in R&M during the EMD or production of an MDAP to reduce future operating and support (O&S) costs.

The committee notes that the design of a major weapon system directly affects its life-cycle sustainment activities and consequently drives its O&S costs. Elements of sustainment that are highly dependent on the system design, namely R&M, are easier and less costly to address during the development of an MDAP than after a weapon system is fielded. Therefore, the committee believes the Department should emphasize R&M in early engineering decisions.

# Section 812—Licensing of Appropriate Intellectual Property to Support Major Weapon Systems

This section would require the Department of Defense to work with contractors to determine prices for technical data the Department plans to acquire or license before selecting a contractor for the engineering and manufacturing development phase or the production phase of a major weapon system. Obtaining prices for technical data while competition exists among contractors encourages the Department to plan early for the technical data it needs to maintain a weapon system and affords the Department more competitive prices than it might pay later during the sustainment phase. Additionally, this section would encourage program managers to negotiate with industry to obtain the custom set of technical data necessary to support each major defense acquisition program rather than, as a default approach, seeking greater rights to more extensive, detailed technical data than is necessary.

The committee believes that acquiring broad rights to most or all of the technical data in a weapon system can be cost-prohibitive and deter contractors from bidding on defense programs. Not acquiring enough technical data, however, can reduce subsequent competition and increase sustainment costs. Therefore, the committee urges program managers when seeking technical data to consider the particular data that is required, the level of detail necessary, the purpose for which it will be used, with whom the government needs to share it, and for how long the government needs it. Program managers should also consider the unique characteristics of the weapon system and its components, the product support strategy for the weapon system, the organic industrial base strategy of the military department, and the commercial market.

### Section 813—Management of Intellectual Property Matters within the Department of Defense

This section would create a small cadre of experts in intellectual property (IP) that would advise, assist, and provide resources to program offices as they develop their IP strategies and negotiate with industry. The section would also establish a centralized Office of Intellectual Property within the Department of Defense to standardize the Department's approach toward obtaining technical data, promulgate policy on IP, oversee the cadre of IP experts, and serve as a single point of contact for industry on IP matters. Finally, this section would add IP positions to the acquisition workforce and would revise the training provided to the acquisition workforce on IP matters.

The committee has observed within the Department divergent philosophies toward acquiring technical data and varying knowledge of IP matters, including laws, regulations, and best practices. The committee is concerned that this inconsistency and lack of coordination disadvantages the Department. Additionally, because a provision elsewhere in this title would establish a preference for "specially negotiated licenses" to obtain the appropriate technical data customized to each weapon system, the committee believes the Department requires tools to improve its ability to negotiate with industry. A centralized Office of Intellectual Property and cadre of IP experts are warranted to address these issues. The committee intends that the office and cadre would provide advice and assistance to facilitate acquisitions. This section would not require the office or cadre to approve IP strategies, contracting actions, or other program office activities.

The committee also intends for the Office of Intellectual Property to maintain Department of Defense policy on Small Business Innovation Research (SBIR) data rights, particularly as it pertains to the transition from Phase I and II awards to Phase III awards, and to serve as a liaison between the Department of Defense and SBIR companies when IP issues arise related to SBIR.

### Section 814—Improvement of Planning for Acquisition of Services

This section would require the Secretary of Defense to ensure that the appropriate information is available and that the right factors are considered to enable the most effective business decisions regarding the procurement of services. This section would require the Secretaries of the Department of Defense and of the military departments to analyze spending patterns and projected future requirements for contracted services and use this analysis to inform

future decisions on services acquisition. Additionally, the section would require the Secretary of Defense to submit to Congress with the annual budget clear and detailed information on the amounts requested for contracted services organized according to the common enterprise data structure required elsewhere in this Act.

This section also would require the Services Requirements Review Boards (SRRBs) that the Department of Defense established last year to focus primarily on evaluating the need for contracted services, rather than the contracting action. The SRRBs would be required to critically examine requirements in light of total force management, available resources, analysis of past spending, and

contracting best practices.

Finally, this section would require the entities that need contracted services to plan appropriately, whenever possible, to receive validation of the requirement, secure the needed funding, and complete the contracting action before the service is needed. A requirements owner that does not adequately plan for contracted services and consequently relies on a bridge contract would be required to provide an update and explanation to a relevant senior official. Upon the second use of a bridge contract for the same service, the senior official would be required to notify senior leadership within the relevant military department, Defense Agency, Department of Defense Field Activity, or combatant command.

The committee believes that greater data and analytics would enable the Department of Defense to make more enterprise-oriented, strategic decisions about its acquisition of services. The committee also believes that if departmental organizations were encouraged to identify their known or enduring requirements earlier in the process, it would enable more thorough examination of the requirements, better and timelier alignment of resources, and opportunities to use contracting best practices. Additionally, improved planning processes would empower local installations and commands to better manage individual contracts and their associated funding. The committee notes that this legislation would improve head-quarters analysis and management of the acquisition of services but would retain the decentralized nature of procuring services at local installations.

# Section 815—Improvements to Test and Evaluation Processes and Tools

This section would amend sections 2366b and 2366c of title 10, United States Code, to require an assessment of the sufficiency of the developmental test plan and resources for each major defense acquisition program (MDAP) be included in the "acquisition scorecards" that were created in section 808 of the National Defense Authorization Act for Fiscal Year 2017 (Public Law 114–328). The committee believes that developmental testing is critical to reducing acquisition program risk by providing valuable information to support sound decision making. However, the committee is concerned that some MDAPs do not conduct enough developmental testing, so too many problems are first identified during operational testing, when they are expensive and time-consuming to fix. This section also would require the Secretary of Defense to evaluate the Department of Defense's strategy for developing and expanding the use of tools that facilitate cost-effective developmental

testing, including automated test methods and tools, modeling and simulation tools, and big data analytics technologies. The Secretary of Defense would be required to provide a briefing to the House Committee on Armed Services,not later than 1 year after the date of the enactment of this Act, on the Secretary's evaluation. The committee believes that emerging technologies and tools, such as Automated Test and Retest and modeling and simulation, can reduce program risk by facilitating rigorous system testing early in the life of a program.

### PART III—ACQUISITION WORKFORCE IMPROVEMENTS

### Section 821—Enhancements to the Civilian Program Management Workforce

This section would require the Secretary of Defense to implement a new career development program for highly qualified, competitively selected civilian employees to increase the pool of experienced civilian employees qualified to serve as program managers for major defense acquisition programs (MDAPs). The committee believes that a focus on career development and incentive structures for program managers would increase the number of personnel ready and willing to successfully manage MDAPs, thereby increasing the professionalization and tenure of personnel in these critical positions. The new career development program would include selection criteria for personnel in the program, necessary human capital flexibilities, and structured training and career paths. The Secretary would be required to provide a design for the program to the Committees on Armed Services of the Senate and the House of Representatives within 1 year after the date of the enactment of this Act. This section would also require an independent study of personnel policies and incentives needed to attract, retain, and hold accountable civilian and military program managers for the largest and most complex acquisition programs in the Department. The study would be required to be completed within 9 months after the date of the enactment of this Act, and the Secretary would be required to provide the study to the congressional defense committees within 30 days thereafter.

# Section 822—Improvements to the Hiring and Training of the Acquisition Workforce

This section would amend section 1705 of title 10, United States Code, to authorize the use of the Defense Acquisition Workforce Development Fund to pay salaries of personnel to manage the Fund. The committee expects that this authorization would improve the Department of Defense's ability to effectively sustain its acquisition workforce.

The section also would require the Comptroller General of the United States to submit a report to the congressional defense committees by June 30, 2019, on the effectiveness of existing hiring flexibilities for the acquisition workforce, as well as the need for acquisition training for personnel who work in acquisition programs but are not formally considered part of the acquisition workforce.

The section would require the Department to evaluate gaps in knowledge of industry operations, industry motivation, and busi-

ness acumen in the acquisition workforce, and would require the Under Secretary of Defense for Acquisition and Sustainment to submit a report on this evaluation to the Committees on Armed Services of the Senate and the House of Representatives by December 31, 2018.

Lastly, the section would require the Director of the Defense Contract Audit Agency to provide a briefing to the Committees on Armed Services of the Senate and the House of Representatives, not later than 180 days after the date of the enactment of this Act, on strategies to enhance the professionalization of the Agency's workforce

The committee believes that the hiring, training, and retention of highly qualified civilian personnel for the defense acquisition workforce is vital to maintaining military readiness, increasing the Department's buying power, and achieving substantial long-term savings through systems engineering and contracting. Therefore, the committee urges that planning for any workforce reduction that would affect the civilian acquisition workforce takes into consideration potential long-term effects of those reductions on cost, technical baseline, and warfighting capability.

### Section 823—Extension and Modifications to Acquisition Demonstration Project

This section would amend section 1762 of title 10, United States Code, to extend, through December 2023, the Acquisition Demonstration (AcqDemo) personnel demonstration project that was established in section 4308 of the National Defense Authorization Act for Fiscal Year 1996 (Public Law 104–106). AcqDemo allows the Department of Defense flexibility in setting compensation for recruiting and retaining high-performing acquisition personnel. The section also would require the Secretary of Defense to develop an implementation strategy to address potential AcqDemo improvements that were identified in a recent RAND assessment, and to provide a briefing to the Committees on Armed Services of the Senate and the House of Representatives and the Committee on Oversight and Government Reform of the House of Representatives on the implementation strategy within 1 year after the date of the enactment of this Act.

# Section 824—Acquisition Positions in the Offices of the Secretaries of the Military Departments

This section would help to retain qualified acquisition personnel within the Department of Defense by amending sections 3014, 5014, and 8014 of title 10, United States Code, to authorize the Secretaries of the military departments to exceed statutory personnel caps for civilian employees when hiring acquisition oversight personnel from the Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics or requirements personnel from the Joint Staff that supported the Joint Requirements Oversight Council. For the caps to be exceeded, a determination would be required that a position was no longer needed due to restructuring required by the National Defense Authorization Act for Fiscal Year 2017 (Public Law 114–328) and that the position would

not be refilled by the Office of the Secretary of Defense or the Joint Staff.

### PART IV—TRANSPARENCY IMPROVEMENTS

Section 831—Transparency of Defense Business System Data

This section would amend section 2222 of title 10, United States Code, to require that all data within Department of Defense business systems be considered owned by the Department and be readily available to the Office of the Secretary of Defense, the Joint Staff, and the military departments. To facilitate the management and analysis of data from across the military departments and defense agencies, the section would require the creation and maintenance of common enterprise data structures (CEDS) into which business system data could be mapped to populate common data sets. The section would assign responsibility to the Deputy Chief Management Officer for creation of CEDS and would amend section 139a of title 10, United States Code, to require that the Director of Cost Assessment and Program Evaluation maintain the CEDS and establish and maintain access to all related data. The section would also require the Deputy Chief Management Officer, with the concurrence of the Director, Cost Assessment and Program Evaluation, to develop a plan to implement the data transparency requirements in this section and to submit the plan to the congressional defense committees not later than 6 months after the date of the enactment of this Act.

The committee is concerned that the Department lags well behind the private sector in effectively incorporating enterprise-wide data analyses into decision making and oversight. The committee therefore believes that a statutory requirement that the Office of the Secretary of Defense, the Joint Staff, and the military departments be given access to business system data is necessary to overcome institutional and cultural barriers to information sharing. The committee further believes that to bring about this significant culture change, it is necessary to assign responsibility at the highest levels of the Department for creating and maintaining CEDS.

The committee recommends \$25.0 million in funding for the implementation of the data transparency requirements in this section.

### Section 832—Major Defense Acquisition Programs: Display of Budget Information

This section would require greater transparency in the budget requests for major defense acquisition programs (MDAPs). Budget justification documents for MDAPs would be required to separately depict funding for developmental and operational testing and evaluation, the purchase of cost data from contractors, and the purchase or license of technical data. The committee believes that testing and evaluation, cost data, and intellectual property are necessary investments made early in a program. However, the committee is concerned that associated funding is often decremented when cost, schedule, or performance risks materialize. Improving transparency of funding for these items would improve the ability of the committee to conduct oversight.

### Section 833—Enhancements to Transparency in Test and Evaluation Processes and Data

This section would require several improvements to the transparency of test and evaluation (T&E) processes and data. It would amend section 139 of title 10, United States Code, to require the Director of Operational Test and Evaluation (OT&E) to document specific circumstances that require the addition of smaller programs to the OT&E oversight list and to summarize those circumstances in the annual OT&E report. The section also would amend section 2399 of title 10, United States Code, to require the Director of OT&E to provide data in test reports on how the capabilities of new systems being tested compare to those of legacy systems.

The committee recognizes the value of an independent operational testing office in identifying potential vulnerabilities of weapon systems before such systems are purchased in significant quantity or deployed operationally. The committee believes that this information is critical to facilitate risk-based fielding decisions by senior Department of Defense leadership. However, the committee is concerned that, in recent years, operational test reports have provided evaluations of effectiveness and suitability but have not provided sufficient information to Congress on the performance improvements a system may provide when compared to legacy systems. The committee believes that more information on such comparisons, where appropriate and available, would provide useful context for evaluating a system's overall performance in operational testing.

This section also would amend section 139 of title 10, United States Code, to enhance the opportunity of the military departments to comment on the annual OT&E report to ensure that OT&E information is complete, accurate, and timely. The section also would require improved transparency of T&E cost data to enable oversight entities to better evaluate the adequacy of a program's T&E plans and resources. It would require the Department of Defense to develop an enterprise approach to T&E knowledge management to leverage T&E data across programs. The Director of the Test Resource Management Center and the senior Department official responsible for developmental testing would be required to submit a report to the congressional defense committees, within 1 year after the date of the enactment of this Act, on the Department's enterprise approach.

# SUBTITLE B—STREAMLINING OF DEFENSE ACQUISITION STATUTES AND REGULATIONS

Section 841—Modifications to the Advisory Panel on Streamlining and Codifying Acquisition Regulations

This section would amend section 809 of the National Defense Authorization Act for Fiscal Year 2016 (Public Law 114–92) to require the Advisory Panel on Streamlining and Codifying Acquisition Regulations to transmit its final report on January 15, 2019, rather than 2 years after the panel was established. It also would require the panel to transmit its final report simultaneously to the Secretary of Defense and the congressional defense committees.

The section would extend the period of time for the Secretary to submit comments on the final report from 30 to 60 days, and would establish a termination date for the panel 180 days after transmittal of the final report.

### Section 842—Extension of Maximum Duration of Fuel Storage Contracts

This section would extend from 20 to 30 years the maximum total period of Department of Defense contracts for storage, handling, or distribution of liquid fuels and natural gas. This provision was recommended by the Section 809 Panel on Streamlining and Codifying Acquisition Regulations, which was established in the National Defense Authorization Act for Fiscal Year 2016 (Public Law 114–92), as an example of updating acquisition regulations to be consistent with modern technology and business practices.

# Section 843—Exception for Business Operations From Requirement to Accept \$1 Coins

This section would exempt government contractors from the requirement of section 5112(p) of title 31, United States Code, that business operations performed on Federal Government premises provide for accepting and dispensing of existing and proposed dollar coins. This provision was recommended by the Section 809 Panel on Streamlining and Codifying Acquisition Regulations, which was established in the National Defense Authorization Act for Fiscal Year 2016 (Public Law 114–92), as an example of an unnecessary contract clause.

### Section 844—Repeal of Expired Pilot Program

This section would repeal an expired pilot program in section 2401a of title 10, United States Code, related to leasing utility cargo vehicles.

# SUBTITLE C—AMENDMENTS TO GENERAL CONTRACTING AUTHORITIES, PROCEDURES, AND LIMITATIONS

# Section 851—Limitation on Unilateral Definitization

This section would amend section 2326 of title 10, United States Code, to require the approval of the agency head before a Department of Defense contracting officer can unilaterally definitize the specifications, terms, or price of undefinitized contractual actions (UCAs) valued greater than \$1.0 billion. Currently, departmental regulations allow contracting officers to unilaterally determine reasonable prices and applicable clauses governing definitized contracts, with approval from the head of contracting activity. The committee believes that this level of scrutiny is sufficient for low dollar value UCAs. However, for high dollar value UCAs, particularly those involving the development or production of major defense acquisition programs, the committee believes that greater oversight is warranted. This section would also require that the unilateral definitization not take effect until 30 calendar days after the approval by the agency head. The committee believes that a 30-day waiting period would result in the contractor and the government having additional time and incentive to reach agreement on

the contract and avoid the negative consequences of unilateral definitization.

Section 852—Codification of Requirements Pertaining to Assessment, Management, and Control of Operating and Support Costs for Major Weapon Systems

This section would codify section 832 of the National Defense Authorization Act for Fiscal Year 2012 (Public Law 112–81; 10 U.S.C. 2430 note) on assessing and controlling operating and support costs for major weapons systems.

Section 853—Use of Program Income by Eligible Entities That Carry Out Procurement Technical Assistance Programs

This section would amend section 2414 of title 10, United States Code, to give Procurement Technical Assistance Centers limited authority to carry over program income into the next fiscal year to further program objectives.

### Section 854—Amendment to Sustainment Reviews

This section would amend section 2441 of title 10, United States Code, pertaining to sustainment reviews of major weapon systems. It would require the Secretaries of the military departments to make the results of sustainment reviews and supporting documentation available to the Under Secretary of Defense for Acquisition and Sustainment. The committee believes that data collected as part of sustainment reviews should be a Department of Defensewide asset that is available for analysis and used to inform the Department's policies on sustainment of major weapon systems.

### Section 855—Clarification to Other Transaction Authority

This section would modify section 2371b of title 10, United States Code, related to other transactions authority (OTA) to ensure consistency across the language and improve clarity for how the Department of Defense makes determinations when higher level authority is needed to sign off on a specific OTA award. The committee believes such changes will improve the speed and efficiency of issuing these awards by reducing the numbers of determinations requiring higher level signature. Due to the changes that have been made to this authority in recent years, the committee encourages the Department to revise and, if necessary, reissue guidance on using OTA.

# Section 856—Clarifying the Use of Lowest Price Technically Acceptable Source Selection Process

This section would amend section 813 of the National Defense Authorization Act for Fiscal Year 2017 (Public Law 114–328) to require the Secretary of Defense to amend the Defense Federal Acquisition Regulation Supplement to require that lowest price technically acceptable source selection criteria are only used in situations in which the Department would realize no or minimal additional innovation or future technological advantage, and, with respect to a contract for procurement of goods, the goods procured are predominantly expendable in nature, nontechnical, or have a short

life expectancy. The section would also require the avoidance of the use of lowest price technically acceptable source selection criteria when procuring certain types of electronic test and measurement equipment.

Section 857—Amendment to Nontraditional and Small Contractor Innovation Prototyping Program

This section would amend section 844(d) of the National Defense Authorization Act for Fiscal Year 2017 (Public Law 114–328) pertaining to the nontraditional and small contractor innovation prototyping program. It would add unmanned ground logistics and unmanned air logistics to the list of capabilities to be included in the program.

Section 858—Modification to Annual Meeting Requirement of Configuration Steering Boards

This section would amend section 814 of the Duncan Hunter National Defense Authorization Act for Fiscal Year 2009 (Public Law 110–417) to remove the requirement for a configuration steering board to meet annually to review an acquisition program if the senior acquisition executive determines in writing that there were no changes to the requirements of the acquisition program during the preceding year.

Section 859—Change to Definition of Subcontract in Certain Circumstances

This section would amend section 1906(c)(1) of title 41, United States Code, to make the definition of subcontract in that section consistent with the definition in section 2375 of title 10, United States Code.

Section 860—Amendment Relating to Applicability of Inflation Adjustments

This section would modify section 1908(d) of title 41, United States Code, to ensure 5-year inflation adjustments apply consistently to all subcontractors. Currently, inflation adjustments impact only prime contractors, so that subcontractors must maintain a compliance requirement for some contracts but not others. The committee believes that standardization will reduce regulatory and compliance challenges for both prime and subcontractors.

### SUBTITLE D—OTHER MATTERS

Section 861—Exemption from Design-Build Selection Procedures

This section would amend section 2305a of title 10, United States Code, to exempt solicitations issued pursuant to an indefinite delivery/indefinite quantity contract from the statutory limitation on the number of offerors that may proceed to step-two of the procurement selection process.

Section 862—Requirement That Certain Ship Components Be Manufactured in the National Technology and Industrial Base

This section would amend section 2534 of title 10, United States Code, and would require certain auxiliary ship components to be procured from a manufacturer in the national technology and industrial base.

Section 863—Procurement of Aviation Critical Safety Items

This section would amend section 814 of the National Defense Authorization Act for Fiscal Year 2017 (Public Law 114–328) to include the procurement of aviation critical safety items.

The committee is concerned the military services may be interpreting the definition of personal protective equipment too narrowly and are not considering aviation critical safety items, such as military parachutes. This change ensures that to the maximum extent practicable, the source selection criteria used in the procurement of aviation critical safety items, such as parachutes, would be best-value based, rather than reverse auction or lowest price technically acceptable contracting methods.

### Section 864—Milestones and Timelines for Contracts for Foreign Military Sales

This section would require the Secretary of Defense to develop standard timeline milestones for the foreign military sales (FMS) process, including related contracting activities. Timeline milestones would vary by the complexity of the FMS case. The Secretary would report quarterly to the congressional defense committees, the Committee on Foreign Affairs of the House of Representatives, and the Committee on Foreign Relations of the Senate any FMS cases that require congressional notification pursuant to section 36 of the Arms Export Control Act that do not meet timeline milestones. The Secretary would also report annually to the congressional defense committees, the Committee on Foreign Affairs of the House of Representatives, and the Committee on Foreign Relations of the Senate the number of FMS cases that did meet timeline milestones during the preceding fiscal year, and the number of FMS cases that failed to meet the timeline milestones, categorized by milestone and reason for the delay.

### Section 865—Notification Requirement for Certain Contracts for Audit Services

This section would require the Secretary of Defense to notify the congressional defense committees when there is a protest of a contract for auditing services that contribute to the Department of Defense achieving auditable financial statements and the Department decides not to use existing authorities to continue performance of the contract while the protest is pending. The committee remains committed to the Department achieving auditable financial statements, and is concerned that a delay in any one annual auditing contract impairs the ability of the entire Department to achieve consolidated audited financial statements.

Section 866—Training in Acquisition of Commercial Items

This section would require the President of the Defense Acquisition University to establish a training program on part 12 of the Federal Acquisition Regulation pertaining to the procurement of commercial items.

Section 867—Notice of Cost-Free Federal Procurement Technical Assistance in Connection With Registration of Small Business Concerns on Procurement Websites of the Department of Defense

This section would require the Secretary of Defense to establish procedures to include information about cost-free services provided by a Federal procurement technical assistance program in notices or direct communications regarding the registration of a small business on a Department of Defense procurement website.

Section 868—Comptroller General Report on Contractor Business System Requirements

This section would require the Comptroller General of the United States to issue a report to the congressional defense committees not later than 1 year after the date of enactment of this Act on the feasibility and effect of revising the applicability of contractor business system rules contained in section 893 of the Ike Skelton National Defense Authorization Act for Fiscal Year 2011 (Public Law 111–383).

Section 869—Standard Guidelines for Evaluation of Requirements for Services Contracts

This section would require the Secretary of Defense to encourage standardization of guidelines for the evaluation of requirements for services contracts.

Section 870—Temporary Limitation on Aggregate Annual Amount Available for Contract Services

This section would extend the cap on spending for services contracts by the Department of Defense through fiscal year 2018.

# TITLE IX—DEPARTMENT OF DEFENSE ORGANIZATION AND MANAGEMENT

### LEGISLATIVE PROVISIONS

SUBTITLE A—ORGANIZATION AND MANAGEMENT OF THE DEPARTMENT OF DEFENSE GENERALLY

Section 901—Responsibility of the Chief Information Officer of the Department of Defense for Risk Management Activities Regarding Supply Chain for Information Technology Systems

This section would amend section 142(b)(1) of title 10, United States Code, by making the Department of Defense Chief Information Officer responsible for policy, oversight, guidance, and coordination for supply chain risk management activities for the Department's information technology (IT) systems.

The committee remains concerned that the Department of Defense is not adequately postured or resourced to conduct the necessary planning, analysis, and assessment for supply chain risk management of Department of Defense information technology systems. This problem is exacerbated by the globalized nature of both the hardware and software supply chains for IT, and by the reliance of the Department on primarily commercial systems that are the products of the globalized management and supply chain. While the committee is aware that much progress has been made in developing policies and guidance, as well as creating the core of an analytic capability, the committee believes there is more to be done. In addition to rethinking how to address this problem with less manpower, the committee also believes the Department should do more to invest in automated information feeds, including from business and commercial intelligence providers, to fuse with classified information when needed, but also to provide stand-alone products more easily shareable with industry, interagency, and international partners.

Section 902—Repeal of Office of Corrosion Policy and Oversight

This section would repeal section 2228 of title 10, United States Code, requiring that there be an Office of Corrosion Policy and Oversight within the Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics.

Section 903—Designation of Corrosion Control and Prevention Executives for the Military Departments

This section would designate corrosion control and prevention executives for the military departments.

Section 904—Maintaining Civilian Workforce Capabilities to Sustain Readiness, the All Volunteer Force, and Operational Effectiveness

This section would amend section 912 of the National Defense Authorization Act for Fiscal Year 2017 (Public Law 114–328) to add civilian workforce matters to the report required by that section.

SUBTITLE B—DESIGNATION OF THE NAVY AND MARINE CORPS

Section 911—Redesignation of the Department of the Navy as the Department of the Navy and Marine Corps

This section would re-designate the Department of the Navy as the Department of the Navy and Marine Corps. Further, this section would re-designate the Secretary of the Navy as the Secretary of the Navy and Marine Corps.

Section 912—Conforming Amendments to Title 10, United States  $\operatorname{Code}$ 

This section would make conforming amendments to Title 10, United States Code, consistent with designating the Department of the Navy as the Department of the Navy and Marine Corps.

### Section 913—Other Provisions of Law and Other References

This section would amend other references in the United States Code consistent with the designation of the Department of the Navy as the Department of the Navy and Marine Corps.

### Section 914—Effective Date

This section would make this subtitle effective on the first day of the first month beginning more than 60 days after the enactment of this Act.

### SUBTITLE C—OTHER MATTERS

Section 921—Transition of the Office of the Secretary of Defense To Reflect Establishment of Positions of Under Secretary of Defense for Research and Engineering, Under Secretary of Defense for Acquisition and Sustainment, and Chief Management Officer

This section would allow the incumbent Principal Deputy Under Secretary of Defense for Acquisition, Technology, and Logistics to become the Under Secretary of Defense for Acquisition and Sustainment, and would allow the incumbent Deputy Chief Management Officer to continue to serve as the Chief Management Officer, once both positions come into effect on February 1, 2018, consistent with section 901 of the National Defense Authorization Act for Fiscal Year 2017 (Public Law 114–328.) Additionally, this section would clarify that any statutory references to the positions established in the aforementioned section 901 also take effect on February 1, 2018.

In the conference report (H. Rept. 114–840) accompanying the National Defense Authorization Act for Fiscal Year 2017, the conferees encouraged the President to move expeditiously on nominations for the Under Secretary of Defense for Research and Engineering, the Under Secretary of Defense for Acquisition and Sustainment, and the Chief Management Officer. However, the committee recognizes the difficulty of recruiting talented, experienced individuals to the incumbent leadership positions if the tenure of such positions is short and the individuals are not retained for the newly established positions. Therefore, the committee recommends that the individuals appointed by and with the advice and consent of the Senate to the relevant incumbent positions be allowed to transition to the newly established positions.

Section 922—Extension of Deadlines for Reporting and Briefing Requirements for Commission on the National Defense Strategy for the United States

This section would amend section 942 of the National Defense Authorization Act for Fiscal Year 2017 (Public Law 114–328), which establishes a Commission on the National Defense Strategy for the United States, to extend the deadlines for the final report and interim briefing.

The committee recognizes that the commissioners had not yet been appointed to the commission as of May 2017. To allow the commission sufficient time to conduct the review and assessment as required, the committee recommends revising the deadlines for the final report and interim briefing.

Section 923—Briefing on Force Management Level Policy

This section would express the sense of Congress that the Department of Defense should discourage the practice of substituting contractor personnel for available members of the Armed Forces when a unit deploys overseas. This section would also require the Secretary of Defense to brief the congressional defense committees on steps the Secretary is taking to revise deployment guidelines to ensure readiness, unit cohesion, and maintenance are prioritized as well as a plan to establish a policy to avoid costly contractor practices when practicable in the future.

# TITLE X—GENERAL PROVISIONS

### ITEMS OF SPECIAL INTEREST

COUNTER-DRUG ACTIVITIES

Narcotics Flow to the United States From Central and South America

Congress continues to be concerned regarding the flow illegal narcotics trafficking into the U.S. from in Central and South America. Congress notes the United States has a national security interest in the narcotics trafficking of transnational criminal organizations taking place in the Western Hemisphere risking widening insecurity and instability. The continuing efforts by U.S. Southern Command have been instrumental in combating the threats posed by the transnational criminal organizations. However, U.S. Southern Command could utilize additional requisite manpower, assets, and resources to assist the Office of National Drug Control Policy's mandated goal of forty percent reduction of narcotics entering through U.S. borders. The committee encourages the Department of Defense to continue to prioritize manpower, assets and resources to meet the mission of U.S. Southern Command to increase stability and security throughout the region. Therefore, the committee requires the Secretary of Defense, to provide a briefing, to the House Committee on Armed Services, no later than November 1, 2017 on the future manpower and resourcing needs in the U.S. Southern Command area of responsibility and the Department's plan to contribute to the interagency effort to reduce the amount of illicit narcotics entering the United States.

### National Guard Counterdrug Schools

The committee acknowledges the continued contributions of the National Guard Counterdrug Schools as part of domestic counterdrug initiatives. The National Guard, working with law enforcement agencies and community-based organizations, operates five regional counterdrug training centers across the country to provide education and training to local, State, and Federal law enforcement in counterdrug and global threat reduction efforts.

The committee notes the importance of each school's curriculum in addressing the counterdrug threat. Each course provides stu-

dents with training and skill set development to better combat transnational criminal organizations, develop intelligence gathering skills, and develop investigation skills. The committee believes that the Department of Defense should perform a thorough review process, to include feedback from schools' leadership and instructors, of the effectiveness of courses and overall curriculum strategy. The committee encourages the Department, as it annually reviews the curricula of each school, to evaluate the holistic approach each school implements to train, educate, and assist its students.

### Peace in Colombia

The committee lauds the Government of the Republic of Colombia on the signing of the peace accords with the Revolutionary Armed Forces of Colombia in September 2016. The committee further congratulates the Government on its implementation of the peace accords, beginning in November 2016. These accords lay the foundation for the peaceful transition of a country dealing with internal war and terrorism for 50 years to a country of stability.

The committee remains supportive of the U.S. mission in Colombia and of the strides made through the U.S.-Colombian partnership. Since 2000, the poverty rate in Colombia has dropped by 44 percent and the Gross Domestic Product has grown by 142 percent, while homicides have decreased by 53 percent. There have also been setbacks, including increased coca production and increased paramilitary attacks, as well as the possible resurgence of the National Liberation Army, and a rise in national violence and homicides. While an increase in coca production has hindered some of the progress of the Colombian Government over the past decade, the U.S. partnership with Colombia to address this and other challenges remains vital. The peace process is a generational transition with no easy victories.

The committee encourages the Government of Colombia to continue its efforts to promote and export stability, security, and transparency. The committee further encourages the Department of Defense and the Government of Colombia to continue their enduring partnership. The committee recognizes Colombia's work in Central America to train and assist countries with rampant violence and instability, leveraging lessons it has learned from 50 years of conflict, and to emphasize the professionalization of the military. The committee believes that, as Colombia evolves through its peaceful transition, a stronger and more stable hemisphere will emerge.

### Venezuela Security and Stability

The committee is concerned about the growing economic and political unrest occurring in the Bolivarian Republic of Venezuela under President Nicolas Maduro. With reports of famine, political uncertainty and corruption, a disintegrating economy, and undue violent government action against its citizens, the committee is concerned that instability in Venezuela could lead to a government collapse and failed state. In addition, this instability could result in portions of the Venezuelan population migrating to neighboring countries, including the Republic of Colombia, the Cooperative Republic of Guyana, the Republic of Peru, and the Federative Repub-

lic of Brazil, seeking humanitarian relief. The effects of a large scale humanitarian crisis in the region could be catastrophic.

The committee is concerned about U.S. Government contingency planning if a collapse of the Venezuelan Government and economy occurs. Therefore, the committee directs the Secretary of Defense, in coordination with other Federal Government agencies and departments that the Secretary deems appropriate, to provide a briefing, which may be classified, to the House Committee on Armed Services not later than September 30, 2017, on U.S. Government contingency plans for a potential humanitarian and migration crisis in Venezuela if its Government and economy collapse, to include the Department of Defense's roles and responsibilities and assets that would contribute to such plans.

### OTHER MATTERS

### Assessment of Culture and Accountability in Special Operations Forces

The committee is aware of the integral role that Special Operations Forces play in the defense of our Nation. Special Operations Forces enjoy a stellar reputation as brave, competent and quiet professionals. The committee is concerned, however, that recent allegations of personal misconduct by a limited number of service members may be detracting from the honorable service of the vast majority of Special Operations Forces. These allegations of misconduct include reports of sexual assault and other sexual misconduct, as well as drug use. Additional concerns have been raised about increased public exposure of Special Operations Forces activities and operations via unauthorized books and media.

Therefore, the committee directs the Assistant Secretary of Defense for Special Operations/Low-Intensity Conflict and the Commander, U.S. Special Operations Command, to provide a briefing to the Committee on Armed Services of the House of Representatives not later than January 1, 2018, on the Department's assessment of the culture and accountability within Special Operations Forces.

### Botulinum Toxin Type A Countermeasures

The committee notes that the Department of Defense is managing efforts to develop a vaccine to counter botulinum toxin types A and B. There is evidence and discussion in the scientific community stating that the use of the botulinum neurotoxin (BoNT) type A vaccine, which the department is pursuing, can limit future medical treatments for military personnel in that it would prevent immunized warfighters and veterans from receiving the benefit of the rapidly growing number of important medical uses of botulinum toxin type A. Several of these medical uses are critically important to the military veteran population, including treatments for PTSD-associated migraine and amputation pain. Furthermore, the committee notes that advances in synthetic biology enhance both the potential threat and potential treatments of biological agents.

Therefore, the committee directs Secretary of Defense to brief the House Committee on Armed Services within 90 days of enactment of this act on the Department of Defense's research and development plans to counter botulinum toxin type A, the impact and/or

potential drawbacks in using the BoNT/A vaccine, and the potential future benefits and complications introduced through the advances of synthetic biology for the treatment and threat of biological agents.

### Combat Helmets for Female Service Members

The committee encourages the Army and the Marine Corps to continue its efforts to reduce the weight of combat helmets issued to service members, while maintaining or enhancing ballistic protection. The committee also recognizes the need for the Department of Defense to ensure that the military services are procuring properly fitting helmets for all military servicemen and women. Specifically, the committee is aware of the Army's efforts to develop and field improved helmet fit and retention systems to account for female service member needs.

Therefore, in finalizing the contracts for current and future combat helmet production, the committee encourages the Army and the Marine Corps to take into account the helmet needs of all military service members when determining the number, size variety, and fitting system designs, with the goal of ensuring that the entirety of the male and female military population have the appropriate size helmets.

### Comptroller General Assessment of Emerging Threats of High National Security Consequence

Within the next ten years, the committee believes that several challenges could present emerging threats of high national security consequence, such as: the proliferation of disruptive and exponentially deployed technologies; the introduction of novel asymmetric weapons; second and third-order effects of environmental and climate-related issues; global pandemic and public health issues; shifting demographics and urbanization effects; and unanticipated state and non-state acts of aggression.

Since the committee believes the Department of Defense must be prepared to counter these threats, the committee directs the Comptroller General of the United States to identify and assess these and other emerging threats that could affect the national security of the United States. Such an assessment should provide a snapshot of critical emerging threats based on the views of the intelligence community, combatant commands, and other Department of Defense organizations, such as the Defense Advanced Research Projects Agency and the Defense Threat Reduction Agency. The assessment should identify:

- (1) the emerging threats within each geographic combatant commander's area of responsibility;
- (2) the extent to which the threats are highlighted in current national security defense strategies; and
- (3) the Department's component(s), if any, tasked to monitor and mitigate these threats.

The committee directs the Comptroller General to provide a briefing to the congressional defense committees by February 1, 2018, on preliminary findings, with a report to follow.

# Defense Department 501(c)3 Coordination and Strategy

The committee is aware that non-profit 501(c)3 entities may provide a valuable utility when operating in concert with Department of Defense and other U.S. government agencies and plans, but that guidance for utilizing such entities is inconsistent throughout the

Department and Combatant Commands.

The committee therefore directs the Secretary of Defense to submit a report by November 1, 2018, to the House Committee on Armed Services on the utility of 501(c)3 organizations to further the international goals and interests of the Department of Defense in concert with other U.S. government agencies and encourages the Department to issue standard guidance and standard operating procedures for working with such non-federal entities overseas.

# Department of Defense Overmatch Strategy

The committee remains concerned that U.S. superiority in some key warfare domains may be at risk with the advances in technology being made by other nations that are designed to counter U.S. overmatch. While the committee appreciates the assessments conducted by the Department of Defense, including the Office of Net Assessment, to characterize trends in competitive capabilities, the committee also seeks to understand the Department's efforts to address these challenges.

Therefore, the committee directs the Secretary of Defense to provide a briefing to the House Committee on Armed Services not later than September 30, 2017, on the Department's strategy to maintain overmatch, including the organizations, activities, and resources involved in the development and implementation of such strategy.

### Disposal of Excess Agriculture-Related Equipment

The committee is aware that the Department of Defense has a disposal process for its excess or unused equipment. The committee believes that veteran-owned farming operations could benefit from greater awareness of equipment availability. Therefore, the committee directs the Director of the Defense Logistics Agency to provide a briefing, not later than December 31, 2017, to the House Committee on Armed Services on all agriculture-related equipment disposals for the past five years. The briefing shall include an itemized list of each item disposed, a brief description of each farming-related item, and whether the item was transferred to another government entity or a private company or citizen.

### High-Altitude Airborne Intelligence, Surveillance, and Reconnaissance Capacity, Capability, and Force Structure

The committee recognizes that both the piloted U-2 Dragon Lady and the remotely piloted RQ-4 Global Hawk fleets of aircraft provide essential and extremely sought after high-altitude airborne intelligence, surveillance, and reconnaissance (ISR) capabilities for geographic combatant commanders. Due to varying circumstances, both aircraft have been viewed as competitors for resources with various stakeholders trying to decide which should remain within the Air Force inventory for the long-term. However, the committee

emphasizes that while both aircraft are highly capable and have differing attributes that may make one aircraft preferable at times over the other aircraft, the combination together provides critical, complementary capabilities within the Department's portfolio of high-altitude ISR capabilities. Furthermore, retiring either aircraft would create a significant capability gap and further exacerbate an existing and significant capacity shortfall in meeting combatant commanders' requirements.

Therefore, elsewhere in this Act, the committee includes a provision that would prohibit the Secretary of the Air Force from retiring either the U–2 or RQ–4 aircraft until at least the beginning of fiscal year 2024. Additionally, the committee also supports and expects the Secretary of the Air Force to robustly continue current and future modernization efforts and capability upgrades underway for the U–2 and RQ–4 to increase capability, generate synergy, and foster commonality within the high-altitude airborne ISR portfolio. Finally, the committee discourages the Secretary of the Air Force or the Chief of Staff of the Air Force from planning in the future or proposing to Congress any aircraft retirement that would create a capability deficit or capacity shortfall from existing levels until a sufficient replacement capability declares full operational capability.

### National Biodefense Strategy

Section 1086 of the National Defense Authorization Act for Fiscal Year 2017 (Public Law 114–328) directed the Secretary of Defense, the Secretary of Health and Human Services, the Secretary of Homeland Security, and the Secretary of Agriculture to jointly develop a national biodefense strategy and associated implementation plan. The strategy is also to include a review and assessment of biodefense policies, practices, programs, and initiatives, and is to be reviewed and revised biennially. The committee is pleased with the interagency coordination that has taken place thus far, including periodic update briefs to all congressional oversight committees and urges the continuation of these updates. The committee looks forward to receiving the completed strategy as required by section 1086, not later than its due date, September 25, 2017, including the subsequent review by the Comptroller General of the United States.

### National Guard CBRN Enterprise Report

The committee is aware that since the 1998 report on National Guard and WMD response, there has not been an updated study on the readiness, roles and tasks of the National Guard in both Title 10 and Title 32 as it relates to the Chemical Biological and Radiological and Nuclear (CBRN) threats has not been conducted to mirror evolving threats and technology including increased asymmetric threats, new chemical and biological threats, UAV and drone technology, and cyber warfare or maturing federal and state homeland defense architecture and policies.

This Committee believes it is appropriate to re-examine our National Guard CBRN enterprise and recommends that the Chief of the National Guard Bureau conduct a comprehensive study of its current federal, state and local Chemical, Biological, Radiological

and Nuclear operations, equipment and training requirements in light of today's threats. The report should highlight strengths as well as gaps and seams in the interagency planning and execution process.

The committee directs the Chief of the National Guard Bureau, working in close coordination with other state and federal agencies and stakeholders across multiple levels of government, to provide a report detailing the following, no later than September 30, 2019:

(1) define and clarify the roles and missions, structure, capabilities and training of the National Guard, as well as identifying emerging gaps and shortfalls in light of current CBRN threats to our country,

(2) by State and territory, comment on the resources each state has (Title 32 and Title 10) that are available to respond to a CBRN attack, proposing adaptions and updated response plans to combat current threats,

(3) the readiness and resourcing status of forces listed in (2),

(4) current strengths and areas of improvement in working with

State and Federal interagency partners,

(5) current assessments that are in place that address both readiness and resourcing of Title 32 and Title 10 forces postured to respond to CBRN incidents.

### National Guard Use of Department of Defense Issued Unmanned Aircraft Systems for Domestic Operations

The committee notes that the Deputy Secretary of Defense issued policy memorandum (15–002) for the Department of Defense on February 17, 2015, to provide guidance for the domestic use of Department of Defense unmanned aircraft systems (UAS). The policy's purpose is to ensure that Department UAS platforms are used in accordance with U.S. law and Department policy, and to ensure the appropriate use of Department UAS assets in domestic operations, training, exercises, and testing within the Department. The policy also covers use of Department UAS platforms issued to the National Guard, in accordance with subsection 710 of title 32, United States Code, which provides accountability for property issued to the National Guard.

The committee supports the purpose and substantive issues that are addressed by the UAS policy memorandum, but the committee also believes that some of the coordination processes and governance structure stipulated by the policy may not be optimal and provides unclear guidance in support of certain State and National Guard operations and missions. For example, the policy states that Department UAS platforms may not be used for Federal, State, or local immediate response, yet the policy allows for State governors to consider Department UAS employment in their planning for disaster response activities, but only after a governor's response plan factors in the procedures and time required for Federal Aviation Administration consultation for access to the necessary airspace, and to obtain Secretary of Defense authorization through a formal request in writing. On the contrary, the committee notes that Secretary of Defense approval is not needed for Department UAS domestic operations for designated search and rescue missions involving distress and potential loss-of-life circumstances. However, the committee believes that most disaster response activities that a

governor would undertake would likely involve distress and potential loss-of-life circumstances in which immediate response may be necessary. The committee is uncertain as to why Secretary of Defense approval is necessary for a governor to use a Department UAS related to disaster response activities, but approval authority is delegated below the Secretary of Defense for search and rescue missions involving distress and potential loss-of-life.

Therefore, elsewhere in this title, the committee includes a provision that would require the Secretary of Defense, in coordination with the Chief of the National Guard Bureau, the Commander, U.S. Northern Command, and the Commander, U.S. Pacific Command, to perform a review of the Department policy memorandum governing the domestic use of Department UAS platforms not later than 1 year after the date of the enactment of this Act, with a particular focus on efficiently and effectively supporting State and National Guard operations and missions.

### Navy Reserve F/A-18 Aircraft

The committee remains concerned over the health and readiness of the Navy Reserve combat air fleet. The committee is aware that the Navy Reserve tactical aviation squadrons provide critical adversary support and strike fighter weapons training to Active Duty forces, and must maintain a high mobilization readiness level as the sole strategic reserve available to the U.S. Navy. The committee understands the Navy Reserve currently operates 33 legacy F/A-18A+ aircraft that are currently shared between 2 squadrons. The committee notes that with an average airframe age of 30 years and onboard systems that are no longer compatible with today's Carrier Air Wing, these aircraft are increasingly less capable than the F/A-18E/F Super Hornets. The committee believes this could impact the ability of these two Navy Reserve squadrons in meeting requirements for advanced strike employment, as well as simulating current advanced threat aircraft. The committee also believes these legacy F/A–18A+ aircraft need to be recapitalized with next generation capability in order to provide realistic threat-representative training for naval aviators and to maintain operational readiness that provides a relevant and deployable backstop to the Active Duty air wings.

Accordingly, the committee directs the Secretary of the Navy, in coordination with the Chief of the Navy Reserve, to provide a briefing to the House Committee on Armed Services, not later than December 1, 2017, on its plans to recapitalize the Navy Reserve combat air fleet.

### Next Generation Immersive Cockpit Systems

The committee is aware of next-generation immersive aircraft operator cockpit technologies, including advanced crew stations, that may reduce aircraft operator risk, while enabling new aircraft to be designed that achieve higher performance at reduced costs when compared to conventional cockpit technology. The committee encourages the Department of Defense to pursue evaluation of such technologies if they are deemed to be beneficial in meeting performance and cost requirements for advanced next-generation aircraft.

# Overseas Posture and Permanently Stationed Forces

The committee asserts that there is operational and strategic value in maintaining forward presence of U.S. military forces in both the U.S. European Command and U.S. Pacific Command's areas of responsibilities. Forward-positioned forces reduce time and space limitations by providing rapid response capabilities to geographic combatant commanders, serve as a deterrent to potential adversaries while assuring partners and allies, and facilitate cooperative efforts to build and develop partner-nation security capabilities. However, the committee notes that several geographic combatant commands have relied on rotational forces to meet requirements due to reductions in the number of permanently stationed forces. While rotational forces can maintain required force levels and help exercise certain skill sets, the committee is concerned that an over-reliance on rotational forces may come at a greater financial cost and with limitations on meeting requirements for our strategic and operational aims when compared to permanently stationed forces.

For example, the use of rotational forces encumbers at least three units to support the one rotation: the unit currently performing the rotational mission, the unit training to assume the rotational mission, and the unit undergoing reset after completing the rotational mission. The committee is concerned that this may have an adverse impact on the readiness and availability of units. Unlike permanently stationed forces, rotational forces are also not assigned to a geographic area long enough to develop and sustain expertise on the terrain, supporting infrastructure, sustainable lines of communication, and regional security forces. This may adversely affect the ability of rotational and partner-nation forces to effectively coordinate responses to contingencies. The committee is also concerned that partner nations may question the United States' commitment, and partner forces may experience fatigue due to the higher operational training tempo associated with rotational forces. Finally, the committee is aware that the financial costs of supporting "heel-to-toe" rotational units over several years may be greater than correlating costs for permanently forward-stationed

Due to these limitations, the committee asserts that it better serves the United States' operational and strategic interests to maintain additional permanently stationed forces where the geographic combatant commanders have requirements for persistent force presence to: provide rapid response capabilities; deter potential adversaries; assure partners and allies; or facilitate cooperative efforts to build and develop partner-nation security capabilities. The committee is concerned that the United States' posture may be out of balance and lack sufficient emphasis on permanent forward-stationed forces.

Therefore, the committee directs the Secretary of Defense, in consultation with the service secretaries, to submit a report to the congressional defense committees not later than April 1, 2018, on the Department's strategy for balancing the force structure of the U.S. Armed Forces as part of any planned growth in end strength and force structure. The report shall be unclassified, but may include a classified annex. At a minimum, the report should address the

following issues with respect to U.S. European Command and U.S.

Pacific Command's areas of responsibility:

(1) an assessment of the additional permanently stationed forces at overseas locations required to meet U.S. strategic requirements and the operational requirements of the geographic combatant commanders;

(2) an assessment of the infrastructure capacity of existing overseas locations and their ability to accommodate additional forces;

- (3) an overview of new locations that might be considered for permanently stationed forces and the estimated cost and scope of infrastructure investments, to include improvements to training areas, which would be required at those locations to support permanently stationed forces. This should include an assessment of what infrastructure investments might be provided by the host-nation as well as new construction or modernization of existing facilities that would be funded by the United States;
- (4) a detailed list of investments in equipment, supplies, logistics, storage, and maintenance, at current and new overseas locations, required to support additional permanently stationed forces;

(5) an assessment of the readiness benefits and disadvantages associated with stationing additional permanent forces at overseas lo-

cations; and

(6) a discussion of potential challenges with stationing additional permanent forces or developing new locations for permanently stationed forces as a result of treaty obligations, international agreements, or other legally binding instruments.

Report on the National Security Implications of Ukraine's Arbitration Proceedings against Russia under Annex VII of the United Nations Convention on the Law of the Sea

The Committee notes the September 14, 2016 announcement by Ukraine that it had initiated arbitration proceedings against Russia under Annex VII of the United Nations Convention on the Law of the Sea (UNCLOS). In bringing this suit, Ukraine is seeking validation of its maritime rights in the vicinity of Crimea in the Black Sea, the Sea of Azov, and the Kerch Strait. The Ukrainian Ministry of Foreign Affairs stated that "Ukraine has asked the arbitral tribunal to enforce its maritime rights by ordering the Russian Federation to cease its internationally wrongful actions in the relevant waters, to provide Ukraine with appropriate guarantees that it will respect Ukraine's rights under UNCLOS, and to make full reparation to Ukraine for the injuries the Russian Federation has caused."

Additionally, the committee notes that the United States was denied observer status to the tribunal's proceedings between the Philippines and the Republic of China, which also carried major national security implications. In its ruling on that case, the tribunal determined that "'only interested States parties to the United Nations Convention on the Law of the Sea will be admitted as observers' and thus could not accede to the U.S. request."

Therefore, the committee directs the Secretary of Defense, in consultation with the Secretary of State, to submit a report to the congressional defense committees by December 31, 2017 on:

(1) the national security implications of the arbitration proceedings brought by Ukraine against Russia under UNCLOS;

(2) actions the U.S. can take to support the arbitration proceedings brought by Ukraine;

(3) limitations to the U.S. position in this case given its failure

to ratify UNCLOS, and;

(4) a recommendation on whether the U.S. should ratify the UNCLOS.

Requirement for Notification of Modifications Made to Presidential Policy Guidance for Direct Action Against Terrorist Targets

When necessary, U.S. Armed Forces use lethal force abroad to protect the American people, consistent with American values and all applicable law, including the international laws of armed conflict. In 2013, the Administration issued Presidential Policy Guidance (PPG) establishing standard operating procedures for direct action, which refers to lethal and non-lethal uses of force, including capture operations against terrorist targets in areas of active hostilities outside of the United States. The committee is aware that the current Administration has directed the Department of Defense and the interagency to review the procedures for direct action against terrorist targets established by the 2013 PPG, and that the results of this review are forthcoming.

Therefore, the committee directs the Secretary of Defense to provide a briefing to the House Committee on Armed Services within 30 days of any change made to procedures for direct action against terrorist targets conducted under title 10, United States Code, authorities, including any deviation, variation, change, or termination of procedure outlined within the 2013 PPG. Additionally, the committee expects the Secretary of Defense to continue to comply with standing requirements to notify the congressional defense committees of non-combatant causalities associated with direct action activities conducted under the auspices of the PPG, and all other title 10 operations, to include a year-end compilation by country.

# Ring Wheel Drive

The committee is interested in advancements in power- and drivetrain systems and whether these systems could offer mechanical and electromechanical benefits to Department of Defense procurements. This includes new "hub-less" or "spoke-less" technology that has been described as a ring wheel drive. The committee directs the Secretary of Defense, in coordination with the military services, to brief the congressional defense committees by March 1, 2018, on current commercial and government efforts to develop and deploy ring wheel drive technology. In addition, the briefing should include an assessment of the applicability of ring wheel drive for military platforms, including the broad range of wheeled vehicles and rotorcraft where ring wheel drive technology might improve the efficiency of current power and drivetrain systems.

Special Operations Forces Demand, Priorities, and Over-Reliance

The committee recognizes the unique capabilities U.S. Special Operations Forces (SOF) offer to combatant commanders to achieve objectives in their assigned area of operations. The committee acknowledges the value of SOF in carrying out missions which the general purpose forces are not trained or equipped to meet.

The committee understands that all military operational units are pressed to meet current demand and maintain readiness, but believes SOF should be preserved for SOF specific missions as an elite, highly specialized, and small force available for high priority operations. However, the committee notes that SOF are increasingly assigned to missions more appropriate for general purpose forces, and the committee is concerned that the use of SOF for non-SOF specific missions may degrade SOF readiness for core missions.

Therefore, the committee urges the Secretary of Defense to review the joint force allocation process in conjunction with an assessment of SOF structure, and to recalibrate the allocation of forces process as necessary to preserve essential readiness of SOF.

Strategy To Counter Unconventional and Hybrid Warfare Threats

The committee is concerned by the Department of Defense's failure to respond to the requirements of section 1097 of the National Defense Authorization Act for Fiscal Year 2016 (Public Law 114–92). The committee continues to hear in open testimony from outside experts and combatant commanders on the need for a whole of government strategy to counter unconventional and hybrid threats. For several years, the committee has expressed concern over the growing sophistication of unconventional and hybrid state-sponsored threats by the Russian Federation, the People's Republic of China, and the Islamic Republic of Iran, and that these adversaries continue to advance and integrate conventional warfare, economic warfare, cyber and information operations, intelligence operations, and other activities to undermine U.S. national security objectives as well as the objectives of U.S. allies.

Therefore, the committee urges the Secretary of Defense to complete the strategy required by section 1097 of Public Law 114–92 as soon as possible.

U.S. Efforts to Train, Advise, Assist, and Equip the Iraqi Counterterrorism Service and the Iraqi Special Operations Forces

The committee has received from the Inspector General of the Department of Defense the report entitled, "An Assessment of U.S. and Coalition Plans and Efforts to Train, Advise, Assist, and Equip the Iraqi Counterterrorism Service and the Iraqi Special Operations Forces" (DODIG–2017–074). Although the report found no statutory anomalies with the implementation of Iraqi train and equip efforts, the committee is concerned that several findings indicated a lack of accountability with materiel and equipment, training standards, and training metrics specifically for the Iraqi Counterterrorism Service and the Iraqi Special Operations Forces. Therefore, the committee directs the Secretary of Defense to provide a briefing to the House Committee on Armed Services by September 1, 2017, on his plan to implement the recommendations made in DODIG–2017–074 concerning efforts to train, advise, assist, and equip the Iraqi Counterterrorism Service and the Iraqi Special Operations Forces.

### LEGISLATIVE PROVISIONS

### SUBTITLE A—FINANCIAL MATTERS

### Section 1001—General Transfer Authority

This section would allow the Secretary of Defense, with certain limitations, to make transfers between amounts authorized for fiscal year 2018 in division A of this Act. This section would limit the total amount transferred under this authority to \$5.00 billion. This section would also require prompt notification to Congress of each transfer made.

Section 1002—Preparation of Consolidated Corrective Action Plan and Implementation of Centralized Reporting System

This section would direct the Under Secretary of Defense (Comptroller) to execute two recommendations identified in the Government Accountability Office (GAO) report, "DOD Financial Management: Significant Efforts Still Needed for Remediating Audit Readiness Deficiencies" (GAO–17–85).

Section 1003—Additional Requirements Relating to Department of Defense Audits

This section changes Section 1003(a)(2)(A)(ii) of the National Defense Authorization Act for Fiscal Year 2010 (Public Law 111–84; 10 U.S.C. 2222 note) regarding audits of the Department of Defense.

### SUBTITLE B—NAVAL VESSELS AND SHIPYARDS

#### Section 1011—National Defense Sealift Fund

This section would amend section 2218 of title 10, United States Code, and strike the use of the fund for research and development related to national defense sealift. Additionally, this section would authorize the Secretary of Defense to purchase up to five used vessels, regardless of where constructed, for the Ready Reserve Force component on a one-for-one basis with new vessels authorized by the National Defense Sealift Fund. Finally, prior to the purchase of a vessel not constructed in the United States, the section would require the Secretary to certify that there are no United States constructed vessels available for purchase at a reasonable price that are suitable for national defense or military purposes.

### Section 1012—National Defense Sealift Fund: Construction of National Icebreaker Vessels

This section would amend section 2218 of title 10, United States Code, and would authorize the obligation and expenditure of funds associated with the National Defense Sealift Fund for the construction, alteration, and conversion of national icebreaker vessels.

Section 1013—Use of National Sea-Based Deterrence Fund for Multiyear Procurement of Certain Critical Components

This section would expand the authority of the Secretary of the Navy to enter into a multiyear contract for certain nuclear-powered vessel components to include missile tubes, torpedo tubes, and propulsors.

Section 1014—Restrictions on the Overhaul and Repair of Vessels in Foreign Shipyards

This section would amend section 7310(b)(1) of title 10, United States Code, to prohibit the Department of the Navy from performing any overhaul, repair, or maintenance work that takes longer than 6 months in foreign shipyards.

Section 1015—Availability of Funds for Retirement or Inactivation of *Ticonderoga*-Class Cruisers or Dock Landing Ships

This section would prohibit the Secretary of the Navy from using funds authorized to be appropriated by this Act to retire a cruiser or dock landing ship or to place in a modernization status more than six cruisers and one dock landing ship.

Section 1016—Policy of the United States on Minimum Number of Battle Force Ships

This section would establish the policy of the United States to have available, as soon as practicable, not fewer than 355 battle force ships.

### SUBTITLE C—COUNTERTERRORISM

Section 1021—Termination of Requirement to Submit Annual Budget Justification Display for Department of Defense Combating Terrorism Program

This section would terminate the requirement to submit an annual budget justification display for Department of Defense combating terrorism programs under section 229 of title 10, United States Code, by December 31, 2020.

Section 1022—Prohibition on Use of Funds for Transfer or Release of Individuals Detained at United States Naval Station, Guantanamo Bay, Cuba to the United States

This section would prohibit the use of any amounts authorized to be appropriated or otherwise made available for the Department of Defense to be used during the period beginning on the date of the enactment of this Act and ending on December 31, 2018, to transfer or release detainees at U.S. Naval Station, Guantanamo Bay, Cuba, to or within the United States, its territories, or possessions.

Section 1023—Prohibition on Use of Funds to Construct or Modify Facilities in the United States to House Detainees Transferred from United States Naval Station, Guantanamo Bay, Cuba

This section would prohibit the use of any amounts authorized to be appropriated or otherwise made available for the Department of Defense to be used during the period beginning on the date of the enactment of this Act and ending on December 31, 2018, to construct or modify any facility in the United States, its territories, or possessions to house any detainee transferred from United States

Naval Station, Guantanamo Bay, Cuba, for the purposes of detention or imprisonment in the custody or under the effective control of the Department of Defense.

Section 1024—Prohibition on Use of Funds for Transfer or Release of Individuals Detained at United States Naval Station, Guantanamo Bay, Cuba, to Certain Countries

This section would prohibit the use of any amounts authorized to be appropriated or otherwise made available for the Department of Defense to be used during the period beginning on the date of the enactment of this Act and ending on December 31, 2018, to transfer, release, or assist in the transfer or release of any individual detained at U.S. Naval Station, Guantanamo Bay, Cuba, to Libya, the Federal Republic of Somalia, the Syrian Arab Republic, or the Republic of Yemen.

Section 1025—Biannual Report on Support of Special Operations to Combat Terrorism

This section would modify the biannual reporting requirements located in section 127e(g) of title 10, United States Code.

SUBTITLE D-MISCELLANEOUS AUTHORITIES AND LIMITATIONS

Section 1031—Limitation on Expenditure of Funds for Emergency and Extraordinary Expenses for Intelligence and Counter-Intelligence Activities and Representation Allowances

This section would modify section 127 of title 10, United States Code, to include an additional notification requirement for intelligence and counter-intelligence activities.

Section 1032—Modifications to Humanitarian Demining Assistance Authorities

This section would modify section 407, of title 10, United States Code, to remove "stockpiled conventional munitions" from the limitations of training opportunities with partner nations. This section would also modify the definitions of "humanitarian demining assistance" and "stockpiled conventional munitions assistance."

Section 1033—Prohibition on Charge of Certain Tariffs on Aircraft Traveling through Channel Routes

This section would prohibit U.S. Transportation Command from charging a tariff when a military service uses their aircraft on a route that is designated by U.S. Transportation Command as a channel route.

Section 1034—Limitation on Divestment of U-2 or RQ-4 Aircraft

This section would repeal section 133 of the National Defense Authorization Act for Fiscal Year 2012 (Public Law 112–81), regarding limitation on retirement of U–2 aircraft, and would prohibit the Department of Defense from retiring either U–2 or RQ–4 aircraft until at least fiscal year 2024.

Section 1035—Prohibition on Use of Funds for Retirement of Legacy Maritime Mine Countermeasures Platforms

This section would prohibit the Secretary of the Navy from obligating or expending funds to deactivate, decommission, or place in reduced operating status any mine countermeasures ships or Sea Dragon (MH–53) helicopters. The limitation in this section may be waived if the Secretary of the Navy certifies that the replacement mine countermeasures capabilities are available in sufficient quantity and capacity to meet the combatant commander requirements that are currently fulfilled by legacy mine countermeasures platforms.

Section 1036—Restriction on Use of Certain Funds Pending Solicitation of Bids for Western Pacific Dry Dock

This section would withhold funding for the Office of Secretary of the Navy until a request for proposal for a dry dock in the Western Pacific has been issued.

Section 1037—National Guard Flyovers of Public Events

This section would require that National Guard flyovers of public events be flown only as part of an approved training mission and would make the Adjutant General the approval authority for all Air National Guard and Army National Guard flyovers in a state or territory.

Section 1038—Transfer of Funds to World War I Centennial Commission

This section would authorize the Secretary of Defense to transfer funding to the World War I Centennial Commission to assist the Commission in carrying out activities in support of the World War I Centennial Commission Act.

Section 1039—Rule of Construction Regarding Use of Department of Defense Funding of a Border Wall

This section would prohibit funds authorized to be appropriated or otherwise made available for fiscal year 2018 for the Department of Defense to be used to plan, develop, or construct any barriers, including walls or fences along the international border of the United States.

### SUBTITLE E—STUDIES AND REPORTS

Section 1051—Elimination of Reporting Requirements Terminated After November 25, 2017, Pursuant to Section 1080 of the National Defense Authorization Act for Fiscal Year 2016

This section makes technical and conforming edits to reflect the termination of certain Department of Defense reporting requirements pursuant to section 1080 of the National Defense Authorization Act for Fiscal Year 2016 (Public Law 114–92), as amended by section 1061 of the National Defense Authorization Act for Fiscal Year 2017 (Public Law 114–328).

Section 1052—Report on Department of Defense Arctic Capability and Resource Gaps

This section would require the Secretary of Defense to provide a report, not later than 90 days after the date of the enactment of this Act, to the congressional defense committees detailing the Department of Defense's efforts to resolve arctic security capability and resource gaps.

Section 1053—Review and Assessment of Department of Defense Personnel Recovery and Nonconventional Assisted Recovery Mechanisms

This section would direct the Secretary of Defense to submit to the congressional defense committees a review and assessment of personnel recovery and nonconventional assisted recovery programs, authorities, and policies not later than March 1, 2018.

Section 1054—Mine Warfare Readiness Inspection Plan and Report

This section would require the Navy to submit a plan for a readiness inspection of naval mine warfare units and report to Congress on the results after the first inspection has been completed. This section also repeals section 1090 of the National Defense Authorization Act for Fiscal Year 2016 (Public Law 114–92).

Section 1055—Report on Civilian Casualties from Department of Defense Strikes

This section would require the Secretary of Defense to submit to the congressional defense committees a report on strikes carried out by the Department of Defense against terrorist targets.

Section 1056—Reports on Infrastructure and Capabilities of Lajes Field, Portugal

This section requires the Department of Defense to submit to the Committees on Armed Services of the Senate and the House of Representatives reports relating to Lajes Field, Portugal.

Section 1057—Report on Joint Pacific Alaska Range Complex Modernization

This section would require the Secretary of the Air Force to submit a report to the congressional defense committees regarding proposed improvements to the Joint Pacific Alaska Range Complex within 120 days after the date of enactment of this Act.

# SUBTITLE F—OTHER MATTERS

Section 1061—Technical, Conforming, and Clerical Amendments

This section would make a number of technical and clerical amendments of a non-substantive nature to existing law.

Section 1062—Workforce Issues for Relocation of Marines to Guam

This section would amend section 1806 of title 48, United States Code, to permit the Director, U.S. Citizenship and Immigration Services, to approve H–2B visa applications and renewals through

October 1, 2020, for contractors performing work on the Territory of Guam for the construction program supporting the realignment of U.S. Marines to Guam.

Section 1063—Protection of Second Amendment Rights of Military Families

This section would require for the purposes of federal firearms laws that the residency of members of the armed forces and their spouses be determined in the same manner.

Section 1064—Transfer of Surplus Firearms to Corporation for the Promotion of Rifle Practice and Firearms Safety

This section would require the Secretary of the Army to transfer surplus firearms to the Corporation for the Promotion of Rifle Practice and Firearms Safety. This section also would terminate the pilot program established in section 1087 of the National Defense Authorization Act for Fiscal Year 2016 (Public Law 113–66).

Section 1065—National Guard Accessibility to Department of Defense Issued Unmanned Aircraft

This section would require the Secretary of Defense, in coordination with the Chief of the National Guard Bureau, the Commander, U.S. Northern Command, and the Commander, U.S. Pacific Command, to complete an efficiency and effectiveness review of the governance structure, coordination processes, documentation, and timing requirements stipulated in Department of Defense policy memorandum 15–002, titled "Guidance for the Domestic Use of Unmanned Aircraft Systems (UAS)." This section would require the review to be completed not later than 1 year after the date of the enactment of this Act and the Secretary of Defense to submit the review to the Committees on Armed Services of the Senate and the House of Representatives not later than 30 days after its completion. This section also would require the aforementioned officials to consider information and data points from State governors and State adjutant generals related to their assessment of the efficiency and effectiveness of accessing Department of Defense UASes for State and National Guard operations.

Section 1066—Sense of Congress Regarding Aircraft Carriers

This section would express the sense of Congress that U.S. aircraft carriers are the preeminent power projection platform and have served the Nation's interests in times of war and in times of peace, adapting to the immediate and ever-changing nature of the world for over 90 years.

Section 1067—Notice to Congress of Terms of Department of Defense Settlement Agreements

This section would require that, upon the request of the chairman of a specified committee, the Secretary of Defense shall make available to that chairman a settlement agreement in a civil action involving the Department of Defense, a military department, or a Defense Agency, if, in the opinion of the Secretary, in consultation with the Attorney General, the terms of such settlement agreement

could affect the congressional authorization or appropriations process with respect to the Department of Defense.

Section 1068—Sense of Congress Recognizing the United States Navy Seabees

This section would establish a sense of congress that recognizes the Navy Seabees and Navy personnel who comprise the construction force for the Navy and Marine Corps as critical elements in deterring conflict, overcoming aggression, and rebuilding democratic institutions.

Section 1069—Recognition of the United States Special Operations Command

This section recognizes contributions made by the U.S. Special Operations Command.

Section 1070—Sense of Congress Regarding World War I

This section would provide a sense of Congress to honor those members of the United States Armed Forces who served in the First World War.

Section 1071—Findings and Sense of Congress Regarding the National Guard Youth Challenge Program

This section would express findings and a sense of Congress regarding the National Guard Youth Challenge Program and its critical role in preparing qualified youth for military service.

Section 1072—Sense of Congress Regarding National Purple Heart Recognition Day

The section would express the sense of Congress that the citizens of the United States should learn about the history of the Purple Heart medal and conduct programs to support Purple Heart medal recipients.

# TITLE XI—CIVILIAN PERSONNEL MATTERS

### ITEMS OF SPECIAL INTEREST

### Accelerated Promotion Program

The committee is aware that the U.S. Office of Personnel Management (OPM) formally approved the Navy's request to establish a Naval Shipyards Engineer Accelerated Promotion Program in December 2016, about 11 months after the Navy Office of Civilian Human Resources directed naval shipyards to cease accelerated promotions. The program is intended to help the shipyards address geographically unique circumstances, such as major in-state competitors or a single in-state university with an engineering program from which to recruit. Given the criticality of engineers to the shipyards' effective planning and efficient and timely completion of ship maintenance availabilities, the committee directs the Secretary of the Navy to brief the House Committee on Armed Services on the history of the Accelerated Promotion Program and what consider-

ation was given to making accelerated promotions retroactive for shipyard engineers hired between January 2016 and December 2016, including any statutory or regulatory impediments to implementation.

### LEGISLATIVE PROVISIONS

Section 1101—Extension of Direct Hire Authority for Domestic Defense Industrial Base Facilities and Major Range and Test Facilities Base

This section would extend the temporary direct hiring authority granted in section 1125 of the National Defense Authorization Act for Fiscal Year 2017 (Public Law 114–328) until September 30, 2021.

Section 1102—Extension of Authority to Provide Voluntary Separation Incentive Pay for Civilian Employees of the Department of Defense

This section would extend the temporary increase in Voluntary Separation Incentive Pay granted in section 1107 of the National Defense Authorization Act for Fiscal Year 2017 (Public Law 114–328) until September 30, 2021.

Section 1103—Additional Department of Defense Science and Technology Reinvention Laboratories

This section would revise and update the list of laboratories designated as Science and Technology Reinvention Laboratories, to include the Naval Medical Research Center and the Joint Warfighting Analysis Center.

Section 1104—One-Year Extension of Authority to Waive Annual Limitation on Premium Pay and Aggregate Limitation on Pay for Federal Civilian Employees Working Overseas

This section would amend section 1101 of the Duncan Hunter National Defense Authorization Act for Fiscal Year 2009 (Public Law 110–417) to extend the authority to waive the annual limitation on premium pay and aggregate limitation on pay for Federal civilian employees working overseas until September 30, 2018.

Section 1105—Appointment of Retired Members of the Armed Forces to Positions In or Under the Department of Defense

This section would amend section 3326 of title 5, United States Code, to allow the Secretary of Defense to appoint recently retired members of the Armed Forces to fill emergency needs.

Section 1106—Direct Hire Authority for Financial Management Experts in the Department of Defense Workforce

This section would amend section 1110 of the National Defense Authorization Act for Fiscal Year 2017 (Public Law 114–328) to expand the number of Department of Defense components that may hire financial management experts using direct hire authority.

Section 1107—Extension of Authority for Temporary Personnel Flexibilities for Domestic Defense Industrial Base Facilities and Major Range and Test Facilities Base Civilian Personnel

This section would amend subsection (a) of section 1132 of the National Defense Authorization Act for Fiscal Year 2017 (Public Law 114–328) to extend authority for temporary civilian personnel flexibilities for domestic defense industrial base facilities and Major Range and Test Facilities through fiscal year 2021.

Section 1108—One-Year Extension of Temporary Authority to Grant Allowances, Benefits, and Gratuities to Civilian Personnel on Official Duty in a Combat Zone

This section would amend section 1133 of the National Defense Authorization Act for Fiscal Year 2017 (Public Law 114–328) to extend temporary authority to grant allowances, benefits, and gratuities to civilian personnel on official duty in a combat zone through fiscal year 2019.

# TITLE XII—MATTERS RELATING TO FOREIGN NATIONS

### ITEMS OF SPECIAL INTEREST

Assessment of Freedom of Navigation Operations in the South China Sea

The committee supports recent Freedom of Navigation Operations (FONOP) in the South China Sea that challenge arbitrary limitations that are in contravention of the United Nations Convention on the Law of the Sea. Therefore, the committee directs the Secretary of Defense, in consultation with the Secretary of State, to provide a report to the congressional defense committees, the Committee on Foreign Affairs of the House of Representatives, and the Committee on Foreign Relations of the Senate, not later than November 30, 2017, that outlines U.S. policy and strategy regarding freedom of navigation in the global commons and a plan for conducting FONOPs in the South China Sea with regularity and frequency. The report shall be submitted in unclassified form but may contain a classified annex.

### Attacks on U.S. Armed Forces Personnel by Partner Nation Security Forces

U.S. military operations to train, advise, and assist missions conducted by our partner nation security forces are a core element of U.S. efforts to enhance security. Nevertheless, the committee is concerned by the incidence of attacks on U.S. military personnel by individuals affiliated with partner nation security forces, so-called "insider" or "green-on-blue" attacks.

Therefore, the committee directs the Secretary of Defense to sub-

Therefore, the committee directs the Secretary of Defense to submit a report to the Committees on Armed Services of the Senate and House of Representatives by March 1, 2018 on the Department's efforts to mitigate the risk of attacks on U.S. military personnel working with partner nation security forces. The report

should include:

(1) A description of each insider attack on U.S. Armed Forces since September 2001, to include the date, location, U.S. and partner nation security forces involved, associated casualties (both U.S. and partner forces), and a description of the circumstances surrounding each incident.

(2) A description of any training received or procedures implemented by U.S. Armed Forces to mitigate the risk of insider at-

tacks (to include cultural awareness training).

(3) A description of any vetting procedures undertaken by U.S. and partner nation security forces to identify possible insider threats.

(4) Any recommendations the Secretary may have to further counter insider threats.

Briefing on the Role of the Russian Military in Influence Operations Targeting Democratic Elections and Disruption of Military Alliances and Partnerships

The committee directs the Secretary of Defense, in coordination with the Secretary of State and the Director of National Intelligence, to provide a briefing to the House Committee on Armed Services not later than October 1, 2017 on the role of the Russian military in influence operations and campaigns conducted by the Russian Federation targeting democratic elections and disruption of military alliances and partnerships of which the United States is a member. At a minimum, the briefing should include;

(a) An assessment of the Russian Federation's objectives in influence campaigns targeting democratic elections and disruption of military alliances and partnerships of which the United States is a member and how they relate to the Russian Federation's broader

strategic objectives;

(b) The role of the Russian military in influence operations sup-

porting such campaigns;

(c) Identification of the Russian military's tactics, techniques, and procedures used in influence operations supporting such cam-

(d) Identification of foreign countries with democratic elections systems that may be targeted in future influence operations and campaigns by the Russian Federation, an assessment of the likelihood each such foreign country will be targeted, and an analysis of the potential strategic advantage gained by the Russian Federation by targeting those foreign countries;

(e) Identification of the Russian military's tactics, techniques, and procedures used in influence operations that are likely to be applied in future influence campaigns targeting democratic elections and disruption of military alliances and partnerships of which

the United States is a member;

(f) An assessment of the Russian Federation's perception and understanding of the security objectives of military alliances and partnerships of which the United States is a member and how that perception or understanding shapes the Russian Federation's intelligence collection and influence operations and campaigns; and

(g) Identification of any gaps in intelligence and warnings and

recommendations to address such gaps.

### Countering Russian Aggression

The committee remains concerned about a resurgent, revanchist Russian Federation. Over the past decade and more acutely in the past 3 years, Russia has intervened in the Syrian Arab Republic, illegally occupied and attempted to annex Crimea, fomented conflict in eastern Ukraine through the direction of combined Russian-separatist forces, interfered in democratic elections in the United States and Europe, conducted propaganda campaigns to undermine the legitimacy of democratic governments, and aggressively sought to expand its global influence and undermine international norms and organizations.

The committee remains committed to reassuring our European partners and allies through the development, implementation, and sustainment of an effective, credible deterrent to Russian aggression, as well as measures to proactively address the danger Russia poses to international principles and institutions. The committee encourages the Department of Defense and other executive agencies to focus their manpower, resources, and capabilities toward the development a cohesive strategy.

#### Counterterrorism Effectiveness Research

The committee recognizes that broad basic research into the effectiveness of counterterrorism policies and strategy is critical to informing and shaping future strategies. The committee believes that there is currently a wide range of social science research in these areas that should be leveraged, including better use of and integration with existing research by organizations maintaining databases of terrorism incidents globally.

For example, the National Consortium for the Study of Terrorism and Responses to Terrorism (START) is a university-based research and education center. The center is comprised of an international network of scholars committed to the scientific study of the causes and human consequences of terrorism in the United States and around the world. START supports the research efforts of leading social scientists at more than 50 academic and research institutions across the country and the globe and is headquartered at the University of Maryland with partner institutions around the United States, including the University of Nebraska.

The committee is aware the START program supports more than 14 terrorism and counterterrorism related datasets that are used across civilian and defense agencies including the Departments of Homeland Security and Department of Defense to directly inform international, federal, state and local training and educational programs. However, the budget request for fiscal year 2018 for the Department of Homeland Security does not include funding for this effort.

Therefore, the committee urges the Department of Defense to foster academically rigorous studies of terrorism, like the START initiative, to provide a foundational understanding for how to assess the effectiveness of specific counterterrorism program of the Department of Defense, and best practices to inform the Department of Defense's counterterrorism policies.

### Critical Shortfalls in the Indo-Asia-Pacific Region

The committee remains concerned about existing shortfalls in critical preferred munitions inventories and the potential impacts this could have on the ability of the Armed Forces to perform required missions. The committee notes that all the military services have expressed concerns about having insufficient preferred munition stockpiles to meet global combatant command contingency requirements, and the committee believes this situation to be amplified for missions in the Indo-Asia-Pacific region. The committee recognizes that improvements in munition stockpiles and munition capacity will require sustained long-term investment, and notes the budget request does provide funding that will increase production capacity for certain high-priority munitions like Joint Direct Attack Munitions and Small Diameter Bombs. The committee expects the Department of Defense to continue to prioritize investment for critical munition capabilities such as long-range anti-ship weapons, advanced air-to-air munitions, theater ballistic missile defense, and torpedoes. The committee also expects the Department to plan and program for improvements in munition prepositioning arrangements, infrastructure for munitions storage and security, and logistical requirements for critical munitions, specifically in the Indo-Asia-Pacific region.

### Cultural Preservation in Armed Conflict

The committee recognizes Department of Defense policy, including the Department Directive 2311.01E, "Department of Defense Law of War Program," which states it is Department policy to comply with the law of war during all armed conflicts and in all other military operations, including treaties and international agreements to which the United States is a party, such as the 1954 Hague Convention for the Protection of Cultural Property in the Event of Armed Conflict. The committee is encouraged by actions the Department has taken to protect cultural property, including its training, education, and cataloging efforts as discussed in the Department's 2015 report relating to the protection of cultural property in the event of armed conflict, required by section 1273 of the Carl Levin and Howard P. "Buck" McKeon National Defense Authorization Act for Fiscal Year 2015 (Public Law 113–291). However the committee remains concerned that the development, application, and oversight of policy and principles for cultural preservation in armed conflict remains inconsistent.

Therefore, the committee directs the Secretary of Defense to provide a report to the House Committee on Armed Services by September 29, 2017, that identifies:

- (1) the specific Assistant Secretary of Defense or Deputy Assistant Secretary of Defense responsible for managing and evaluating compliance with the 1954 Hague Convention and other relevant law of war requirements;
- (2) the offices and agencies within the Department that have responsibility for obtaining information related to safeguarding cultural heritage sites during armed conflict and other military operations:
- (3) the funding mechanisms that the Department uses, or would plan to use, to obtain relevant cultural heritage information; and

(4) any other information the Secretary deems relevant.

Defense Support to the Global Engagement Center Mission

The committee recognizes that operating in the information environment will be an increasingly important task for the Department of Defense in dealing with future conflicts and national security contingencies. The Department of Defense Strategy for Operations in the Information Environment, dated June 2016, provided a rudimentary framework for trying to prepare for these kinds of operations. The key tenets of this strategy remain relevant, including the importance of information operations in all phases of future operations; the need for policies and procedures that can manage information activities appropriately across the spectrum of conflict; the need for intelligence support to conduct effective information operations; the need for increased resources and informed resource prioritization to provide key capabilities, personnel and approaches; and coordination of influence activities with the interagency and international partners.

In order to meet those goals, and many of the specific tasks needed to develop the ways to conduct operations in the information environment, the Department will need to place increased attention and resources to build the workforce, technological capabilities and operational concepts, as well as coordinate with technology companies. The Department is already renewing its emphasis on traditional information operations programs, but the committee also believes that the Department should also actively explore how to, deconflict, contribute to, as well as reap the benefits from, interagency and technology companies activities in this space. For example, the committee is aware that the Global Engagement Center (GEC) within the Department of State is tasked with countering violent extremist groups, as well as addressing threats posed by state-sponsored and state-directed propaganda and misinformation activities. As noted elsewhere in this report, the committee supports the activities of the GEC, including through the development of a strategy for fulfilling its roles and responsibilities. The committee also believes that the Department should find opportunities to increase support for, cooperation with, and integration of efforts with the GEC. Increased cooperation would help with integrating military and non-military efforts, but also develop other pathways for career opportunity and advancement that don't currently exist. Additionally, such actions might also help ameliorate many of the challenges described in testimony before the committee, such as "lack of accountability and oversight, bureaucracy resulting in insufficient levels of resourcing, and the inability to absorb cutting edge information and analytic tools, and access to highly skilled personnel."

Therefore, the committee directs the Secretary of Defense to provide a briefing to the House Armed Services Committee by February 15, 2018 assessing the opportunities for support of and integration with the Global Engagement Center to address similar missions. This briefing should include identification of personnel or technology that has been or is being shared with the GEC, any requests for personnel or resources to the Department from the GEC, identification of training or exercise opportunities that might be beneficial for integrating GEC participation, and assessment of re-

quirements being generated by the GEC for personnel or capabilities needs for future years. Further, the report shall include coordination with technology companies, specifically on understanding their efforts to make platforms hostile to propaganda and violent extremism.

### Department of Defense Briefing on Crisis Response in Africa

The committee is concerned about the ability of the Department of Defense to provide rapid response to crises in Africa. The committee is aware that with current force posture and resources, the United States may be accepting a high level of risk in fulfilling crisis response support for U.S. posts that have been determined to be "high risk, high threat" as part of the "New Normal" requirements, as well as in responding to other emergent threats. Moreover, the committee is concerned that U.S. Africa Command may not have sufficient forces, enablers, and other resources to meet the "New Normal" requirements, particularly with the reduction in the force structure of the Special Purpose Marine Air Ground Task Force-Crisis Response-Africa, while also meeting other requirements.

Therefore, the committee directs the Secretary of Defense to provide a briefing to the House Committee on Armed Services not later than October 31, 2017, on the Department's assessment of its ability to respond to "New Normal" and other crisis response requirements in Africa, and courses of action to reduce risk.

### DTRA International Countering WMD-Program

The committee notes with approval that the Defense Threat Reduction Agency (DTRA) conducts programs to improve the ability of partner nations to respond to the spread of infectious disease, whether naturally occurring or the product of biological attack. In support of this work, Section 1241 of the Fiscal Year 2017 National Defense Authorization Act expanded DTRA authority to conduct these programs by authorizing the Secretary of Defense to support programs that build the capacity of foreign military forces to conduct several types of operations, including counter-WMD and border security. By working with partners in Africa and Asia, these DTRA programs contribute to the national strategy for countering weapons of mass destruction, including biological attack and pandemic because stopping the spread of disease early in an outbreak protects national security and saves lives. Therefore, the committee directs the Director of the DTRA, to brief the House Armed Services Committee not later than September 30, 2017, on the agency's planned activities to promote the ability of partner nations to respond to WMD, including infectious disease.

### Forward-Stationed Combat Aviation Brigade in South Korea

The committee supports the Army's decision to retain a combat aviation brigade in the Republic of Korea. The committee was earlier concerned that the Army's plan to begin rotational sourcing in 2019 to meet the combat aviation brigade requirement in South Korea would present a significant risk in capabilities required for major contingencies, given terrain and aviation mission complexities in South Korea.

### Global Engagement Center

The committee remains concerned by the increasing prevalence of propaganda, disinformation, and influence activities aimed at undermining the decision-making of the Department of Defense and confidence in its actions. For several years, the committee has supported increasing the Department of Defense's focus and attention on these matters. To that end, the committee has directed actions to develop a strategy for operating in the information environment, pressed for technology development efforts to support this mission set, and issued clear guidance to help direct military infor-

mation support operations.

The National Defense Authorization Act for Fiscal Year 2017 (Public Law 114–328) included a provision to authorize and expand the mission of the Global Engagement Center (GEC) within the Department of State beyond countering violent extremist groups to also address state-sponsored and state-directed propaganda and misinformation activities. Recent news of Russian efforts to influence elections in the United States and Europe, as well as its continued support of state-run media and proxy groups, highlights the need to focus attention and resources on state-sponsored challenges to our national security. The committee continues to support the efforts by the GEC to address messaging of violent extremist groups, but believes that the methodologies, tools, and expertise developed in that fight can be adapted to address state-sponsored misinforma-

The committee believes that the GEC should exert greater leadership to better coordinate, synchronize, and leverage interagency capabilities in order to lead and coordinate this mission area across the Federal Government. In taking a long-term view, the committee believes the GEC should begin to develop a strategy for fulfilling its roles and responsibilities for the recently expanded mission. The strategy should include identification of additional required resources, personnel, authorities, and capabilities. The strategy should also include milestones for continually evaluating and assessing the effectiveness of efforts and available resources, and ensure transparency through regular updates to key stakeholders. The strategy should also evaluate how the GEC should leverage commercially available technology to enhance its mission's capability. Further, the committee encourages the Department of Defense to be involved with this strategy in order to find ways to leverage the authorities, people, and funding for mutual benefit.

### Global Theater Security Cooperation Management Information System

The committee is concerned that the functionality and effectiveness of the Global Theater Security Cooperation Management Information System (G-TSCMIS) are hindered by the lack of timely and regular input of high-quality security cooperation event information. The value and functionality of G-TSCMIS for all users is directly related to the input of information by those responsible across the Department of Defense. Inconsistent and late information creates an inaccurate global operating picture of security cooperation activities, thus hampering data analysis, planning, monitoring, and resource allocation decisions. Further, the committee believes that G-TSCMIS should be considered as a means to capture and disseminate security cooperation assessment, monitoring,

and evaluation information, including lessons learned.

Therefore, the committee directs the Under Secretary of Defense for Policy, in coordination with the Deputy Chief Management Officer, to provide a briefing to the House Committee on Armed Services not later than October 1, 2017, on:

(1) measures the Department can take to improve data entry in G-TSCMIS, including recommendations for G-TSCMIS business process reengineering to streamline processes;

(2) other steps to improve the functionality, utility, and effective-

ness of G-TSCMIS; and

(3) the potential for incorporation of Assessment, Monitoring, and Evaluation functionality in future releases of G-TSCMIS, including an assessment of other technical means or collaboration opportunities to increase functionality that the Department of Defense may be pursuing.

Elsewhere in this Act, the committee includes a provision that would require the Secretary of Defense to submit an assessment to the congressional defense committees on the effectiveness of meas-

ures taken to improve the functionality of G-TSCMIS.

# Impact of Foreign Laws on U.S. Defense Contractors

Partners and allies of the United States are vital to the national security of the United States and the world. These partnerships and alliances are the bedrock of global stability and democratic principles. However, the committee is concerned with legislative action by certain U.S. partners and allies to prevent citizens and private groups to invest in the U.S. defense industrial base. Therefore, the committee directs the Secretary of Defense to brief the House Committee on Armed Services, the House Committee on Foreign Affairs, the House Committee on Ways and Means, and the House Committee on Financial Services, no later than October 1, 2017, on whether any U.S. partners and allies have enacted domestic laws which have created any adverse consequences for any U.S. defense contractors, and, if so, the impact of said laws on such contractors, and any policy recommendations the Secretary may have to address such laws.

### Implementation of Strategy to Prevent and Respond to Gender-Based Violence

The committee is aware of efforts by the Department of Defense to implement the "United States Strategy to Prevent and Respond to Gender-Based Violence Globally," and appreciates the Department's efforts to keep the committee apprised of its implementation activities. However, the committee remains concerned about the metrics used to assess, monitor, and evaluate the activities, programs, and investments employed to implement the strategy.

Therefore, the committee directs the Deputy Assistant Secretary of Defense for Stability and Humanitarian Affairs to provide a briefing to the House Committee on Armed Services not later than October 2, 2017, on the Department's efforts to effectively assess, monitor, and evaluate activities, programs, and investments, to include the methodology used in the formulation of metrics, related to the "United States Strategy to Prevent and Respond to Gender-Based Violence Globally."  $\,$ 

Improvements to Transparency in the Technology Release Process in Foreign Military Sales

The committee is encouraged by Department of Defense initiatives to improve internal Department processes in Foreign Military Sales (FMS) and urges the Department to continue to seek improvements. The committee is aware that the Deputy Secretary of Defense established a Defense Senior Steering Group on Arms Transfers and Technology Release in August 2008 to review and improve the Department's decision-making on arms transfers and release of sensitive technology. In July 2010, the Deputy Secretary issued a memorandum to revise the Department's Technology Security and Foreign Disclosure processes, pursuant to the Steering Group's recommendations and Presidential Study Directive 8, issued in December 2009. The committee is aware that the Defense Security Cooperation Agency and the Defense Technology Security Administration engage with stakeholders through a variety of means; however, the committee remains concerned about the extent to which these organizations communicate with industry stakeholders regarding the technology release processes. Therefore, the committee directs the Under Secretary of Defense for Policy to provide a briefing to the House Committee on Armed Services and the House Committee on Foreign Affairs not later than October 31, 2017, on communication with industry stakeholders on relevant processes for considering the release of sensitive technology and steps to improve that communication.

# Independent Security Cooperation Evaluation Office

The committee commends the Department of Defense for issuing its policy, Department of Defense Instruction (DODI) 5132.14, requiring the assessment, monitoring, and evaluation of security cooperation programs. High-quality, independent evaluations of these programs can reveal important lessons for improving the effectiveness of security cooperation programs. The committee notes that DODI 5132.14 directs the establishment of an independent evaluation office, consistent with international best practices. Further, the committee believes the establishment of such an office to be an important prerequisite to effective implementation of the broader policy. To ensure that evaluations are both useful and utilized for decision-making, the committee directs the Under Secretary of Defense for Policy to provide a briefing to the House Committee on Armed Services by October 1, 2017, on its progress toward establishing an independent evaluation office.

### NATO Defense Weapon System Development Cooperation

The committee recognizes the role that NATO defense industries have played in weapon systems programs through partnerships and supply chain activities. Joint weapon system development with NATO defense industries can help maintain stability and interoperability with partner defense forces. The committee encourages the Department to continue seeking avenues to provide the best weapon systems at the best cost for our Nation's defense, and when

appropriate, leverage NATO defense industries to maximize joint force integration and interoperability. The committee directs the Secretary of Defense to provide a briefing on joint weapon system development and coordination and interoperability efforts with NATO members and defense industries by February 1, 2018.

### Non-Lethal Weapons for European Theater Contingencies

The committee reaffirms its longstanding support for the accelerated development, fielding, and deployment of non-lethal technologies. Non-lethal systems are useful for both force application and force protection missions, especially in ambiguous environments where conflicts simmer below the threshold of declared hostilities. The committee notes that their employment is consistent with U.S. military strategy and helps minimize damage to property and inadvertent civilian casualties in the kinds of operational contingencies, including irregular warfare and humanitarian crises, in which U.S. forces are likely to be engaged. Their use provides commanders with additional decision time and space before resorting to lethal force, helps mitigate the negative consequences of unintended non-combatant injuries and fatalities, and enhances the overall prospects of mission success.

With the challenges posed by grey zone conflicts, irregular warfare scenarios that co-mingle military and civilian militia forces, and the continuing growth of megacities and other expansive urban zones, the committee is concerned that insufficient planning, preparation or doctrinal development has been focused on the use of and integration of non-lethal systems in some of these scenarios. In light of the continuing importance of the European Deterrence Initiative (EDI) to preventing and deterring hostile actions with Russia, the committee believes that increased focus should be placed on how best to integrate non-lethal weapons into the strategic planning for regional scenarios, as well as the training and equipping of regional partner forces.

Accordingly, the committee directs the Chairman of the Joint Chiefs of Staff to provide a briefing to the House Committee on Armed Services by February 1, 2018, on the integration of non-lethal weapons planning and training as part of EDI. This briefing should examine current contingency planning within European Command, and with North Atlantic Treaty Organization partners, to determine if the level of investment estimated across the Future Years Defense Program is sufficient to support those plans, identification of training or exercise opportunities for integrating non-lethal weapons training and doctrinal development, as well as recommendations for ways improving partner nation access to non-lethal systems for military, border guard units, or other government affiliated units.

# Plan to Enhance Imagery Sharing with Allies in the Asia-Pacific Region

The committee supports enhancing imagery sharing with allies in the Asia-Pacific region to improve joint non-proliferation, counterproliferation, and ballistic missile detection and defense capabilities. The committee directs the Secretary of Defense, in consultation with the Director of National Intelligence, to develop and implement a plan for enhancing the sharing of commercial imagery and national technical means with the Governments of the Republic of Korea and Japan, consistent with the national security of the United States and with the protection of sources and methods. The committee further directs the Secretary to provide a briefing to the House Committee on Armed Services and the House Permanent Select Committee on Intelligence on this plan and its implementation not later than November 30, 2017.

# Report on Impact of Outsourcing on the U.S. Defense Industrial Base

The committee has long been concerned with the vitality of the U.S. defense industrial base. The committee notes the domestic manufacturing sector has been particularly affected by the compounding deleterious effects of current market practices and business trends regarding outsourcing. The committee believes that large-scale outsourcing of U.S. manufacturing requirements to receptive foreign countries, such as the People's Republic of China, is having a damaging effect on the U.S. defense industrial base and could endanger national security.

Therefore, the committee directs the Comptroller General of the United States to submit a report to the Committee on Armed Services of the House of Representatives by November 1, 2018, on the national security implications of private companies that outsource their industrial and manufacturing capacities to locations outside of the United States. The report shall include the following ele-

ments:

(1) an assessment of the material effects of such outsourcing on the U.S. defense industrial base;

(2) an assessment of the national security risks to the U.S. defense industrial base of such outsourcing, including the integrity of the Department of Defense acquisition system, logistics network, or supply chains;

(3) an assessment of the risks posed by such outsourcing to the readiness of U.S. military forces to field a full spectrum of military

capabilities; and

(4) the risks posed by such outsourcing and its effects on the U.S. defense industrial base to the capacity of the United States to sustain a protracted conflict against a near-peer adversary.

#### Security Cooperation Assessment, Monitoring, and Evaluation

The committee notes the critical importance of assessment, monitoring, and evaluation of security cooperation initiatives. Section 1205 of the National Defense Authorization Act for Fiscal Year 2017 (Public Law 114–328) expressed the sense of Congress that the Secretary of Defense should implement an assessment, monitoring, and evaluation framework consistent with interagency approaches and existing best practices, and that it should be sufficiently resourced, and appropriately organized and staffed to inform security cooperation planning, policies, and resource decisions as well as ensure the effectiveness and efficiency of security cooperation efforts. The committee expects the Department of Defense will invest sufficient resources to ensure that best practices and lessons learned are incorporated into security cooperation pol-

icy, plans, programs, program management, resources, and the security cooperation workforce to ensure the best return on investment for the Department's security cooperation initiatives.

### Security Cooperation Reform

The National Defense Authorization Act for Fiscal Year 2017 (Public Law 114–328) contained significant and extensive reform of security cooperation authorities, programs, and funding of the Department of Defense. The security cooperation reforms in Public Law 114–328 sought to provide greater clarity and consistency about the nature and scope of the Department's security cooperation programs and activities to those who plan, manage, implement, and conduct oversight of these programs. The committee is aware of the Department's initial progress toward implementing these reforms.

Of note, Public Law 114–328 consolidated multiple, similar "train and equip" authorities into a single authority to build partner capacity to conduct specific missions identified under section 333 of title 10, United States Code. Section 333 was crafted to synchronize and replace the so-called "patchwork of authorities" that previously existed for "train and equip" and to alleviate inefficiencies in design, funding, management, and implementation of such programs. The committee urges the Department to overcome bureaucratic obstacles that hinder continued progress in aggressively implementing the security cooperation reforms in Public Law 114–328.

### Support for Afghan Special Immigrant Visa Program

The Committee on Armed Services of the House of Representatives recognizes the importance of the Afghan Special Immigrant Visa (SIV) program and the critical role these partners play in assisting the United States mission in Afghanistan. The Committee is concerned by reports that the United States Embassy in Kabul is close to exhausting available visas currently authorized to the program. Failing to authorize additional visas would leave threatened local partners in serious danger for many additional months beyond current processing times sometimes exceeding one year. This exposes these individuals and their families to attack, kidnapping, and death. The Committee directs the Secretary of Defense, in consultation with the Secretary of State, to brief the committee on the importance of continuing the SIV program by September 30, 2017.

Support for Other Departments and Agencies of the United States Government that Advance Department of Defense Security Cooperation Objectives

Section 385 of title 10, United States Code, authorizes the Secretary of Defense to transfer up to \$75 million to other agencies in the United States Government for foreign assistance programs and activities that "(1) are necessary for the effectiveness of one or more programs of the Department of Defense relating to security cooperation conducted pursuant to an authority in this chapter; and (2) cannot be carried out by the Department." For example, programs within the United States Agency for International Development (USAID) and the Department of State to counter violent

extremism and terrorism may be an appropriate use of funds, if they are identified as a requirement by the Department and meet all of the conditions of section 385.

The committee directs the Secretary of Defense to provide a briefing to the House Committee on Armed Services not later than February 1, 2018 on the status of any funds transferred to other departments and agencies.

### Timor Sea Maritime Developments

The committee recognizes the strategic importance of the Indo-Asia-Pacific region and has a strong interest in ensuring processes to resolve territorial and maritime disputes are done fairly and peacefully in accordance with international law. Given the growing and complex regional maritime security issues in the Pacific, the committee believes that negotiations between Australia and Timor-Leste to establish permanent maritime boundaries sends a positive signal to other states in the region regarding adherence to a rulesbased international order. A mutually agreed upon resolution could serve as an example for resolving other disputes peacefully and have benefits to cooperative maritime efforts in the region. The committee directs the Secretary of Defense, in coordination with the Secretary of State, to provide a briefing to the House Committee on Armed Services, not later than September 30, 2017, on the potential security benefits that may result from the Australia-Timor Leste conciliation process and how a peaceful resolution to the dispute might affect overall U.S. defense and security interests in the region.

### U.S. Civilian Contractors in Iraq

The committee notes that U.S. civilian contractors supporting the U.S. military in the Republic of Iraq are performing services absent a diplomatic agreement that provides them with legal and financial safeguards. The committee is concerned that U.S. civilian contractors may be subject to visa denials, tax collection efforts, and other actions which may hinder support to U.S. forces and coalition partners, including their ability to provide U.S. forces and coalition partners with timely access to critical supplies.

Therefore, the committee directs the Secretary of Defense, in coordination with the Secretary of State, to provide a briefing to the House Committee on Armed Services and the House Committee on Foreign Affairs not later than July 31, 2017, on: tax collection, visa denials, and other issues that are affecting U.S. civilian contractors in Iraq; the impact of such issues; and, if necessary, any plans to mitigate such issues.

### U.S. National Security Threats in Africa

The committee remains concerned about the ability of the Department of Defense to address the broad range of current and evolving threats to U.S. national security in Africa. Numerous security threats challenge the United States and its partners, such as stability in Libya, the Federal Republic of Somalia, and the Republic of Mali; various terrorist organizations such as Al Shabaab, Al Qaeda in the Islamic Maghreb, the Islamic State of Iraq and the Levant, and Boko Haram; and many others.

Given the massive size of the continent, the array of security challenges, partners that may be unable or unwilling to address security challenges, and a constant shortage of resources, the Department of Defense and U.S. Africa Command must find innovative, effective, and efficient solutions to the security challenges they face. Over the previous several years, the committee has provided the Department with multiple new or revised authorities, as well as significant funding, to address these challenges. A comprehensive strategy for achieving the Department of Defense's objectives on the continent will better enable the Department to address and plan for these challenges, as well as assist the committee in its oversight role. The committee looks forward to receiving the strategy for U.S. defense interests in Africa, as required by section 1273 of the National Defense Authorization Act for Fiscal Year 2017 (Public Law 114–328), not later than its due date of December 23, 2017.

### Utilizing Unmanned Aircraft Systems for International Humanitarian Assistance and Disaster Relief

The Committee understands that over the last decade, unmanned aircraft systems (UAS) have increased in both number and capability in order to enhance warfighting operations. UAS have proven vital to enhancing situational awareness, improving mission performance, and minimizing risk to both civilian and military personnel within the U.S. Armed Forces.

The Committee notes that effective use of these technologies may also have the potential to improve military operations such as Overseas Humanitarian, Disaster, and Civic Aid missions in support of humanitarian crises and disaster relief. The Committee is also aware that UAS are being increasingly accepted and utilized for international humanitarian assistance and disaster relief (HA/DR).

The Committee believes that while unmanned aircraft systems provide the United States' Armed Forces strategic ISR and combat capabilities, these systems have additional potential to enhance the speed and quality of localized needs assessments, and to strengthen and revolutionize humanitarian assistance and disaster relief efforts abroad, particularly when it comes to mapping, lightweight essential item delivery, damage assessment support, and increased situational awareness.

The Committee therefore directs the Secretary of Defense to brief the House Committee on Armed Services and House Committee on Foreign Affairs on potential ways in which the Department of Defense can support increased utilization of unmanned aircraft systems in support of humanitarian assistance and disaster relief missions abroad understanding that such platforms are a limited, high demand resource. This brief should include the viability of UAS in support of these desired operations; address the feasibility of information sharing between civil authorities and multinational organizations for a common humanitarian purpose; determine payload delivery effectiveness or limitations; and identify any international regulations or jurisdictional constraints, as well as any other topics the Secretary deems appropriate, and should be delivered to the Committee by October 1, 2017.

# LEGISLATIVE PROVISIONS

### SUBTITLE A—ASSISTANCE AND TRAINING

Section 1201—One-Year Extension of Logistical Support for Coalition Forces Supporting Certain United States Military Operations

This section would amend section 1234 of the National Defense Authorization Act for Fiscal Year 2008 (Public Law 110–181), as most recently amended by section 1201 of the National Defense Authorization Act for Fiscal Year 2017 (Public Law 114–328), by authorizing the Secretary of Defense to provide supplies, services, transportation, and other logistical support to coalition forces supporting U.S. operations in the Republic of Iraq and the Islamic Republic of Afghanistan during fiscal year 2018.

Section 1202—Modification to Special Defense Acquisition Fund

This section would amend section 114(c) of title 10, United States Code, to clarify the use of funds for the procurement of precision guided munitions with the Special Defense Acquisition Fund (SDAF).

Section 1202 of the National Defense Authorization Act for Fiscal Year 2017 (Public Law 114–328) increased the size of the SDAF from \$1.07 billion to \$2.50 billion. Section 1202(b)(2) further required that \$500.0 million of the SDAF may only be used to procure and stock precision guided munitions that may be required by partner and allied forces to enhance the effectiveness of their contribution to overseas contingency operations conducted or supported by the United States. The intent of section 1202(b)(2) was to ensure that once SDAF funds were used to purchase \$2.00 billion of defense articles or services in a fiscal year, the remaining \$500.0 million was to be used only for the purchase of precision guided munitions. Prior to reaching the threshold of \$2.00 billion of purchases in any fiscal year, SDAF funds may be used to purchase precision guided munitions, but are not required to be used to purchase precision guided munitions.

### Section 1203—Modification to Ministry of Defense Advisor Authority

This section would modify section 332 of title 10, United States Code, to authorize the Secretary of Defense to assign military personnel as advisors or trainers under the Ministry of Defense Advisor program to ensure that advisors or trainers with the appropriate expertise and skills are assigned to improve the institutional capacity of partner nations.

## Section 1204—Modification of Authority to Build Capacity of Foreign Security Forces

This section would amend section 333(c) of title 10, United States Code, to modify the required elements associated with the authority to build partner capacity by allowing human rights training conducted by the Department of State to satisfy the human rights training requirement, and clarifying the requirement regarding re-

spect for civilian control of the military and institutional capacity building to ensure that both are promoted as part of the capacity building programs of the Department of Defense.

Section 1205—Extension and Modification of Authority on Training for Eastern European National Military Forces in the Course of Multilateral Exercises

This section would extend the authority provided the Secretary of Defense by section 1251 of the National Defense Authorization Act for Fiscal Year 2016 (Public Law 114–92), as amended by section 1233 of the National Defense Authorization Act for Fiscal Year 2017 (Public Law 114–328), to train eastern European national security forces until December 31, 2019. This section would also modify the authority to address the payment of incremental expenses of partner nations.

Section 1206—Extension of Participation in and Support of the Inter-American Defense College

This section would extend for 1 year the authority in section 1243(c) of the National Defense Authorization Act for Fiscal Year 2017 (Public Law 114–328) with respect to participation in and support of the Inter-American Defense College.

SUBTITLE B-MATTERS RELATING TO AFGHANISTAN AND PAKISTAN

Section 1211—Extension of Authority to Transfer Defense Articles and Provide Defense Services to the Military and Security Forces of Afghanistan

This section would extend through December 31, 2018, the authority under section 1222 of the National Defense Authorization Act for Fiscal Year 2013 (Public Law 112–239), as amended, to transfer defense articles and provide defense services to the military and security forces of the Islamic Republic of Afghanistan.

Section 1212—Report on United States Strategy in Afghanistan

This section would require the Secretary of Defense, in consultation with the Secretary of State, to submit a report to the appropriate congressional committees not later than February 15, 2018, that describes the strategy of the United States in the Islamic Republic of Afghanistan. The committee is concerned that the Department of Defense does not have a long-term strategy for U.S. involvement in Afghanistan to complement operational planning. A comprehensive strategy should look beyond the next five years and should connect current lines of effort to a steady state for U.S. involvement in Afghanistan that meets U.S. objectives.

Section 1213—Extension and Modification of Authority for Reimbursement of Certain Coalition Nations for Support Provided to United States Military Operations

This section would amend section 1233 of the National Defense Authorization Act for Fiscal Year 2008 (Public Law 110–181), as most recently amended by section 1218 of the National Defense Authorization Act for Fiscal Year 2017 (Public Law 114–328), by ex-

tending the authority for reimbursement of coalition nations for support provided to the United States for military operations in the Islamic Republic of Afghanistan through December 31, 2018.

This section would also extend, through December 31, 2018, the requirement for the Secretary of Defense to notify the appropriate congressional committees prior to making any reimbursement to the Government of the Islamic Republic of Pakistan for any logistical, military or other support that Pakistan provides to the United States.

Further, this section would extend the requirement for the Secretary of Defense to certify, prior to making any reimbursement to Pakistan, that Pakistan is maintaining security along the Ground Lines of Communication through Pakistan, taking demonstrable steps to support counterterrorism operations, disrupting cross border attacks, and countering the threat of improvised explosive devices.

This section would specify that, of the total amount of reimbursement and support authorized for Pakistan during the period beginning on October 1, 2017, and ending on December 31, 2018, \$400.0 million would not be eligible for a national security waiver unless the Secretary of Defense certifies that Pakistan continues to conduct military operations against the Haqqani Network in North Waziristan, is demonstrating commitment to preventing the Haqqani network from using North Waziristan as a safe haven, and is actively coordinating with the Government of Afghanistan to restrict the movement of militants, including the Haqqani Network, along the Pakistan-Afghanistan border.

SUBTITLE C-MATTERS RELATING TO SYRIA, IRAQ, AND IRAN

Section 1221—Report on United States Strategy in Syria

This section would require the Secretary of Defense, in coordination with the Secretary of State, to submit a report to the appropriate congressional committees not later than February 1, 2018, on the U.S. strategy in the Syrian Arab Republic. This report would require the Secretary to describe and prioritize interests, assess the ambitions of state actors in Syria, including the Islamic Republic of Iran, assess the threat to U.S. interests posed by Al Qaeda, the Islamic State of Iraq and the Levant, and Hezbollah, assess the resources and timeline required to achieve U.S. objectives, describe the transition from military operations to stabilization programming, and evaluate the risk to U.S. forces.

The committee understands that the political and military situation in Syria is unpredictable and that the nature of U.S. involvement may change as the result of such volatility. The committee, however, believes it important to articulate the United States' strategic objectives and describe a realistic process for achieving such objectives.

Section 1222—Extension and Modification of Authority to Provide Assistance to Counter the Islamic State of Iraq and the Levant

This section would extend section 1236 of the Carl Levin and Howard P. "Buck" McKeon National Defense Authorization Act for Fiscal Year 2015 (Public Law 113–291), as most recently amended by section 1222 of the National Defense Authorization Act for Fiscal Year 2017 (Public Law 114–328), which authorizes the Secretary of Defense, in coordination with the Secretary of State, to provide \$1.3 billion in assistance in fiscal year 2018 to the military and other security forces of, or associated with, the Government of the Republic of Iraq, including Kurdish and Sunni tribal security forces or other local security forces with a national security mission, through December 31, 2019. This section would also require a quarterly progress report that would detail the security in liberated areas in Iraq, the preparedness of the Iraqi Security Forces to conduct stabilization operations, and a description of the forces providing security in liberated areas.

The committee notes that an inclusive and representative Iraq is critical to achieving U.S. counterterrorism objectives and that Iraq must take meaningful steps to ensure that minorities' interests are represented by the central Government. The committee encourages the Government of Iraq to pursue efforts to include and promote ethnic and sectarian minorities in the Iraqi Security Forces, and to ensure that defense equipment and materiel are getting to Sunni, Kurdish, and Christian groups, including the minority groups of the Nineveh Plain that have a national security mission. To that end, this section would express the sense of congress that the United States should provide arms, training, and appropriate equipment to vetted elements of the Nineveh Plain Council.

The committee notes that funding provided to the Kurdish Regional Government (KRG) is to enhance Government of Iraq-KRG cooperation and support a unified effort to counter the Islamic State of Iraq and the Levant (ISIL). Such funding should be contingent upon KRG participation in the government of a unified Iraq and on their continued good faith cooperation in the anti-ISIL campaign.

Section 1223—Extension and Modification of Authority to Support Operations and Activities of the Office of Security Cooperation in Iraq

This section would amend section 1215 of the National Defense Authorization Act for Fiscal Year 2012 (Public Law 112–81), as most recently amended by section 1223 of the National Defense Authorization Act for Fiscal Year 2017 (Public Law 114–328), by extending the authority for the Office of Security Cooperation in the Republic of Iraq (OSC–I) for 1 year through fiscal year 2018.

### Section 1224—Sense of Congress on Threats Posed by the Government of Iran

This section would express the sense of Congress that the United States should counter the Islamic Republic of Iran's malign activities in the Middle East; maintain a capable military presence in the Arabian Gulf region to deter, and, if necessary, respond to Iranian aggression; strengthen ballistic missile defense capabilities; ensure freedom of navigation through the Bab al Mandab and the Strait of Hormuz; and, renew focus on countering Iranian efforts to illicitly proliferate weapons in the region.

SUBTITLE D-MATTERS RELATING TO THE RUSSIAN FEDERATION

Section 1231—Extension of Limitation on Military Cooperation between the United States and the Russian Federation

This section would extend, by 1 year, section 1232 of the National Defense Authorization Act for Fiscal Year 2017 (Public Law 114–328). This section would limit the use of fiscal year 2018 funds for bilateral military-to-military cooperation between the Governments of the United States and the Russian Federation until the Secretary of Defense, in coordination with the Secretary of State, provides a certification to the appropriate congressional committees relating to certain actions by Russia. This section would also allow the Secretary of Defense to waive the limitation under certain conditions.

Section 1232—Prohibition on Availability of Funds Relating to Sovereignty of the Russian Federation over Crimea

This section would extend by 1 year the prohibition imposed by section 1245 of the National Defense Authorization Act for Fiscal Year 2016 (Public Law 114–270), as amended by section 1234 of the National Defense Authorization Act for Fiscal Year 2017 (Public Law 114–328). This section would prohibit the use of fiscal year 2018 funds to implement any activity that recognizes the sovereignty of the Russian Federation over Crimea. This section would allow the Secretary of Defense, in concurrence with the Secretary of State, to waive the prohibition if the Secretary determines that doing so would be in the national security interest of the United States and submits a notification to the Committees on Armed Services of the Senate and the House of Representatives, the Committee on Foreign Relations of the Senate, and the Committee on Foreign Affairs of the House of Representatives.

Section 1233—Statement of Policy on the Russian Federation

This section would state that it is the policy of the United States to sustain credible deterrence against aggression by the Government of the Russian Federation in order to enhance regional and global security and stability. The section would also include a series of findings highlighting continued aggression and intimidation by the Russian Federation against U.S. allies and partners in Europe.

Section 1234—Modification and Extension of Ukraine Security Assistance Initiative

This section would extend by 1 year section 1250 of the National Defense Authorization Act for Fiscal Year 2016 (Public Law 114–92), as amended by section 1237 of the National Defense Authorization Act for Fiscal Year 2017 (Public Law 114–328), to authorize the Secretary of Defense to provide security assistance and intelligence support to the Government of Ukraine.

Elsewhere in this Act, the committee includes a provision that would authorize \$150.0 million to carry out this authority in fiscal year 2018.

As reflected in the past three National Defense Authorization Acts, Congress has authorized and encouraged the Department of Defense to provide defensive lethal assistance to the Government of Ukraine. The committee urges the Department to provide defensive lethal assistance to the Government of Ukraine to support its efforts to protect and defend its territorial integrity.

# Section 1235—Limitation on Availability of Funds Relating to Implementation of the Open Skies Treaty

This section would prohibit the use of funds authorized to be appropriated by this Act, or otherwise made available for fiscal year 2018, or any subsequent fiscal year, for Department of Defense operations and maintenance, Defense-wide, or operations and maintenance, Air Force, to conduct any flight for the purposes of implementing the Open Skies Treaty until the President submits a plan with respect to such fiscal year to the appropriate congressional committees and 7 days have elapsed. Such a plan would be required to be developed by the Secretary of Defense, in coordination with the Secretary of State, the Chairman of the Joint Chiefs of Staff, and the Director of National Intelligence, and would contain a description of the objectives for each Open Skies Treaty flight in the upcoming fiscal year. These requirements would terminate 5 years after the date of enactment of this Act.

This section would also prohibit the use of funds authorized to be appropriated by this Act, or otherwise made available for fiscal year 2018, for the digital visual imaging system to carry out any activities to modify any U.S. aircraft for purposes of implementing the Open Skies Treaty.

# Section 1236—Sense of Congress on Importance of Nuclear Capabilities of NATO

This section would make a series of findings and express the sense of Congress regarding the North Atlantic Treaty Organization's nuclear deterrence capability.

Section 1237—Sense of Congress on Support for Georgia

This section would express the sense of Congress regarding the United States' support for Georgia's sovereignty and territorial integrity as well as support for continued cooperation between the United States and Georgia.

# Section 1238—Sense of Congress on Support for Estonia, Latvia, and Lithuania

This section would express the sense of Congress on U.S. support for the Republic of Estonia, the Republic of Latvia, and the Republic of Lithuania, including support for their sovereignty, concern over aggressive military actions of the Russian Federation against these nations, and encouragement for further defense cooperation between the United States and these nations.

# SUBTITLE E—INTERMEDIATE-RANGE NUCLEAR FORCES (INF) TREATY PRESERVATION ACT OF 2017

### Section 1241—Short Title

This section would cite this subtitle as the "Intermediate-Range Nuclear Forces (INF) Treaty Preservation Act of 2017."

### Section 1242—Findings

This section would make a series of findings by Congress related to the Intermediate-Range Nuclear Forces Treaty and the Russian Federation's violations of that treaty.

### Section 1243—Compliance Enforcement regarding Russian Violations of the INF Treaty

This section would make a statement of U.S. policy regarding Russian Federation compliance to the Intermediate-Range Nuclear Forces (INF) Treaty. It would state:

(1) it is the policy of the United States that the actions undertaken by Russia in violation of the INF Treaty constitute a material breach of the treaty;

(2) in light of such a material breach, the United States is legally entitled to suspend the operation of the INF Treaty in whole or in part for so long as Russia continues to be in material breach; and

(3) for so long as Russia remains in noncompliance with the INF Treaty, the United States should take actions to encourage a return to compliance, including by providing additional funds for certain capabilities identified in section 1243(d) of the National Defense Authorization Act for Fiscal Year 2016 (Public Law 114–92) and by seeking additional missile defense assets in the European theater to protect United States and North Atlantic Treaty Organization forces from missile systems of Russia that are in noncompliance with the INF Treaty.

This section would also make available \$50.0 million of the funds authorized by this Act for fiscal year 2018, as specified in the funding table in division D of this Act, for the development of active defenses to counter ground-launched missile systems with ranges between 500 and 5,500 kilometers; counterforce capabilities to prevent attacks from such missiles; and, countervailing strike capabilities identified in section 1243(d) of Public Law 114–92.

Lastly, this section would authorize \$25.0 million of the funds authorized by this section to be used for activities undertaken to carry out research and development activities contained elsewhere in this Act.

### Section 1244—Development of INF Range Ground-Launched Missile System

This section would require the Secretary of Defense to establish a program of record to develop a conventional road-mobile ground-launched cruise missile system with a range of between 500 to 5,500 kilometers. This section would further require the Secretary of Defense to submit a report to the congressional defense committees, Committee on Foreign Affairs of the House of Representatives, and Committee on Foreign Relations of the Senate within

120 days after the date of the enactment of this Act on the cost, schedule, and feasibility to modify existing and planned systems for ground launch with a range of between 500 and 5,500 kilometers in order to meet the capabilities specified.

Section 1245—Notification Requirement Related to Russian Federation Development of Noncompliant Systems and United States Actions Regarding Material Breach of INF Treaty by the Russian Federation

This section would state that Congress declares the Russian Federation to be in material breach of the Intermediate-Range Nuclear Forces (INF) Treaty. This section would also require the Director of National Intelligence to notify the appropriate congressional committees of any development, deployment, or test of a system by Russia that the Director determines is inconsistent with the INF Treaty within 15 days of the Director making such determination. This section would further direct the President to submit a report within 15 months after the date of the enactment of this Act to the appropriate congressional committees that contains a determination by the President whether Russia engaged in activity that would be considered noncompliant with the INF Treaty during each of the 3 consecutive 120-day periods following the date of the enactment of this Act.

If the determination is made by the President that Russia has engaged in activities considered noncompliant with the INF Treaty, this section would provide that the United States, as a matter of law, would no longer be bound by the prohibitions set forth in Article VI of the INF Treaty.

Section 1246—Limitation on Availability of Funds to Extend the Implementation of the New START Treaty

This section would prohibit any funds authorized to be appropriated or otherwise made available for fiscal year 2018 for the Department of Defense to be obligated or expended to extend the implementation of the New Strategic Arms Reduction Treaty, unless the President certifies to the appropriate congressional committees that the Russian Federation has verifiably eliminated all missiles that are in violation of or may be inconsistent with the Intermediate-Range Nuclear Forces Treaty.

#### Section 1247—Review of RS-26 Ballistic Missile

This section would direct the President, in consultation with the Secretary of State, the Secretary of Defense, the Chairman of the Joint Chiefs of Staff, and the Director of National Intelligence to conduct a review of the RS–26 ballistic missile of the Russian Federation and submit a report to the appropriate congressional committees not later than 90 days after the date of the enactment of this Act.

Such a report would include a determination of whether the RS–26 ballistic missile is covered under the New Strategic Arms Reduction Treaty (NST) or would be a violation of the Intermediate-Range Nuclear Forces (INF) Treaty because Russia has conducted flight tests to ranges prohibited by the INF Treaty in more than one warhead configuration. If the President determines that the

RS-26 ballistic missile is covered under the NST, the report would further include a determination whether the Russian Federation has agreed that such a system is limited under the NST central limits and has agreed to an exhibition of such a system.

If the determination is made that the RS-26 ballistic missile is covered under the NST and that Russia has not agreed that such a system is limited under the NST or to an exhibition under the treaty of the system, the U.S. Government would consider such a system to be a violation of the INF Treaty for purposes of all policies and decisions.

### Section 1248—Definitions

This section would define the terms "appropriate congressional committees", "INF Treaty", "intelligence community", "New START Treaty", and "Open Skies Treaty", among other terms in this subtitle.

Subtitle F—Fostering Unity Against Russian Aggression Act of 2017

### Section 1251—Short Title

This section would cite this subtitle as the "Fostering Unity Against Russian Aggression Act of 2017".

### Section 1252—Findings and Sense of Congress

This section would express the sense of Congress on the Russian Federation's "escalate to de-escalate" doctrine, subversive and destabilizing activities of the Russian Federation, the European Deterrence Initiative as a long-term investment, and cooperation with North Atlantic Treaty Organization (NATO) allies.

# Section 1253—Strategy To Counter Threats by the Russian Federation

This section would require the Secretary of Defense, in coordination with the Secretary of State, to submit a strategy to the appropriate congressional committees not later than 180 days after the date of enactment of this Act containing a comprehensive strategy to counter threats by the Russian Federation.

Section 1254—Strategy To Increase Conventional Precision Strike Weapon Stockpiles in the United States European Command's Areas of Responsibility

This section would also require the Secretary of Defense, in coordination with the Secretary of State, to submit a strategy to the appropriate congressional committees not later than April 1, 2018, to increase conventional precision strike weapon stockpiles in the United States European Command's Area of Responsibility.

# Section 1255—Plan To Counter the Military Capabilities of the Russian Federation

This section would require the Secretary of Defense to develop and implement a plan to counter the military capabilities of the Russian Federation and submit the plan to the appropriate congressional committees not later than April 1, 2018.

Section 1256—Plan To Increase Cyber and Information Operations, Deterrence, and Defense

This section would require the Secretary of Defense and the Secretary of State to jointly develop and submit a plan to increase cyber and information operations deterrence and defense to the appropriate committees not later than 180 days after the date of enactment of this Act.

Section 1257—Sense of Congress on Enhancing Maritime Capabilities

This section would express the sense of Congress on enhancing maritime capabilities.

Section 1258—Plan To Reduce the Risks of Miscalculation and Unintended Consequences That Could Precipitate a Nuclear War

This section would require the Secretary of Defense to submit a plan not later than March 1, 2018, to the congressional defense committees that includes options to reduce the risk of miscalculation and unintended consequences that could precipitate a nuclear war.

### Section 1259—Definitions

This section would define the terms "appropriate congressional committees", and "NATO".

SUBTITLE G—MATTERS RELATING TO THE INDO-ASIA-PACIFIC REGION

Section 1261—Sense of Congress on the Indo-Asia-Pacific Region

This section would express the sense of Congress that the United States has a national interest in maintaining the stability and security of the Indo-Asia-Pacific region. It expresses that the United States should maintain a military capability to deter acts of aggression and respond to regional threats. It expresses that continuing efforts to realign forces, commit additional assets, and increase investments in the region are necessary to maintain a robust U.S. commitment to the region. The committee believes the United States should continue to strengthen alliances and partnerships and support regional institutions and bodies.

Section 1262—Report on Strategy To Prioritize United States Defense Interests in the Indo-Asia-Pacific Region

This section would require the Secretary of Defense to develop a strategic plan that would prioritize the Department of Defense's efforts in the Indo-Asia-Pacific region and to submit a report on this plan to the appropriate congressional committees by February 1, 2018. In preparing the report, the Secretary should consider the strategy required by section 1261 of the National Defense Authorization Act for Fiscal Year 2016 (Public Law 114–92). This section would also repeal section 1251 of the Carl Levin and Howard P.

"Buck" McKeon National Defense Authorization Act for Fiscal Year 2015 (Public Law 113–291), even though the committee is disappointed that the Secretary failed to submit the report required by that section.

Section 1263—Assessment of United States Force Posture and Basing Needs in the Indo-Asia-Pacific Region

This section would require the Secretary of Defense to assess U.S. Pacific posture, deployment plans, and realignment and basing needs to accomplish U.S. defense priorities and respond to complex crises and contingencies. This section would also require the Secretary to report the results of this assessment to the congressional defense committees not later than March 1, 2018. The required report should align with the Department of Defense strategy to prioritize U.S. defense interests in the Indo-Asia-Pacific region that would be required elsewhere in this subtitle.

Section 1264—Extended Deterrence Commitment to the Asia-Pacific Region

This section would express the sense of Congress that the United States is committed to providing extended deterrence to allies in the Asia-Pacific, including Japan and the Republic of Korea. This section would also assert that the United States must maintain robust nuclear capabilities, including nuclear-capable aircraft, to assure that the full spectrum of military options associated with the extended deterrence commitments of the United States remains credible and executable.

Section 1265—Authorization of Appropriations To Meet United States Financial Obligations Under Compact of Free Association With Palau

This section would authorize the Secretary of the Interior to meet the financial obligations of the United States under an agreement with the Government of the Republic of Palau.

Section 1266—Sense of Congress Reaffirming Security Commitments to the Governments of Japan and South Korea and Trilateral Cooperation Between the United States, Japan, and South Korea

This section would express the sense of Congress that the United States values its alliances with the Governments of Japan and the Republic of Korea and that the United States should continue further defense cooperation. Additionally, the sense of Congress would convey the importance that the United States places on strengthening bilateral cooperation between Japan and South Korea and on trilateral cooperation among the United States, Japan, and South Korea. This section would seek to promote continued and strengthened bilateral and trilateral cooperation on a full range of issues related to the Democratic People's Republic of Korea and to other security challenges in the Asia-Pacific region.

# Section 1267—Sense of Congress on Freedom of Navigation Operations in the South China Sea

This section would express the sense of Congress that the United States should regularly and routinely conduct freedom of navigation operations in the South China Sea.

Section 1268—Sense of Congress on Strengthening the Defense of Taiwan

This section would express the sense of Congress that the United States should strengthen and enhance its long-standing partner-ship and strategic cooperation with Taiwan, and that Taiwan should take steps to optimize its self-defense. This section would recommend that the United States should consider opportunities to expand exchanges and encourage more frequent provisioning of defense articles and services to Taiwan.

#### Section 1269—Sense of Congress on the Association on Southeast Asian Nations

This section would provide the sense of Congress in support of the Association of Southeast Asian Nations (ASEAN) on the 50th anniversary of its formation. It would recognize ASEAN efforts to promote peace, stability and prosperity in the region, including the steps taken to highlight the importance of peaceful dispute resolution and the need for adherence to international rules and standards. Finally, the section would state that ASEAN and the ASEAN Defense Ministers Meeting Plus should continue to be forums to discuss shared challenges in the maritime domain and for greater information sharing.

Section 1270—Sense of Congress on Reaffirming the Importance of the United States-Australia Defense Alliance

This section would provide the sense of Congress on the strength of United States-Australia relations. It recognizes that the United States and the Commonwealth of Australia maintain a critical strategic relationship underpinned by shared democratic values, common interests, and close defense ties. The committee recognizes that 2017 marks the 75th anniversary of the Battles of the Coral Sea, Midway, and Guadalcanal, and Australia has been a loyal ally, particularly with respect to international efforts in the Islamic Republic of Afghanistan and against the Islamic State of Iraq and the Levant. The committee also recognizes that the Force Posture Agreement between the Government of Australia and the Government of the United States, signed in 2014, strengthened the relationship between the two countries, a relationship that is an anchor for peace and security both in the Asia-Pacific region and worldwide.

# SUBTITLE H—OTHER MATTERS

#### Section 1271—NATO Cooperative Cyber Defense Center of Excellence

This section would authorize up to \$5.0 million for fiscal year 2018 for the purposes of establishing the NATO Cooperative Cyber

Center of Excellence, and would direct the Secretary of Defense to assign executive agent responsibilities to an appropriate organization within the Department of Defense.

# Section 1272—NATO Strategic Communications Center of Excellence

This section would authorize up to \$5.0 million for fiscal year 2018 for the purposes of establishing the NATO Strategic Communications Center of Excellence, and would direct the Secretary of Defense to assign executive agent responsibilities to an appropriate organization within the Department of Defense.

# Section 1273—Security and Stability Strategy for Somalia

This section would require the President to submit a report to the appropriate congressional committees not later than 120 days after the date of enactment of this Act containing a comprehensive strategy to achieve long-term security and stability in the Federal Republic of Somalia.

## Section 1274—Assessment of Global Theater Security Cooperation Management Information System

This section would require the Secretary of Defense to enter into an agreement with a federally funded research and development center to conduct an assessment of the effectiveness of measures taken to improve the functionality of the Global Theater Security Cooperation Management Information System (G-TSCMIS). The committee is aware of a July 2016 study prepared for the Defense Security Cooperation Agency (DSCA) that recommended that DSCA should ascertain the extent to which security cooperation organizations are fully and accurately entering information into G-TSCMIS. The study further concluded that, if accurate and complete, data drawn from G-TSCMIS could be a tremendous asset in the evaluation of security cooperation impacts. This section would also require the Secretary of Defense to submit the assessment to the congressional defense committees not later than six months after the date of the enactment of this Act.

#### Section 1275—Future Years Plan for the European Deterrence Initiative

This section would require the Secretary of Defense to develop and submit a plan to the congressional defense committees not later than 120 days after the date of the enactment of this Act, for the U.S. military's role in the European theater. This plan would include the allocation of resources in Europe through the continuation of the European Deterrence Initiative for fiscal year 2018 and four successive fiscal years. The plan would also include the Department's assessment of what would be required to fully resource U.S. force posture and capabilities in the European theater, as well as a plan to station additional permanent U.S. troops in Europe, along with the necessary infrastructure and enablers.

This section would also require the Secretary of Defense to pause divestment of any remaining sites under the European Infrastructure Consolidation (EIC) until the required plan is submitted to Congress. Since the EIC was enacted into law in 2015, the strategic landscape of Europe has evolved with the resurgence of aggression by the Russian Federation. The committee notes that in a changing strategic environment, a re-evaluation of the sites the Department is planning to divest is necessary for long-term strategic planning.

The committee believes this section would provide the Department a tool to further develop its transition of European resources from reassurance to resources that develop, implement, and sustain a credible deterrent against a resurgent Russia.

Section 1276—Extension of Authority To Enter into Agreements With Participating Countries in the American, British, Canadian, and Australian Armies' Program

This section would extend by 5 years the authority in section 1274(g) of the National Defense Authorization Act for Fiscal Year 2013 (Public Law 112–239) to enter into agreements with participating countries in the American, British, Canadian, and Australian Armies Program.

# Section 1277—Security Strategy for Yemen

This section would require the President to develop a security strategy for the Republic of Yemen and to submit a report on the required strategy to certain congressional committees within 120 days of the date of the enactment of this Act. The report required would include: discussion of the strategy's compliance with applicable legal authorities; a detailed description of the security environment; the threats posed by Al Qaeda in the Arabian Peninsula and the Islamic State in Iraq and the Levant—Yemen; a detailed description of the threat posed to maritime vessels at the Bab al Mandab Strait; the role of the U.S. Armed Forces in implementing the strategy; a discussion of the ends, ways, and means inherent to the strategy and the strategy's objectives regarding counterterrorism and long-term stability in Yemen; and a plan to coordinate the U.S. resources necessary to implement the strategy.

Section 1278—Limitation on Transfer of Excess Defense Articles That Are High Mobility Multi-Purpose Wheeled Vehicles

This section would prohibit the Secretary of Defense from transferring any excess defense articles (EDA) that are high mobility multipurpose wheeled vehicles (HMMWVs) until 30 days after the Comptroller General of the United States submits a report to the congressional defense committees, the Committee on Foreign Relations of the Senate, and the Committee on Foreign Affairs of the House of Representatives that assesses the Department of Defense's efforts to evaluate the potential impact of HMMWV EDA transfers on the U.S. industrial base pursuant to section 2321j(b)(1)(E) of title 22, United States Code, for fiscal years 2012 through 2016. The assessment shall also review the timing, rigor, and procedures used by the Department in conducting the industrial base analysis as required by current statute and any other related matters the Comptroller General considers appropriate.

The committee is concerned that the existing requirements to determine the potential impact of EDA transfers on the U.S. industrial base as required under section 2321j(b)(1)(E) of title 22,

United States Code, are not being enforced by the Department of Defense, and as such there could be adverse impacts to the U.S. industrial base or its workforce. The committee is particularly concerned about the potential adverse impacts of EDA transfers to the light tactical vehicle industrial base.

The committee expects the Secretary of Defense to actively engage the industrial base in a timely manner regarding any potential EDA transfers to assist in the determination of whether the transfer of such articles will have an adverse impact on the national technology and industrial base, or reduce the opportunities of entities in the national technology and industrial base to sell new or used equipment to the countries to which such articles are transferred. The committee also expects the Secretary of Defense to engage the industrial base in providing refurbishment and sustainment of EDA equipment, to include supplies and parts, to the fullest extent possible.

# Section 1279—Department of Defense Program To Protect United States Students Against Foreign Agents

This section would require the Secretary of Defense to develop and implement a program to prepare U.S. students studying abroad through Department of Defense National Security Education Programs to recognize and protect themselves against recruitment efforts by foreign intelligence agents. This section would also require the Secretary of Defense to provide a briefing to the Committee on Armed Services of the Senate and the Committee on Armed Services of the House of Representatives on the plan to develop and implement the program.

## Section 1280—Extension of United States-Israel Anti-Tunnel Cooperation Authority

This section would amend section 1279(f) of the National Defense Authorization Act for Fiscal Year 2016 (Public Law 114–92) to extend the United States-Israel Anti-Tunnel Cooperation Authority to December 31, 2020.

## Section 1281—Anticorruption Strategy

This section would require the Secretary of Defense, the Secretary of State, and the Administrator of the United States Agency for International Development, in consultation with the heads of other relevant Federal agencies, to develop a strategy to prevent corruption in reconstruction efforts and submit it to the congressional defense committees, the Committee on Foreign Relations of the Senate, and the Committee on Foreign Affairs of the House of Representatives.

# TITLE XIII—COOPERATIVE THREAT REDUCTION

## LEGISLATIVE PROVISIONS

Section 1301—Specification of Cooperative Threat Reduction Funds

This section would specify that funds authorized to be appropriated to the Department of Defense for the Cooperative Threat

Reduction Program established under the Department of Defense Cooperative Threat Reduction Act (50 U.S.C. 3711) would be avail-

able for obligation in fiscal years 2018, 2019, and 2020.

The committee also notes that section 1303 of the National Defense Authorization Act for Fiscal Year 2017 (Public Law 114–328) mandated the expenditure or obligation of semiannual installments of funds available for Cooperative Threat Reduction Activities in the People's Republic of China, and that such semiannual installments should be made in accordance with all applicable laws, to include chapter 39 of title 31, United States Code, also known as the "Prompt Payment Act."

# Section 1302—Funding Allocations

This section would allocate specific funding amounts for each program under the Department of Defense Cooperative Threat Reduction (CTR) Program from within the overall \$324.6 million that the committee would authorize for the CTR Program. The allocation under this section reflects the amount of the budget request for fiscal year 2018.

# TITLE XIV—OTHER AUTHORIZATIONS

#### ITEMS OF SPECIAL INTEREST

Assessment of the Realignment of the Joint Improvised-Threat Defeat Organization under the Defense Threat Reduction Agency

The committee supports the transition of the Joint Improvised-Threat Defeat Agency (JIDA) to the Defense Threat Reduction Agency (DTRA) as the Joint Improvised-Threat Defeat Organization (JIDO) under DTRA. The committee also appreciates actions taken to achieve efficiencies and synergies while not compromising the mission of either JIDO or DTRA and without interruption of support to the warfighter. However, the committee believes there may be opportunities for additional efficiencies and collaboration that can be achieved as a result of this transition.

For example, the committee is aware JIDO has taken on a greater role in countering unmanned aerial systems (UAS). The committee recognizes the nexus between UAS and improvised explosive devices (IEDs). However, the committee is concerned about mission creep to countering weapon systems and platforms that may diminish focus on the mission of countering IEDs employed in all forms. Additionally, the JIDO director remains a two-star billet sourced by the Army. The committee is concerned about whether this level of seniority for JIDO is necessary given the leadership and oversight structures in place at DTRA.

Therefore, the committee directs the Comptroller General of the United States to assess the transition of JIDA as JIDO to DTRA, to include an assessment of additional efficiencies that may be achieved and recommendations for progress to that end in the near-term, as well as an assessment of JIDA's primary mission of countering current and future IED threats. The Comptroller General shall provide a briefing to the congressional defense committees, not later than March 1, 2018, on the results of the assessment

with a report to follow on a date agreed to at the time of the briefing.

# Beryllium Supply Chain

The committee notes the continuing importance of the strategic and critical material beryllium to national security. The committee understands that, starting in 2004, the Department of Defense took affirmative steps to invest in a domestic beryllium manufacturing facility in order to maintain security of supply, as well as the affordability of beryllium for defense systems. These interventions have not only provided security of supply, they have also stabilized the price for beryllium metal in recent years, and the committee is encouraged that the Department of Defense is considering additional measures that would stabilize prices at the U.S. beryllium metal facility.

However, the committee is concerned that individual program managers within the Department of Defense are considering the use of foreign-owned competitors. The committee believes there is no security of supply with foreign beryllium, and there is no realistic estimate for a supplier mine to be opened in the foreseeable future. As a result, the Department of Defense should exercise care when contractors or subcontractors seek to supply national security needs through use of these foreign manufacturers.

The committee directs the Under Secretary of Defense for Acquisition, Technology, and Logistics to submit a report to the House Committee on Armed Services by November 30, 2017, on the supply chains for beryllium metal used by the Department of Defense. Such a study shall include: (1) an analysis of the economic viability and long-term supply potential of all current beryllium metal suppliers; and (2) an analysis of when foreign supplies of beryllium are expected to be exhausted.

## Fiscal Stability of the National Defense Stockpile

The committee notes that the funds within the National Defense Stockpile (NDS) Transaction Fund have been significantly depleted due to the lack of excess materials available for disposal. The fund was designed to allow for the sale of excess materials, from which the funds in turn could be used to acquire emergent strategic and critical materials for national defense requirements. While this process has been ongoing since just after World War II, the value of the available inventory designated as "excess" is no longer sufficient to acquire the strategic and critical material requirements identified by the President. The committee believes the current manager of the NDS, the Defense Logistics Agency Office for Strategic Materials (DLA-SM), is hampered in its acquisition strategy due to the lack of funds available for the procurement of materials. The committee has observed that the DLA-SM must determine which materials are most critical for acquisition, leaving other material requirements unfunded. The committee notes that the fund will become insolvent within the next three to seven years, despite the careful management of expenditures.

Accordingly, the committee directs the Secretary of Defense, in coordination with the NDS manager, to provide a briefing to the congressional defense committees not later than January 31, 2018,

on the plan to develop and implement a funding strategy for sustaining a robust national defense stockpile inventory when current funds in the transaction fund are depleted. This strategy should include the incorporation of acquisition requirements for strategic and critical materials though the discretionary appropriations process.

#### LEGISLATIVE PROVISIONS

#### SUBTITLE A—MILITARY PROGRAMS

# Section 1401—Working Capital Funds

This section would authorize appropriations for Defense Working Capital Funds at the levels identified in section 4501 of division D of this Act.

## Section 1402—Chemical Agents and Munitions Destruction, Defense

This section would authorize appropriations for Chemical Agents and Munitions Destruction, Defense at the levels identified in section 4501 of division D of this Act.

## Section 1403—Drug Interdiction and Counter-Drug Activities, Defense-Wide

This section would authorize appropriations for Drug Interdiction and Counter-Drug Activities, Defense-Wide at the levels identified in section 4501 of division D of this Act.

## Section 1404—Defense Inspector General

This section would authorize appropriations for the Office of the Inspector General at the levels identified in section 4501 of division D of this Act.

#### Section 1405—Defense Health Program

This section would authorize appropriations for the Defense Health Program at the levels identified in section 4501 of division D of this Act.

#### Section 1406—National Defense Sealift Fund

This section would authorize appropriations for the National Defense Sealift Fund at the levels identified in section 4501 of division D of this Act.

#### SUBTITLE B—OTHER MATTERS

Section 1411—Authority for Transfer of Funds to Joint Department of Defense-Department of Veterans Affairs Medical Facility Demonstration Fund for Captain James A. Lovell Health Care Center, Illinois

This section would authorize the Secretary of Defense to transfer funds from the Defense Health Program to the Joint Department of Defense-Department of Veterans Affairs Medical Facility Demonstration Fund created by section 1704 of the National Defense Authorization Act for Fiscal Year 2010 (Public Law 111–84).

Section 1412—Authorization of Appropriations for Armed Forces Retirement Home

This section would authorize \$64.3 million to be appropriated for the operation of the Armed Forces Retirement Home during fiscal year 2018.

# TITLE XV—AUTHORIZATION OF ADDITIONAL AP-PROPRIATIONS FOR OVERSEAS CONTINGENCY OPERATIONS

# ITEMS OF SPECIAL INTEREST

National Guard and Reserve Component Equipment Account

The budget request for Overseas Contingency Operations contained no funding for a National Guard and Reserve Component equipment account. Elsewhere as reflected in division D of this Act, the committee notes that the base budget request contained \$1.5 billion for procurement of National Guard and Reserve Component

equipment.

Given the uncertainty of the current and projected fiscal environment, the committee remains concerned about the availability of equipment needed to sustain and modernize the National Guard and Reserve Components as an operational reserve and for their domestic support missions. The committee recognizes the National Guard and Reserve Components continue to report significant shortages in modernized equipment and challenges associated with efficiently fulfilling combat readiness training requirements. For example, the committee notes there are significant modernization, capability, and training challenges associated with the current Air National Guard aircraft assigned to the Aerospace Control Alert mission, and those aircraft crews maintaining proficiency and readiness in other mission areas critical to full-spectrum combat readiness. The committee also notes the Army National Guard continues to experience modernization shortfalls in utility rotorcraft and heavy-lift rotorcraft.

The committee believes additional funds would help eliminate identified critical dual-use equipment shortfalls. The committee expects these funds to be used for the purposes of, but not limited to, the procurement of rotorcraft, avionic and radar upgrades for legacy strike fighter aircraft to include Navy Reserve F-18 strike fighters, wheeled and tracked combat vehicles, tactical wheeled vehicles, ammunition, small arms, tactical radios (to include single channel ground and airborne radio systems), non-system training devices, logistics automation systems, sense and avoid system upgrades for unmanned aerial systems, civil support communication systems, hail and warning escalation of force systems, out of band infrared pointer and illumination systems, near infrared aiming and illumination systems, crashworthy and ballistically tolerant auxiliary fuel systems, Engagement Skills Trainer II systems, F-16 distributed-operations mission training centers, mobile ad hoc network emergency communications equipment, commercial Wi-Fi

upgrades for operational support aircraft, and other critical dualuse, unfunded procurement items for the National Guard and Re-

serve Components.

The committee recommends additional funding for a National Guard and Reserve Component equipment account within the Overseas Contingency Operations budget request. The committee also recommends \$1.5 billion, the full amount of the base budget request, for National Guard and Reserve equipment.

## LEGISLATIVE PROVISIONS

#### SUBTITLE A—AUTHORIZATION OF APPROPRIATIONS

Section 1501—Purpose and Treatment of Certain Authorizations of Appropriations

This section would establish the purpose of this title and make authorization of appropriations available upon enactment of this Act for the Department of Defense, in addition to amounts otherwise authorized in this Act, to provide for additional costs due to Overseas Contingency Operations and other additional funding requirements.

#### Section 1502—Procurement

This section would authorize additional appropriations for Procurement at the levels identified in section 4102 of division D of this Act.

Section 1503—Research, Development, Test, and Evaluation

This section would authorize additional appropriations for Research, Development, Test, and Evaluation at the levels identified in section 4202 of division D of this Act.

## Section 1504—Operation and Maintenance

This section would authorize additional appropriations for operation and maintenance programs at the levels identified in section 4302 of division D of this Act.

## Section 1505—Military Personnel

This section would authorize additional appropriations for military personnel at the levels identified in section 4402 of division D of this Act.

# Section 1506—Working Capital Funds

This section would authorize additional appropriations for Defense Working Capital Funds at the levels identified in section 4502 of division D of this Act.

Section 1507—Drug Interdiction and Counter-Drug Activities, Defense-Wide

This section would authorize additional appropriations for Drug Interdiction and Counter-Drug Activities, Defense-Wide, at the levels identified in section 4502 of division D of this Act.

## Section 1508—Defense Inspector General

This section would authorize additional appropriations for the Office of the Inspector General at the levels identified in section 4502 of division D of this Act.

## Section 1509—Defense Health Program

This section would authorize additional appropriations for the Defense Health Program at the levels identified in section 4502 of division D of this Act.

## SUBTITLE B—FINANCIAL MATTERS

## Section 1511—Treatment as Additional Authorizations

This section would state that amounts authorized to be appropriated by this title are in addition to amounts otherwise authorized to be appropriated by this Act.

# Section 1512—Special Transfer Authority

This section would authorize the transfer of up to \$2.50 billion of additional war-related funding authorizations in this title among the accounts in this title.

#### SUBTITLE C—LIMITATIONS, REPORTS, AND OTHER MATTERS

#### Section 1521—Afghanistan Security Forces Fund

This section would continue through December 31, 2018, the existing limitation on the use of funds in the Afghanistan Security Forces Fund, subject to certain conditions of section 1513 of the National Defense Authorization Act for Fiscal Year 2008 (Public Law 110–181), as amended by section 1531(b) of the Ike Skelton National Defense Authorization Act for Fiscal Year 2011 (Public Law 111–383).

This section would also require the Secretary of Defense, in consultation with the Secretary of State, to conduct a progress assessment on the efforts of the Afghan National Defense and Security Forces. The assessment would focus on accountability and anti-corruption efforts, the capability and capacity of the security forces, the success of the security forces in holding and defending territory, and the appropriate distribution of equipment. Taking into account the results of such an assessment, the Secretary of Defense may withhold funding from the Afghan Security Forces Fund. The Secretaries are required to notify the appropriate congressional committees within 30 days of the decision to withhold such funds.

# Section 1522—Joint Improvised-Threat Defeat Fund

This section would amend subsections (b) and (c) of section 1514 of the John Warner National Defense Authorization Act for Fiscal Year 2009 (Public Law 109–364) to extend the use and transfer authority for the Joint Improvised-Threat Defeat Fund through fiscal year 2018. This section would also extend the authority for interdiction of improvised explosive device precursor chemicals to December 31, 2018.

# TITLE XVI—STRATEGIC PROGRAMS, CYBER, AND INTELLIGENCE MATTERS

## ITEMS OF SPECIAL INTEREST

#### SPACE ACTIVITIES

# Overview on National Security Space Organization

The committee believes that, without significant reorganization of the national security space enterprise, the United States is at serious risk of losing the competitive advantage it has maintained as

a result of its use of space for national security.

As noted by the Secretary of the Air Force, and other Air Force leaders, in a joint testimony to Congress on May 17, 2017, "space is now a warfighting domain, similar to the more familiar air, land, and maritime domains our men and women are fighting in today. The committee agrees with this statement and recognizes the gravity of this fundamental shift.

The committee is concerned that our posture to address this shift is inadequate. As noted by the Commander of U.S. Strategic Command, "[t]he space enterprise is not resilient enough to successfully prosecute—or even survive—a high-end conflict which extends to space," and that without space "you go back to industrial age warfare," which was fraught with levels of casualties in military and civilian populations that are simply unacceptable today.

The national security space enterprise is not sufficiently structured to facilitate the evolution of the space domain into a warfighting domain. And, the committee is concerned that the current organization and management construct of the national security space enterprise jeopardizes the sustainment of U.S. domi-

The committee notes that numerous studies and reports have cited systemic flaws in the organization and management structure of the national security space enterprise. Specifically, these reports consistently point to a fragmentation of leadership and authorities across the enterprise, which result in insufficient focus and priority

on space and ineffective decision making.

The first major report, the "Commission to Assess United States National Security Space Management and Organization," also known as the Rumsfeld Commission, was mandated by section 1623 of the National Defense Authorization Act for Fiscal Year 2000 (Public Law 106–65). The executive summary of the report states, "[t]he Commission has unanimously concluded that organizational and management changes are needed . . . the Commission concluded that a number of disparate space activities should promptly be merged, chains of command adjusted, lines of communication opened and policies modified to achieve greater responsibility and accountability.

Subsequent reports on national security space management, oversight, and acquisition by the Institute for Defense Analyses in 2008 and the Government Accountability Office (GAO) in 2016, reaffirmed the issues raised by the 2001 Rumsfeld Commission. In July of 2016, the GAO published a report titled, "DOD Space Acquisition Management and Oversight," required by a provision in

the committee report (S. Rept. 114–49) accompanying the National Defense Authorization Act for Fiscal Year 2016, which "identified approximately 60 stakeholder organizations involved in space acquisitions." This report stated that "[i]n general DOD has not made any significant changes to space leadership over the last two decades."

The committee further notes the conclusions made by these reports are consistent with the testimony from former national security space leaders during hearings the committee has held on the

space enterprise.

In September 2016, the Subcommittee on Strategic Forces held a hearing titled, "National Security Space: 21st Century Challenges, 20th Century Organization" with several retired space experts. During the hearing, each witness was asked if he believed, "we are adequately postured to address the serious challenges faced in space" to which all three witnesses responded unequivo-

cally, "[n]o."

In March 2017, the Subcommittee on Strategic Forces held a joint hearing with the House Committee on Homeland Security Subcommittee on Emergency Preparedness, Response, and Communications where several former national security leaders testified on the severity of threats facing U.S. space systems, the consequences of their loss, and an assessment of what has been done to address such threats. During his testimony, the former commander of Air Force Space Command summed up what has been done to improve U.S. posture in space since the 2007 Chinese antisatellite weapon test, stating, "10 years of innumerable studies and policy debates have not produced tangible improvements in our space protection posture."

In May 2017, the Director of the National Reconnaissance Office testified to the Subcommittee on Strategic Forces, stating, "staying ahead of the adversaries who threaten our space capabilities is a challenge. Those adversaries are making space a priority. The U.S. has not been keeping pace. I believe we have not made the investment that would indicate space is a priority or fundamental to the U.S. Our requirements, budget, and acquisition processes are dis-

connected, and none of them moves quickly."

The committee believes several guiding principles must be addressed to solve these longstanding organization and management issues. First, bureaucracy should be reduced, roles and responsibilities clarified, and a person should be empowered with the proper authorities to lead the national security space enterprise. Second, space needs to be prioritized equally with the land, air, and maritime domains of conflict. Third, there needs to be a clearly identified cadre of space professionals who are trained, promoted, and sustained as space experts. Lastly, there needs to be an integrated national security space program.

Therefore, the committee recommends a legislative reorganization of the Department of Defense national security space structure

that would:

(1) create a Space Corps within the United States Air Force to posture and properly focus the preponderance of our military services to protect U.S. interests in space; deter aggression in, from, and through space; and provide combat-ready space forces that enable combatant commanders to fight and win wars;

- (2) elevate national security space operations within the combatant command structure by creating a subunified combatant command for space within U.S. Strategic Command and strengthen operational leadership of space in the Department; and
- (3) eliminate unnecessary bureaucracy by terminating the Principal Department of Defense Space Advisor office and function, as well as the Defense Space Council construct.

## Certification of Reusable Launch Vehicles for National Security Space Missions

The committee is aware of the recent successful re-launch of an Evolved Expendable Launch Vehicle-class launch vehicle that had previously been used to deliver a payload to orbit. The potential to reuse launch vehicles for orbital space launch has the potential to significantly reduce the cost of space launch in the commercial sector and for national security space launches.

The committee believes that the Air Force should move rapidly to evaluate how to leverage this commercial technology in order to meet national security space requirements. Reusability offers the potential to enable the Department of Defense to further lower the price of national security space launch.

The committee believes that the government should move rapidly to evaluate the use of reusable space launch vehicles. Accordingly, the committee directs the Secretary of Defense to brief the Committee on Armed Services of the House of Representatives not later than March 1, 2018 on the Department's plan to evaluate the risks, benefits, costs and potential cost-savings of the use of reusable launch vehicles for use in national security space missions.

# Commercial Geospatial Intelligence

The committee supports the National Geospatial-Intelligence Agency's (NGA's) leadership in acquiring new and non-traditional sources for geospatial intelligence, including commercial geospatial intelligence data and services as part of its combat support mission. Commercial geospatial intelligence provides significant benefit to the Department of Defense, particularly in terms of increasing capability, providing cost-savings, and enhancing opportunities for sharing unclassified products with multinational coalition partners. Additionally, approximately 90 percent of NGA's foundational geospatial intelligence, to include mapping, navigation, and aeronautical charts, is derived from commercial imagery sources. Along with evolving current commercial capabilities, there are new commercial endeavors of space and ground exploitation which will likely offer opportunities from which the Department can benefit. For instance, there are commercial companies that are utilizing machine learning techniques and capabilities to automate and extract additional information from commercial imagery, which will enhance and maximize analytical capabilities. The committee encourages the NGA Director to continue to lead the Department in current and new sources of geospatial intelligence collection and exploitation, and to keep the committee informed of its progress.

## Comptroller General Review of Hosted Payloads

The committee is aware that the Air Force is working to strengthen processes to ensure greater consideration of hosted payloads in space-related analysis of alternatives and architecture studies. Of note, the Air Force has undertaken some efforts to study, contract for, and use hosted payloads for technology development, but it appears the Air Force has done little to operationally use hosted payloads. The committee is concerned that the acquisition process may not fully consider the use of hosted payloads. Therefore, the committee directs the Comptroller General of the United States to provide a briefing to the House Committee on Armed Services by February 1, 2018, on the following:

(1) the Department of Defense's use of hosted payload arrangements to date;

(2) the extent to which the Department has the knowledge it needs, from the perspectives of cost, capability, and resilience, to determine whether to expand its use of hosted payloads;

(3) the extent that hosted payloads are appropriately considered throughout the acquisition process, including how acquisition requirements are written and how they impact the option to use hosted payloads; and

(4) barriers or challenges the Department faces for increasing its use of hosted payloads.

## Global Positioning System

The committee is aware that the Air Force is developing an acquisition strategy for Global Positioning System (GPS) block III space vehicles 11 and beyond. The Air Force is anticipating a full and open competition for up to 22 space vehicles, with production starting in fiscal year 2019. The committee supports the GPS III program, and recommends the Air Force leverage the existing non-recurring investment and technical risk reduction when developing an acquisition plan for future space vehicles. The committee continues to support evolutionary acquisition for space vehicles with technology insertion plans to meet warfighter requirements.

#### Multi-Band Satellite Communications Terminals

The committee is aware that satellite communications provide significant capabilities to deployed forces to communicate around the globe. The Department of Defense uses various satellite communication frequency ranges, each with advantages and drawbacks, to meet its mission. The committee also recognizes that potential adversaries are developing counter-space capabilities, to include but not limited to, systems which are designed to interfere with satellite communications. The committee therefore believes that warfighters may benefit from flexible user terminals which can communicate with a variety of government and commercial satellite systems. Therefore, the committee directs the Secretary of Defense to provide a briefing to the congressional defense committees by December 1, 2017, on an assessment, including benefits, costs, technology insertion opportunities, and timelines to expand the use of dual or multi-band satellite communication terminals. The briefing shall address:

- (1) a review of fielded and projected Department of Defense platforms and mission sets using satellite communications terminals;
- (2) a review of commercial and government satellite communications capabilities;
- (3) an assessment of the viability, benefits, and drawbacks if applicable, of using dual or multi-band satellite communications terminals for all or some of the identified platforms and mission sets; and
  - (4) any other matter the Secretary deems appropriate.

# Outer Space Cooperation With Japan

The committee encourages further outer space cooperation between the United States and Japan. The committee notes that the guidelines for defense cooperation between the United States and Japan issued in April 2015 include openness to cooperation in several areas, including areas relating to outer space. The committee further notes the Japanese QZSS regional navigation satellite system could potentially complement and augment the coverage provided by the Global Positioning System of the United States and improve availability of space-based position, navigation, and timing signals in the Asia-Pacific region.

Therefore, the committee directs the Secretary of Defense, jointly with the Chairman of the Joint Chiefs of Staff, and in coordination with the Secretary of State, to submit a report to the Committees on Armed Services of the Senate and the House of Representatives, the Committee on Foreign Affairs of the House of Representatives, and the Committee on Foreign Relations of the Senate by December 1, 2017, on the status of cooperation between the United States and the Government of Japan regarding outer space activities, including with respect to space-based position, navigation, and timing.

Reliance on Global Positioning System for Defense of the Homeland

The committee is aware that the Department of Defense is coordinating with the Department of Transportation and the Department of Homeland Security on efforts to strengthen positioning, navigation, and timing (PNT) capabilities, including considering redundant systems. The committee notes that section 1618 of the National Defense Authorization Act for Fiscal Year 2017 (Public Law 114-328) required a report on requirements and technology options to address PNT resilience. In addition to this assessment, the committee directs the Secretary of Defense, in coordination with the Commander of U.S. Northern Command, to provide a briefing to the Committee on Armed Services of the House of Representatives by December 15, 2017, on the risks associated with disruptions to the Global Positioning System (GPS) that could affect defense of the homeland and other defense activities in the United States. The briefing shall include the requirements for PNT reliability and redundancy for Department of Defense operations in the United States, an analysis of the extent to which defense of the homeland operations rely on accurate PNT signals from GPS, and an assessment of alternative sources of PNT that could be used as a backup to ensure continuity of operations in the event of a major disruption to GPS.

## Responsive Launch

According to the Department of Defense budget request documentation, U.S. Strategic Command (USSTRATCOM) has identified needs to:

(1) rapidly augment existing space capabilities when needed to expand operational capability;

(2) rapidly reconstitute/replenish critical space capabilities to preserve "continuity of operations" capability; and

(3) rapidly exploit and infuse space technological or operational

innovations to increase U.S. advantage.

There have been a variety of previous and ongoing activities within the Air Force, Army, and the Defense Advanced Projects Research Agency to develop responsive launch capabilities. To date, none of these programs have matured to the point of a military

operational capability that meets USSTRATCOM needs.

Therefore, the committee encourages the Secretary of Defense to increase the priority and resources of this mission area. This could include low-cost responsive launch for small satellites and modifications of existing launch infrastructure, including use of commercial capabilities. Additionally, the committee believes that state-owned spaceports may provide an opportunity to support this mission. The committee encourages the Department to evaluate the contribution and necessary investments in spaceports to support responsive launch.

The committee also directs the Secretary of Defense to provide a briefing to the Committee on Armed Services of the House of Representatives by December 1, 2017, on the warfighter requirements and documented needs for reconstitution and responsive launch; the current and projected activities to meet those requirements, to include investments in launch systems, infrastructure, and payloads; and the opportunities, risks, and challenges in this mission

area.

# Small Satellite Technology Development

The committee supports the efforts of the Department of Defense to include the Air Force, Army, and Navy in the research and development of militarily relevant small satellites. Industry has made significant advances in recent years regarding the miniaturization of electronics and satellite-related components. The military services have begun to leverage this innovative technology. For instance, the Air Force is planning to invest in key mission areas, such as position, navigation, and timing, to develop a combination of small satellites and rapidly procured payloads. In addition, the Air Force's Space and Missile Systems Center has begun planning for utilization of small satellites in fulfilling its mission requirements. The Army Space and Missile Defense Command is building and testing multiple small satellites for warfighters' tactical use in contested, remote, and anti-access/area denial regions. The U.S. Naval Research Laboratory has worked on unique satellite capabilities, such as thruster technologies, to support efforts for smaller, less expensive satellites.

The committee supports these activities and encourages continued emphasis on the research and development of small satellites, including the maturation of small satellite technologies which sup-

port warfighter systems, as these systems can provide lower-cost solutions and increase agility and resiliency to address developing threats. The committee also encourages the Department to initiate and use commercial partnerships and demonstration efforts to procure small satellites for demonstrations relevant to military missions.

Therefore, the committee directs the Secretary of Defense, in coordination with the Secretaries of the Air Force, Army, and Navy, and the directors of defense agencies and offices as appropriate, to provide a briefing to the Committee on Armed Services of the House of Representatives by December 1, 2017, on the military applications of small satellites and a coordinated Department-wide strategy for technology development activities and investments in small satellites.

## Space Commercial Antenna Service

The committee is aware that the Air Force is pursuing activities that augment the Air Force Satellite Control Network with commercial capabilities. The goal of these activities is to enhance resiliency, reduce costs, and leverage commercial systems in a timely, modern, and more automated fashion. The committee supports the continued investments in this area and encourages the Secretary of the Air Force to prioritize this endeavor.

## Space Security

The committee is aware of the significant and increasing foreign threats to our national security space systems. Officials in the Department of Defense recognize this counter-space threat, and are taking steps to address it. However, as stated by General John Hyten, former Commander of Air Force Space Command and current Commander of U.S. Strategic Command, the space enterprise which evolved in an uncontested environment is not resilient enough to fight through and deliver warfighting effects in, from, and through today's contested space domain.

This lack of military preparedness for this new battlespace domain is of serious concern to the committee. The committee recognizes that the response to such threats will require a range of activity to include, but not limited to, investments, plans, training, allied partnerships, clear messaging, and diplomatic engagement. The committee requires close oversight of the progress being made in this area.

Therefore, the committee directs the Secretary of Defense to provide two briefings to the congressional defense committees in fiscal year 2018, the first by December 1, 2017, and the second by July 1, 2018, on the plans and progress in addressing counter-space threats. The briefings should address the following areas:

- (1) intelligence analysis regarding current and projected foreign counter-space threats;
- (2) status of the Department of Defense activities, plans, policies, and programs to address the threat, including effectively managing deterrence in space;
  - (3) areas of significant risk; and
  - (4) other areas the Secretary deems appropriate.

## Space Situational Awareness and Battle Management Command and Control

The committee recognizes the importance of rapidly developing robust space situational awareness (SSA) and space battle management command and control (BMC2) capabilities in order to successfully operate in the space warfighting domain. The committee is aware that there are multiple acquisition and development efforts underway in response to warfighter requirements, including the Joint Space Operations Center Mission System (JMS) and Enterprise BMC2 program, managed by the Space and Missile Systems Center (SMC); a Joint Emergent Operational Need (JEON) spiral development program, managed by the Air Force Research Laboratory (AFRL); and a common standards and open mission system development program, managed by the Air Force Rapid Capabilities Office (AFRCO). SMC is serving as the enterprise manager for these BMC2 activities, which, when developed and acquired, will be delivered to the warfighter to operate at the Joint Space Operations Center (JSpOC) and the National Space Defense Center (formerly called the Joint Interagency Combined Space Operations Center).

The committee believes that, in addition to the aforementioned activities, the use of commercial capabilities can and should be increased to rapidly meet the warfighter requirement. The committee understands that SMC, AFRL, and AFRCO plan to, in the near term, competitively seek commercial solutions and to form a consortia to include additional commercial and defense industry partners in BMC2 efforts.

The committee supports these activities and plans, and expects the Air Force to appropriately leverage commercial capabilities, which may be able to address certain warfighter requirements in the near term.

Therefore, the committee directs the Commander of Air Force Space Command, in coordination with the Commander of U.S. Strategic Command, to provide a briefing to the Committee on Armed Services of the House of Representatives by October 1, 2017, on an assessment of relevant commercial capabilities and the near-term plan to leverage existing and mature commercial space situational awareness capabilities to rapidly address validated warfighter capability gaps concerning foundational SSA and BMC2. The briefing should include funding amounts, including any unfunded requirements, for development, operations, and sustainment of the following components:

- (1) space surveillance sensor systems
- (2) SSA software for operations centers
- (3) BMC2 software for operations centers.

Additionally, considering the complexity and scope of this activity, the committee directs the Comptroller General of the United States to review the Air Force Enterprise Space BMC2 activities, to include JMS, and provide a briefing to the congressional defense committees by November 1, 2017, with an update briefing not more than 6 months later, on the status of the program, the extent to which the Air Force is following acquisition best practices for information technology, and whether it is appropriately leveraging commercial capabilities.

## Use of Surplus Intercontinental Ballistic Missile Motors for Commercial Space Launches

In the committee report (H. Rept. 114–537) accompanying the National Defense Authorization Act for Fiscal Year 2017, the committee directed the Secretary of Defense to provide a briefing to the congressional defense committees on the range of options and recommendations for modification of the existing policy on the usage of intercontinental ballistic missile (ICBM) motors for commercial sales that would support the domestic industrial base. The committee has yet to receive this briefing, or the subsequent assessment from the Comptroller General of the United States.

The committee continues to believe that modification to the law in order to allow for increased commercial use of decommissioned U.S. ICBM motors could yield benefits for the U.S. domestic launch industry and payload launching capacity while also saving the U.S. Air Force excess motor storage costs. However, the committee also recognizes the concerns regarding unintended negative consequences for the U.S. commercial space industrial base resulting

from such a change in policy.

The committee encourages the Secretary to finish the comprehensive study and provide the results to Congress in order to inform potential future legislation.

## MISSILE DEFENSE PROGRAMS

# Hypersonic Defense

The budget request contained \$75.3 million in PE 64181C for the development of a defensive system to protect the nation from rapidly evolving hypersonic glide vehicle threats. The committee supports Missile Defense Agency (MDA) plans to develop requirements, conduct necessary engineering, and proceed with experiments that ultimately result in a fielded defensive architecture or system of systems. However, the committee is concerned that the current acquisition approach may increase risk by relying on a single technical approach.

Therefore, the committee directs the Director, MDA, to provide a briefing to the Committee on Armed Services of the House of Representatives by October 1, 2017 that details the potential benefits, challenges, and associated costs of an acquisition strategy allowing for at least two competitive designs until the operational demonstration. Further, the briefing should address whether this acquisition strategy requires additional funds than the current pro-

gram of record.

## Improving Ground Testing of the Ground-Based Midcourse Defense System

The committee notes the congressional requirement included in section 1664 of the Carl Levin and Howard P. "Buck" McKeon National Defense Authorization Act for Fiscal Year 2015 (Public Law 113–291) for an independent report to improve the effectiveness of the Ground-Based Midcourse Missile Defense system testing. The committee received this classified report from the Institute for Defense Analyses in 2016 which made recommendations related to improving testing, and recommended that the Director of the Mis-

sile Defense Agency develop a strategy for making these improvements. The committee commends the Director of the Missile Defense Agency for considering and accepting these recommendations. The committee remains interested in the implementation of these recommendations, and whether and how they might improve cost-effectiveness, reduce unnecessary risks, and increase the value of missile defense flight intercept tests. Therefore, the committee directs the Director of the Missile Defense Agency to provide a briefing to the Committee on Armed Services of the House of Representatives not later than November 1, 2017, on the implementation of the recommendations, any related funding requirements, and, any associated risk-reduction that is expected to occur as a result of implementing the recommendations.

#### Low Cost Missile Defense Initiative

The committee is aware that the Department of Defense has undertaken a multiyear development effort referred to as the Low Cost Missile Defeat (LCMD) study, which began in fiscal year 2015 with technology development efforts under the purview of the Deputy Assistant Secretary of Defense for Emerging Capability and Prototyping, driven by requirements of the geographic combatant commands. The objective of this study is to assess options for ballistic missile defense (BMD) interceptors that cost between one-tenth to one-half of the cost of current regional BMD interceptors, and to identify the changes required for integration into an existing weapon system. The committee notes that such interceptors are intended to augment, not replace, the stockpile of existing interceptors.

The National Defense Authorization Act for Fiscal Year 2017 (Public Law 114–328) supported the budget request of \$50.0 million to continue the LCMD studies. The committee is also aware that the U.S. Army and the Missile Defense Agency have undertaken an analysis of alternatives-like study of LCMD that is due to be completed by July 31, 2017, concerning the path forward for LCMD. The committee expects to be briefed on the results of this study within 1 month of its completion. The committee further expects that, consistent with established means for reprogramming of funds, it will be consulted prior to any transfer of funding authorized to be appropriated for the LCMD study effort for any other purpose.

National Missile Defense Policy Change and Adversary Reactions

The Fiscal Year 2017 National Defense Authorization Act changed the National Missile Defense Policy (NMDP) Act of 1999. Since 1999, it had been the policy of the United States "to deploy as soon as is technologically possible an effective National Missile Defense system capable of defending the territory of the United States against limited ballistic missile attack (whether accidental, unauthorized, or deliberate)."

The NDAA changed this policy to state that it is now the policy of the United States "to maintain and improve an effective, robust layered missile defense system capable of defending the territory of the United States, allies, deployed forces, and capabilities against the developing and increasingly complex ballistic missile threat." The committee wishes to understand what, if any impact this has had on Russian or Chinese defense policy, including nuclear weapons and ballistic missile defense development programs. Therefore, the committee directs the Secretary of Defense, in coordination with the Director of the Defense Intelligence Agency to submit a report to the Committees on Armed Services of the House of Representatives and the Senate and the House Permanent Select Committee on Intelligence not later than December 15, 2017 on any impact to Russian or Chinese defense policy, including nuclear weapons and ballistic missile defense development programs resulting from past and present U.S. missile defense policy. This report should be unclassified, but may include a classified annex.

## Plan To Assess the Acquisition of Missile Defense Targets

The committee is interested in assuring the most effective and efficient acquisition of ballistic missile target vehicles used for ballistic missile defense tests. The committee is particularly mindful that, as the pace of ballistic missile defense flight intercept testing increases, the Missile Defense Agency will require the timely and cost-effective delivery of additional ballistic missile targets.

Therefore, the committee directs the Director of the Missile Defense Agency to submit a report to the Committee on Armed Services of the House of Representatives, not later than January 15, 2018, that assesses the options for acquisition strategies that could lead to more affordable, threat-representative, and reliable targets.

#### Sea-Based X-Band Radar

The Committee notes that the Fiscal Year 2018 budget request contained \$130.7M in Research, Development, Test, and Evaluation, Defense-Wide for the Sea-Based X-band (SBX) radar. The committee is also aware that this request includes funding to extend on-station time from 120 days at sea to 330 days at the request of the U.S. Pacific Command and U.S. Northern Command.

The committee recognizes that the SBX radar is a critical component of the U.S. ballistic missile defense system, providing critical track and discrimination capabilities to the Missile Defense Agency, combatant commanders, and the intelligence community in defense of the United States homeland and territories. In response to the intensifying ballistic missile threat in the Asia-Pacific region, the committee strongly supports full funding for the SBX Radar and extending on-station time to 330 days. In particular, the SBX radar will play an important role to provide continued track and discrimination information for the ballistic missile defense of Hawaii. The committee remains concerned about ballistic missile defense coverage for Hawaii as the SBX system transitions into depot maintenance in 2020, well ahead of the planned initial operational capability of the planned Homeland Defense Radar-Hawaii or equivalent capability.

Therefore, the Committee directs the Director of the Missile Defense Agency to brief the congressional defense committees by December 1, 2017 on the maintenance plan, and near-term and long-term sustainment costs for the SBX radar until an operational medium-range discrimination radar or equivalent capability is avail-

able for the defense of Hawaii, as well as the Agency's plans to more fully integrate the SBX radar into the ballistic missile defense architecture, and how it plans to mitigate any gaps in coverage resulting from the SBX radar's depot maintenance availability.

## NUCLEAR FORCES

# Briefing on Commonality Related to the Ground-Based Strategic Deterrent Program

The committee directs the Under Secretary of Defense for Acquisition, Technology, and Logistics to provide a briefing to the Committees on Armed Services of the Senate and House of Representatives by February 1, 2018, on the degree of commonality with other missile and rocket systems—such as Trident II D5, Ground-based Missile Defense, civilian or commercial rockets, and others—are included within the concepts proposed by the contractors awarded technology maturation and risk reduction contracts for the Ground-Based Strategic Deterrent program. Such briefing should include a discussion of:

(1) the degree and types of commonality within the concepts proposed:

(2) the incentives that were included in the request for proposals to encourage solutions and concepts that include common technologies or components, where appropriate; and

(3) how the proposals were evaluated for commonality or related savings in making contract awards.

Briefing on the 3+2 Strategy and Interoperable Warhead 1 (IW-1)

The Obama Administration's nuclear modernization plan centered upon a "3+2" strategy that was intended to reduce the number of nuclear weapons and types of nuclear weapons in the U.S. stockpile. In the budget request for fiscal year 2018, the Trump Administration has proposed continuing this strategy for the coming year while evaluating its long-term plan within the ongoing Nuclear Posture Review.

The first ballistic missile warhead in the 3+2 strategy is the Interoperable Warhead 1 (IW-1), which would replace the current W78 and W88 warheads and provide some degree of interoperability or commonality between these sea-based and land-based weapons. According to the National Nuclear Security Administration's (NNSA) Fiscal Year 2017 Stockpile Stewardship and Management Plan, published in March 2016, the IW-1 is estimated to cost between \$9.0 billion and \$13.8 billion (in FY2016 dollars) and to enter production in 2029.

The committee is aware that the Nuclear Posture Review is assessing the long-term nuclear modernization plan and evaluating how this plan aligns with adversary threats to the effectiveness and credibility of U.S. nuclear forces. As the threat environment changes throughout the coming decades, the committee believes a thorough evaluation of its impacts to long-term programs, such as IW-1, is warranted.

To enable its oversight and inform its eventual consideration of the Nuclear Posture Review, the committee directs the Chairman of the Nuclear Weapons Council to provide a briefing to the House Committee on Armed Services by February 15, 2018 on both the 3+2 strategy and IW-1. The briefing should include an assessment of:

(1) the costs, benefits, risks, and opportunities of the 3+2 strategy;

(2) the degree of interoperability or commonality within the IW-1 concept, and the costs, benefits, risks, and opportunities associated with that concept;

(3) the implications to certification requirements of the IW-1 concept, including whether such concept increases the potential need

to resume nuclear explosive testing;

(4) the expected threats to U.S. nuclear forces in 2030 and beyond, and whether such threats should affect or change the 3+2 strategy or the requirements for IW-1 and its associated missile delivery vehicles; and

(5) whether and how the 3+2 strategy or IW-1 is driving infrastructure or capability requirements within the NNSA or DOD nuclear enterprises, and whether such infrastructure or capabilities would not be required absent such strategy or IW-1.

## Comptroller General Review of Nuclear Forces Readiness During Recapitalization and Transition

The Department of Defense is embarked on a large, complex, and interdependent effort to sustain and modernize U.S. nuclear forces. Current delivery systems, infrastructure, and nuclear command, control, and communications (NC3) systems are all aging, with many systems now deployed well beyond their intended service lives. For example, the Minuteman III missile system was first deployed in 1970 and, following multiple life extension efforts, is intended to stay in service through 2030. *Ohio*-class ballistic missile submarines will, by 2020, have been in service longer than any other submarines and will still have more than a decade until retirement. Meanwhile, the youngest airplane in the B–52 bomber fleet was delivered to the Air Force in 1962 and the B–2 bomber entered service 25 years ago.

The Department's plans to recapitalize these major systems concurrently are tightly scheduled and closely coupled to plans to sustain and maintain the readiness of the current systems until the new systems are fully operational. The committee believes the success of maintaining the readiness of nuclear forces at all times, but particularly during this transition period, is vital to national security. Therefore, the committee directs the Comptroller General of the United States to assess the readiness of U.S. nuclear forces and provide a report to the Committees on Armed Services of the Senate and the House of Representatives by March 1, 2018. Such report should include an assessment of:

(1) the historical and current status of nuclear forces readiness, including how well such forces and NC3 systems are meeting combatant commander requirements;

(2) the Department's strategy and plans, for maintaining the readiness of legacy delivery systems and NC3 systems until modern replacement systems are operational;

(3) the Department's risk mitigation plans for maintaining nuclear forces readiness and meeting combatant commander require-

ments during the transition from legacy systems, including risk reduction plans if legacy systems expire sooner than planned or new systems are delayed.

Continuation of Nuclear Command, Control and Communications Acquisition Assessments by the Government Accountability Office

The committee values the ongoing work of the Government Accountability Office (GAO) in reviewing the progress and challenges facing the Department of Defense's nuclear command, control, and communications (NC3) acquisition programs. Similar to space acquisition programs, NC3 acquisition is a system of systems process, which takes years to oversee on a continuous basis to determine if the programs are achieving their cost, schedule, and performance goals. The committee supports the Department's continuing efforts to establish new and rigorous NC3 acquisition oversight structures to address NC3 capability gaps and weaknesses. However, much work remains to be done to establish these oversight structures at both the departmental and military garrians levels.

both the departmental and military services levels.

Therefore, the committee directs the Comptroller General of the United States to assess the Department's NC3 acquisition oversight and NC3 acquisition programs, as well as its progress in developing and implementing an overall NC3 architecture. The committee further directs the Comptroller General to provide a briefing to the congressional defense committees by March 1, 2018, on the results of GAO's assessment for fiscal year 2018. In conducting the assessment, the Comptroller General should include, as the Comptroller General deems appropriate, the insights of both Department of Defense and non-Department entities that have relevant NC3 knowledge. The Department organizations include, but are not limited to, the Office of the Secretary of Defense (Nuclear Matters, Cost Assessment and Program Evaluation, Chief Information Office), the military services, the Joint Staff, U.S. Strategic Command, Defense Information Systems Agency, and Department of Defense independent test offices. The non-Department entities include federally funded research and development centers, university affiliated research centers such as the Johns Hopkins University Applied Physics Laboratory, contractors, the White House Military Office, and industry groups. Finally, the committee encourages the Comptroller General to conduct periodic updates of such an assessment in consultation with the congressional defense committees.

# Countering Threats From Unmanned Aircraft Systems

With their rapidly increasing ubiquity, ease of use, and capabilities, the committee continues to be concerned that unmanned aircraft and unmanned aircraft systems (UAS) are a growing and significant threat to U.S. defense assets and U.S. national security more broadly. Sections 1697 and 3112 of the National Defense Authorization Act (NDAA) for Fiscal Year 2017 (Public Law 114–328) represent a first step to provide clear and direct authority to the Secretary of Defense and the Secretary of Energy to protect the nation's most critical defense facilities and assets from threats posed by UAS.

However, it appears that the administration has been slow to implement this statutory authority into guidance and directives that provide clear rules of engagement to security forces on the ground. In testimony before the committee on March 8, 2017, the Commander of U.S. Strategic Command noted that progress has been slow. More recently, the commander promulgated implementing guidance for countering UAS threats to facilities and assets under the authority of U.S. Strategic Command. The committee applauds this action and encourages the broader Department of Defense and the Department of Energy to take similar action without further delay.

Elsewhere in this Act, the committee includes a provision that would expand the counter-UAS authority provided by section 1697 of Public Law 114–328, as contained in section 130i of title 10, United States Code. The committee stresses that this proposed expansion must not slow down implementation of the existing authority.

## Future of Nuclear Deterrence and the Joint Strategic Deterrence Review Process

In late 2013 and early 2014, the Secretary of Energy tasked the directors of the U.S. national security laboratories to study the future of nuclear deterrence, saying in a tasking memorandum dated May 9, 2014, "The current stockpile was designed to meet the needs of a bipolar world with roots in the Cold War era. A more complex, chaotic, and dynamic security environment is emerging . . . we must look ahead, using the expertise of our laboratories, to how the capabilities that may be employed by other nations could impact deterrence over the next several decades [and] . . . we must challenge our thinking about our programs of record."

Later that year, the directors submitted to the Secretary the study report, which was eventually submitted to Congress pursuant to section 3138 of the National Defense Authorization Act for Fiscal Year 2017 (Public Law 114–328). Subsequent to the study, the Department of Defense and Department of Energy continued to develop a framework for considering the changing global strategic environment and how such changes may impact U.S. nuclear deterrence requirements and capabilities. In December 2016, the Deputy Secretary of Defense and the Deputy Secretary of Energy created the Joint Strategic Deterrence Review (JSDR) process to institutionalize and perpetuate a structure for considering these matters.

The committee believes the JSDR process is an important tool for understanding the increasingly dynamic security environment that has emerged regarding nuclear deterrence and its implications for U.S. defense posture and policy. The committee urges the current administration to review and leverage this work and the JSDR process as it continues its ongoing Nuclear Posture Review.

## Nuclear Assurance and Deterrence Science, Technology, Innovation, and Collaboration

Air Force Global Strike Command (AFGSC) was established, and later elevated to a four-star command, to help address problems within the Air Force's nuclear enterprise and bring sustained senior leadership focus to the nuclear deterrence mission. AFGSC leads Air Force efforts for both nuclear deterrence operations (NDO) and the National Leadership Command Capabilities/Nuclear Command, Control, and Communications (NLCC/NC3) system. The committee recognizes AFGSC's efforts, and believes sustained, focused, and consolidated attention on these issues will be required as the Air Force carries out its portions of the nuclear modernization program.

The committee is aware of AFGSC's strategy to enhance science, technology, innovation, and collaboration related to its missions. This nascent strategy includes outreach to academic institutions and researchers, cooperation and investment in multidisciplinary teams and programs, and creation of an institute for NLCC/NC3 and NDO. The committee expects these efforts to provide AFGSC the analytical foundation and access to expertise needed to carry out its important NDO and NLCC/NC3 missions.

## Nuclear Command, Control, and Communications Systems Modernization

The committee recognizes that maintaining and modernizing the nuclear command, control, and communications (NC3) system is a critical effort in the overall modernization of the nation's nuclear infrastructure. The committee notes the ongoing challenges in recapitalizing the NC3 architecture and expects continuous focus on these efforts after decades of neglect. The committee encourages the Department of Defense, and particularly the Air Force, which is responsible for acquiring and sustaining the preponderance of these systems, to move forward with NC3 modernization expeditiously to avoid further delays and potential capability gaps. Given the sensitive nature and prioritization of the mission, the committee expects that the Air Force is planning appropriately to ensure that secure facilities are available to enable NC3 recapitalization efforts.

## Nuclear Security Collaboration and Harmonization

The committee continues to encourage the Department of Defense and the National Nuclear Security Administration to collaborate and share expertise, resources, standards, processes, and lessons learned to more effectively and efficiently safeguard the nation's nuclear weapons and special nuclear materials. This collaboration began pursuant to a December 2011 memorandum of agreement between the Deputy Secretary of Defense and the Deputy Secretary of Energy, but it took several years for implementation to truly begin. Recent efforts to collaborate on development and validation of security technologies, develop and implement tools like the Joint Integrated Lifecycle Surety (JILS) system, and understand threats, are positive.

The committee encourages the Department of Defense and Department of Energy to recommit to the principles contained in the 2011 memorandum and establish milestones and a roadmap to carry out the activities called for within it. The committee believes more can be done to take common approaches to technology development and validation, share inspection and force-on-force capabilities and approaches, and take more consistent approaches to threat policies and security risk analyses. The committee believes these

steps will reduce costs, improve consistency, and lead to improved nuclear security.

The committee directs the Administrator for Nuclear Security, in coordination with the Chairman of the Nuclear Weapons Council and appropriate representatives from the Navy and Air Force, to provide a briefing to the Committees on Armed Services of the Senate and the House of Representatives by November 30, 2017, on progress in nuclear security collaboration and their plan or roadmap for future activities.

## Office of the Secretary of Defense Oversight and Organization for the Nuclear Deterrence Mission

The committee recognizes and appreciates the importance and priority placed by the Department of Defense on its nuclear deterrence mission. The Department's Nuclear Enterprise Review (NER) in 2014 brought renewed senior leadership attention to the mission and made a variety of recommendations to make improvements through increased focus, investment, and policy adjustments.

To track and ensure meaningful implementation of the recommendations of the NER, the Department created the Nuclear Deterrence Enterprise Review Group (NDERG), headed by the Deputy Secretary of Defense and supported by the Office of Cost Assessment and Program Evaluation (CAPE). The committee believes the NDERG was instrumental in correcting many of the longstanding problems and deficiencies identified by the NER. But the committee also believes that key cultural problems identified by the NER will take many years of continuous, high-level engagement and follow-through to successfully address. The committee is concerned that senior leader attention and engagement on the nuclear mission could wane with the transition of senior personnel between administrations.

The committee therefore directs the Deputy Secretary of Defense to provide a briefing to the Committees on Armed Services of the Senate and the House of Representatives by October 31, 2017, on the Department's approach to oversight and organization for the nuclear deterrence mission. Such briefing should include:

- (1) a description of how the Department is following through on the recommendations of the NER and the NDERG process, and how the Department will ensure meaningful and successful remedies are being applied now and in the future;
- (2) the Department's approach to ensuring senior leader engagement and focus continues for the nuclear deterrence mission;
- (3) remaining gaps and challenges that will require ongoing attention, and metrics for measuring progress on those issues; and
- (4) how the Office of the Secretary of Defense will be organized, taking into account recent legislation and executive actions, to oversee and steward the nuclear deterrence mission.

#### Remote Visual Assessment System at Minuteman III Launch Facilities

The Air Force uses the Remote Visual Assessment (RVA) system to maintain situational awareness of activity at Minuteman III launch facilities. This important capability allows missile crews to remotely assess certain alarms and dispatch security forces accord-

ingly. The system has provided a significant improvement to the security and operations of the missile fields.

The committee is aware of early efforts to upgrade and modernize the RVA system as existing components become obsolete and unsupported by their original manufacturers. Such age and obsolescence can lead to increased failure rates and sustainment costs. The committee encourages the Air Force to closely examine its strategy for sustaining and upgrading the components and subsystems of the RVA system, the system's requirements and the ability of older technologies to meet those requirements, the value of procuring new systems, and the criteria used to determine schedules for component replacement.

# Report on Ground Based Strategic Deterrent and Minuteman III

The United States currently deploys more than 400 LGM-30G Minuteman III intercontinental ballistic missiles. In the nuclear modernization program laid out by the Obama Administration and now continued by the Trump Administration's budget request for fiscal year 2018, the Air Force plans to replace the Minuteman III system with the Ground Based Strategic Deterrent (GBSD) system.

In testimony and reports provided to the committee by Department of Defense and Air Force officials, the total development and procurement costs for the GBSD program, including replacement of the missile flight system and recapitalization of all support ground infrastructure and command and control systems, will cost approximately \$62.3 billion over the course of the 25+ year program. A separate analysis of the GBSD program by the Department of Defense's Office of Cost Assessment and Program Evaluation (CAPE) estimated the cost of development and procurement of the GBSD system in a range from \$85.0 billion to significantly more than \$100.0 billion (in then-year dollars). Ultimately, at the Milestone A decision for GBSD, the Under Secretary of Defense for Acquisition, Technology, and Logistics set a baseline cost for the program at CAPE's lower estimate.

The committee acknowledges the challenge of estimating replacement costs for a system first deployed 47 years ago, particularly when historical data is largely absent and present-day comparison systems are dissimilar. To ensure the Department is seeking greater fidelity in its varying cost estimates as the GBSD program moves forward, the committee directs the Secretary of Defense, in coordination with the Secretary of the Air Force and the Director of CAPE, to provide a report to the House Committee on Armed Services by March 1, 2018, on cost estimates and requirements related to the GBSD program. Such report should include:

- (1) Updates, based on information gathered from the selected contractors for the technology maturation and risk reduction phase of the GBSD program, from the Air Force and CAPE regarding their cost estimates for the development and procurement of the GBSD system:
- (2) A detailed breakdown of the costs associated with life extending Minuteman III as compared to the costs of GBSD, including a breakdown of the costs to replace or extend the life of relevant components until 2045, as well as until 2075; and

(3) The trade-offs between requirements and costs, including how GBSD and Minuteman III will meet military effectiveness requirements over the course of their expected lifecycles.

## Status of Infrastructure Supporting NATO Nuclear Deterrence Mission

The committee appreciates the importance of the North Atlantic Treaty Organization's (NATO's) deterrence and defense mission, and the role that U.S. forward-deployed nuclear weapons play in the Alliance. The committee understands that NATO, the U.S., and individual host nations all bear responsibilities for ensuring that the infrastructure supporting NATO's nuclear deterrence mission and the U.S. military personnel stationed in Europe enabling that mission, are safe, secure, and modern. As NATO continues to strengthen and update its deterrence posture following the Warsaw Summit in July 2016, and based on the findings of the Department of Defense's Nuclear Enterprise Review in 2014, the committee believes it is imperative upon all stakeholders to ensure NATO's nuclear-related infrastructure receives sufficient funding and senior leadership attention.

The committee appreciates the ongoing dialogue with the Department of Defense on this issue. To provide continuing and close oversight of this issue, the committee directs the Secretary of Defense, acting through the Secretary of Defense Advisor, Europe, and in consultation with the Secretary of State and the Secretary of the Air Force, to provide two briefings to the Committees on Armed Services of the Senate and the House of Representatives, with the first such briefing to be provided by October 1, 2017, on the status of U.S. and NATO nuclear-related infrastructure in Europe, including efforts to upgrade, modernize, and improve such infrastructure. The briefings should also address plans to encourage NATO to adopt and implement a common standard for perimeter security at relevant sites. The final briefing should be provided by April 1, 2018. Specifically, the briefings should include:

- (1) the status of nuclear-related infrastructure across NATO, including descriptions of facilities' state of repair and progress on efforts to recapitalize or replace outdated facilities or equipment, and including a description of any variances in perimeter security and infrastructure at relevant sites;
- (2) current or potential plans, programs, or activities that would improve NATO's nuclear-related infrastructure, including for safety, security, communications, or operations for U.S. nuclear weapons in Europe or quality of life for U.S. military personnel supporting this mission;
- (3) actions taken by the U.S. Government to standardize or improve NATO's nuclear-related infrastructure and adopt common standards, such as for perimeter security, including engagements bilaterally with host nations and multilaterally through NATO; and
- (4) such other matters as the Secretary of Defense determines appropriate.

#### CYBER-RELATED MATTERS

## Assessment of Effectiveness of Cyber Reporting

The committee is aware that the Department of Defense has been working for several years to develop a new cyber security and incident reporting scheme for defense contractors with access to controlled, unclassified information stored on, or processed by, their own information networks. While this requirement is called for by section 941 of the National Defense Authorization Act for Fiscal Year 2013 (Public Law 112–239), the Department has drafted and promulgated a new contract clause in the Defense Federal Acquisition Regulation Supplement (DFARS) as a means to implement the

requirements of this reporting.

The committee is aware that this new language, DFARS 252.204–7012 on Cyber Security and Incident Reporting, has been the cause of concern and misunderstanding from many in industry, particularly among small businesses, and those businesses where defense revenue is a very small percentage of their overall revenue. The committee acknowledges that the Department has made efforts to make this new guidance as easy to implement and track as possible, and understands that the new process provides wide latitude and flexibility for businesses to craft strategies for compliance. For example, the Department has made available a number of tools to help small businesses with implementation, and worked extensively with Procurement Technical Assistance Centers so they can understand the requirements and assist small businesses directly in the course of their normal support. Additionally, the Department of Homeland Security has updated and modified their Cyber Security Evaluation Tool to provide a means for businesses to selfevaluate their compliance with the new rules.

To ensure that these tools are effective at helping small businesses and other non-traditional defense contractors meet this requirement, the committee directs the Secretary of Defense to conduct an assessment of the DFARS clause. The Secretary should assess the compliance of industry, including the extent to which these support tools have been effective. This assessment should also identify any issues and concerns with the quality of System Security Plans from the contractors, and to the extent practicable, should include input from affected contractors. The committee further directs the Secretary to provide a briefing to the House Committee on Armed Services by December 7, 2018, on the results of this as-

sessment.

## Assessment of Third-Party Cybersecurity Risk

The committee recognizes the work by the Defense Security Service to clear defense contractors and believes advanced capabilities would enhance their existing efforts. The committee is aware of capabilities that exist in the private sector, like cybersecurity ratings services, that can effectively provide rapid, accurate initial assessments and ongoing, continuous monitoring of defense contractors' cybersecurity. The committee believes such assessments are critical to protecting classified and controlled unclassified defense information. The committee encourages the Department of Defense to evaluate existing capabilities for assessment and monitoring of the

cybersecurity of defense contractors and critical infrastructure providers prior to a contract award and on an ongoing basis, and identify capability and tool options currently in use and available in the private sector for such purposes.

## Cloud Computing

The committee believes the widespread adoption by the Department of Defense of cloud computing technology would be beneficial to both the management functions and operational functions of the Department of Defense, resulting in cost savings, increased flexibility and scalability, mobility, and improved security. For example, cloud computing provides enhanced data analytics capabilities, reduces the need for physical data storage centers, and increases situational awareness on the battlefield. The committee is pleased that the military departments, particularly the Department of the Navy and Department of the Army, have recognized cloud computing is not only beneficial to the enterprise, but can also provide increased warfighting capabilities for tactical and operational advantages.

The committee encourages the continued use of cloud computing to achieve battlefield advantages, and encourages the Department of Defense to use cloud computing in military exercises and wargaming. For example, the Department of Defense could examine the use of cloud computing to support continuity of operations planning or to support resilient operations in the face of a degraded cyber environment. The committee also encourages greater synergy and collaboration between the acquisition community and information technology community, so that future weapon systems and platforms take full advantage of cloud computing benefits. In addition, the committee encourages the Department to explore the benefits of hyperscale cloud computing, which enables advanced capabilities such as big data analytics, machine learning, and cognitive services while providing advanced cybersecurity and continual updates to services and cyber defense.

Additionally, the committee supports the less risk-averse approach by the military services, than is traditionally prevalent throughout the Department of Defense, to incorporate cloud computing at the tactical, operational, strategic, and enterprise-wide levels. The committee believes the Department of Defense Chief Information Office should leverage lessons learned by the military services on cloud computing, to include security, capabilities, and criteria to appropriately determine if commercial, government, or hybrid clouds are required to update the Department's cloud strategy and assess current Department of Defense cloud security requirements; specifically, on-premise and off-premise requirements.

Finally, the committee directs the Department of Defense's Chief Information Officer to provide a briefing to the House Committee on Armed Services by March 5, 2018, on cloud computing. The briefing should include efforts to coordinate with the acquisition community, encourage the use of cloud computing in wargaming and military exercises, and an assessment of the Department of Defense's current cloud strategy and security requirements.

## Comply-to-Connect Policy

Section 1653 of the National Defense Authorization for Fiscal Year 2017 (Public Law 114-328) required the Department of Defense to develop and enforce a new automated continuous monitoring compliance tracking system and policy referred to as "Comply-to-Connect." The committee believes such automated ways to enforce compliance, as well as to isolate and deny access for systems that have not been adequately patched or updated, will be necessary in the future to handle the increasing numbers of new information technology systems, as well as the manpower burdens that scale will impose. However, the committee has become aware that there is some confusion that this Comply-to-Connect language refers to a specific technology offering and not a generic policy. The committee's intent was not to endorse or limit the Department to any specific technology product or provider with the inclusion of section 1653. The committee expects the Department to continue to comply with all applicable rules for open competition in the acquisition of any technical solutions to meet the requirements of that section.

#### Comptroller General Assessment of Cyber Training

The committee is aware that the military services have been developing cyber training standards and establishing cyber schools or centers of excellence to prepare their personnel for operations in cyberspace. While the services have responsibility to train their forces, these forces must be trained to consistent and joint standards. The committee believes that the military services should leverage each other's training capabilities to the extent possible.

Therefore, the committee directs the Comptroller General of the United States to assess the Department of Defense's current and planned state of cyber training. The assessment should identify the extent to which the military services:

(1) have established consistent cyber training standards for Active and Reserve Component forces;

(2) have leveraged each other's cyber training capabilities, to include training schools and ranges;

(3) are achieving training capability and capacity goals; and

(4) are leveraging other cyber experience to meet training requirements.

The committee directs the Comptroller General to provide a briefing to the House Committee on Armed Services by March 15, 2018, on preliminary findings, with a report to follow on a date agreed to at the time of the briefing.

#### Cyber Hardening

The committee recognizes the urgent need to harden our major weapon systems and critical infrastructure against cybersecurity threats. The committee notes that section 1647 of the National Defense Authorization Act for Fiscal Year 2016 (Public Law 114-92) directed an evaluation of cyber vulnerabilities of each major weapon system by the Secretary of Defense, while section 1650 of the National Defense Authorization Act for Fiscal Year 2017 (Public Law 114–328) directed an evaluation of cyber vulnerabilities of the critical infrastructure of the Department of Defense. These reviews

have identified platforms in the field today that have aging software and hardware components vulnerable to cyber threats that could be extraordinarily costly to upgrade. The committee understands that the Department has evaluated how to implement a pilot project to cyber harden existing programs for fiscal year 2018 that includes an estimate of both resources and time required to carry out such efforts. This pilot project is intended to meet cyberhardening objectives while mitigating the significant cost and time delays associated with traditional planned upgrades.

The committee strongly supports the Department's efforts to explore alternatives to traditional cyber defense architectures and approaches. Elsewhere in this report, the committee provides additional funds and guidance for cyber vulnerability assessments and hardening. The committee encourages the Secretary of Defense to continue to explore and invest in cyber technology that provides multi-tiered defensive capabilities, including those that leverage software defined "Moving Target Defense" technology and techniques.

# Cyber Training and Talent Management

The committee is aware of the efforts of the Reserve Components to develop cyber protection teams that can leverage the best attributes, authorities, and capabilities of both civilian and military cyber practitioners. The committee is aware that the Department of Defense is considering a concept for establishing Joint Reserve Cyber Centers as a way of bringing together this expertise into a critical mass of talent. The committee encourages the Department of Defense to examine how this concept might be used to help cyber forces evaluate and quickly integrate new technologies such as autonomy, machine learning, and big data analytics. The committee further encourages the Department to continue to improve the processes to give cyber personnel credit for other experience, certifications, or commercial training they may have received that meets the joint training standard.

The committee remains concerned, however, that the current training pipeline is a major bottleneck to fully manning and training cyber mission teams. The committee continues to believe that the Department of Defense should look at additional ways to diversify the training pipeline available to all cyber personnel to help relieve that bottleneck, to include building public-private partnerships with academia, industry, and non-profit institutions. Especially in specialized and emerging areas like Internet-of-Things applications, building and utility control systems, or other operational physical systems, the Department should develop these kinds of partnerships to support training and familiarization of these operational physical systems through emulation technology. The committee recognizes the role the National Security Agency (NSA), through the National Centers of Academic Excellence in Cyber Defense (CAE-CD) education, has in the establishment and development of curriculum for cyber education. The committee recognizes the value these university relationships have had, and accordingly recommends an additional \$8.0 million to the NSA CAE-CD Program Office to support cyber defense education of reservists across all military services and the National Guard.

Finally, the committee believes it is imperative for the Department of Defense to have comprehensive visibility on the cyber talent available in both the Active and Reserve Components, as well as the civilian workforce. The committee is aware of the Department of the Army's talent management programs, including the Cyber Warrior Database (CWARD). CWARD is intended to capture relevant expertise, knowledge, skills, and abilities within the Army Cyber community in order to enable effective mission planning and human resource management. The committee supports this effort and encourages widespread adoption of common cyber talent management tools. The committee directs the Secretary of Defense to provide a briefing to the House Committee on Armed Services by February 5, 2018, on cyber talent management tools in development and use across the Department of Defense.

## Cyber Vulnerability Disclosure Program

The committee supports the Department of Defense's recently initiated vulnerability disclosure program and "bug bounty" program, which allow the Department to crowd-source security and encourage security researchers to share their discoveries responsibly while providing accountability for institutions operating or developing software. Following the Pentagon's initial bug bounty program, several of the services have taken on their own similar programs under a Department-wide contract. These projects are helping to provide for greater security across the defense enterprise, with positive results.

Accordingly, it is critical that the Defense Cyber Crime Center (DC3) is supported in order to effectively coordinate vulnerability disclosure across the Department of Defense Information Network. The DC3 is responsible for receiving security vulnerabilities reported under the vulnerability disclosure policy and facilitating their remediation. Without sufficient resources, vulnerabilities may be found and never rectified, ultimately handicapping the Department's positive steps forward. The committee believes the DC3 must be supported with the appropriate resources and authorities in order to improve the Department's cybersecurity posture and strengthen relationships with the security research community.

#### **Data Protection**

The committee remains concerned about continuing reports of unauthorized disclosures of critical program and other classified information, whether from insiders or from external network intrusions. While the Department of Defense has made significant investments to improve its cyber security posture, the committee also remains concerned by the rate of progress the Department is making in preventing unauthorized review, redistribution, and modification of sensitive government information. The committee recognizes that there are a number of technologies, such as digital rights management (DRM) and attribute-based access control (ABAC), that could provide useful, needed capabilities in the Joint Information Environment, and are specifically cited as new information security policy requirements to help intelligence and civilian agencies persistently protect their sensitive information and high-value asset data both inside and outside of agency networks.

Therefore, the committee directs the Department of Defense Chief Information Officer, in coordination with the Director of the Defense Information Systems Agency, to provide a briefing to the House Committee on Armed Services by November 1, 2017, on any current plans to demonstrate or incorporate Department-wide DRM and ABAC capabilities into upgrades to key enabling cyber capabilities inside the Joint Regional Security Stacks initiative.

## **Evaluation of Commercial Cyber Threat Information Sources**

The committee is aware that the availability of commercially derived cyber threat information from various service providers has the potential to be a tremendous force multiplier for both the government and industry. Many of the companies providing this information have been successful at identifying new threats and reporting on them to broad audiences more dynamically than the government, and without the risk of disclosing sensitive intelligence or capabilities of the government. The committee believes these providers could be better integrated into a full-spectrum strategy that synchronizes government, industry, and third-party capabilities to increase cyber security.

However, the committee is concerned that many of the components utilizing such services are not smart consumers of such services, and it can be very difficult to evaluate the utility or quality of said services across differing providers. Additionally, since there is no view of assessing these services, it can be difficult to figure out how best to leverage these capabilities to supplement or even replace some government capabilities. That task becomes even harder for industry users hoping to incorporate this sort of threat information or threat services into their cybersecurity strategy.

Therefore, the committee directs the Department of Defense Chief Information Officer (CIO), in coordination with the Principal Cyber Adviser and the Commander of Cyber Command, to create criteria for evaluating commercial threat information service providers and sources. This assessment should look at the following:

(1) what capabilities exist commercially for cyber threat information providers;

(2) what criteria should the Department or defense industry be using when assessing when and how to leverage these sources;

(3) in what ways can these types of services fit with the Department's needs, or be integrated into the Department's cyber defense construct; and

(4) an assessment of whether there is a need to develop some joint enterprise license agreement or contractual mechanism to more quickly and efficiently gain access to and standardize the use of such activities.

The committee further directs the Department of Defense CIO to provide a briefing to the House Committee on Armed Services by February 28, 2018, on the results of this evaluation.

Implementation of Recommendations by Defense Science Board Task Force on Cyber Deterrence and Cyber Supply Chain

The committee has reviewed the findings and recommendations contained in the Defense Science Board Task Force on Cyber Deterrence report and the Defense Science Board Task Force on Cyber Supply Chain report. The committee appreciates these comprehensive and substantive reviews that contain tangible recommendations for the Department of Defense in the areas of cybersecurity, deterrence, supply chain vulnerabilities, and other related issues. Over the previous several years, the committee has provided the Department with multiple new or revised authorities, as well as significant funding, to address many of the challenges identified in these two reports. The committee is concerned, however, that the Department nonetheless lacks a comprehensive strategy to implement many of the important recommendations contained in these two Defense Science Board reports on cyber.

Therefore, the committee directs the Secretary of Defense to provide a briefing to the House Committee on Armed Services by September 1, 2017, on efforts to implement the recommendations contained in the Defense Science Board Task Force on Cyber Deterrence and the Defense Science Board Task Force on Cyber Supply

Chain reports.

# Persistent Training Environment

The committee is aware that the development of a Persistent Training Environment (PTE) for cyber is a significant priority for U.S. Cyber Command. The committee recognizes that the Department of Defense is currently struggling to train, certify, and deploy sufficient personnel to man to the levels called for by the Cyber Mission Force (CMF) construct.

Further, the committee recognizes the need for periodic recertification for both individuals and teams to keep skills sharp. In order to meet this demand, the committee believes it will be critical to develop the PTE to provide the means to enable thousands of military and civilian personnel to maintain their skills and certification

required to continue to work on missions.

Therefore, the committee directs the Commander of U.S. Cyber Command, in coordination with the Secretary of the Army, to provide a briefing to the House Committee on Armed Services by December 8, 2017, on the progress in developing the PTE. This briefing should address the capability goals for the program, funding profile, major projected milestones (including any exercises PTE is expected to be used in conjunction with), performers, and any significant risks to the program.

#### Report on Army Network Security Consolidation

The committees notes that the Army is shrinking the number of vulnerable nodes by installing Joint Regional Security Stacks (JRSS) to reduce the need for security enclaves at more than 400 existing network access points by replacing them with regional security stacks at 28 global ingress locations. In addition to limiting the number of access points, the Army is also installing Multi-Protocol Label Switching (MPLS) technology to connect all of the 40 major posts in the United States, with a more robust network that can run up to 100 GB while providing substantial savings over the operation of legacy circuits.

The committee supports the Army's goal to operate a single network that is secure, integrated, standards-based, and which ensures uninterrupted global access to enable collaboration and deci-

sive action. To achieve this result, the committee directs the Secretary of the Army to submit a report to the committee no later than December 31, 2017 with a plan to carry out the timely completion of network consolidation and installation of JRSS and MPLS at key nodes in the United States per the three strategic plans published to date. The plan should include the milestones, timelines, and resources required to complete the consolidation of networks.

#### Unified Platform

The committee notes that the Department of Defense is in the process of developing the requirements for new systems for the Cyber Mission Force (CMF) operators known as Unified Platform (UP). UP is intended to unify existing or evolving systems infrastructure, mission capabilities, data analytics, and programs to meet current and future CMF mission requirements. The committee recognizes that this system will drive the concepts of operations and procedures for the CMF for several years, so careful thought and consideration should go into the requirements generation and acquisition development process. The committee encourages the Department to use this opportunity to implement UP as an open architecture concept informed by agile development practices to make this system sustainable and scalable in the future as new technological capabilities become available. The committee also believes that the Department should include, as part of the Request for Information and Request for Proposals (RFP) process, opportunities for industry to offer new and innovative concepts above and beyond those formally articulated. The committee also believes information technology programs such as this should find new ways of responding to RFPs, such as the requirement to provide working software code for evaluation in order to determine which proposal is deserving of award.

## Weapon System Cyber Vulnerabilities

The budget request contained \$30.1 million in PE 64942D8Z for conducting cyber vulnerability assessments for weapon systems.

The committee continues to support the assessments of weapon systems to understand and identify their cyber vulnerabilities. The committee is aware of the prioritization of these systems for review, and also that the fiscal year 2016 budget only included \$100.0 million of the necessary funds to carry out all of these assessments. The committee believes this effort should be continued, and to the extent practical, the Department of Defense should begin the remediation and hardening of these systems. Further, the committee encourages the Department of Defense to pay special attention to examining software vulnerabilities in nuclear weapons systems, other delivery vehicles, and other advanced weapons systems. The committee believes that the Department of Defense should develop a framework for industry to share information on these threats. This framework should improve the methodology for the assessment and prioritization of vulnerabilities in weapon systems and embedded information technology systems.

Therefore, the committee recommends \$50.1 million, an increase of \$20.0 million, in PE 64942D8Z to provide needed additional

funding to complete weapon system vulnerability assessments, and as needed, to provide funding for hardening these systems.

#### INTELLIGENCE MATTERS

#### Defense Clandestine Service

The committee commends the Defense Intelligence Agency's work to improve the support the Defense Clandestine Service (DCS) provides to the Defense Intelligence Enterprise. The committee believes a human intelligence (HUMINT) capability within the Department of Defense directly supporting the integrated Department of Defense intelligence priorities directed in section 922 of the National Defense Authorization Act for Fiscal Year 2014 (Public Law 113-66) is preferable to an option that places the capability outside of the Department. The committee intends to continue to conduct oversight of the Department of Defense's HUMINT capability as DCS evolves, and believes consistent and improved career management of DCS officers will further enhance such capability. Therefore, the committee directs the Secretary of Defense to provide a briefing to the House Committee on Armed Services and the House Permanent Select Committee on Intelligence not later than December 1, 2017, on the posture of the Defense Clandestine Service to address the integrated Department of Defense intelligence priorities. The briefing should also include the methodology the Department uses to assign officer locations to fulfill priority requirements, efforts to improve the career management of DCS officers and employees, and how the Department will continue to increase support for officers in the field, to include future information technology plans to address their needs.

# European Deterrence Initiative Intelligence, Surveillance, and Reconnaissance

The Department of Defense has requested a significant amount of funding for intelligence, surveillance, and reconnaissance (ISR) as a part of the European Deterrence Initiative (EDI). The committee supports this request and expects that the platforms and sensors developed with these funds will be deployed to support U.S. European Command (EUCOM) intelligence requirements, and not diverted to meet other combatant commander (COCOM) ISR requirements. If unexpected circumstances and requirements justify diversion of ISR assets from EUCOM to another COCOM, the committee expects to be notified in writing and provided an explanation for the action.

### Improving Analytic Automation

The committee continues to support efforts like the National Geospatial-Intelligence Agency (NGA) program called Expeditionary Large Data Object Repository for Analytics in Deployed Operations that gather, analyze, manage, and store large amounts of intelligence, surveillance, and reconnaissance (ISR) data from remote sources. Managing data by making information discoverable to analysts across the globe, while reducing storage and analytical access costs, are critical steps in Department of Defense efforts to leverage commercial best practices in big data analytics. NGA is at

the forefront of such efforts, but the committee is concerned by the Department's slow pace in developing formal requirements for big

data analytic capabilities.

For example, wide area motion imagery (WAMI) provides extremely valuable ISR data, but ground processing and integration of this data is currently very labor intensive. While WAMI collection capabilities continue to evolve with technology, much of the ground processing, automation, and alert functions have fallen behind. The Department continues to struggle to provide data analysis and machine learning capabilities that have been available in the commercial sector for several years that can process ISR data like WAMI. The committee recognizes the significant challenges the Department has in addressing combatant commanders' ISR requirements, but new collection capabilities will produce ever larger volumes of data. The Department's processing, exploitation and dissemination (PED) shortfalls cannot be addressed without integrating commercial data processing and access techniques, and automating as much of the PED workflow as possible.

Therefore, the committee directs the Under Secretary of Defense for Intelligence, in concert with the Secretary of the Army, Secretary of the Air Force, Secretary of the Navy, and Director of National Intelligence, to provide a briefing to the House Committee on Armed Services and the House Permanent Select Committee on Intelligence by December 1, 2017, on efforts that allow for rapid adoption of data storage, access, and automated processing and ma-

chine learning technologies and techniques.

#### **Intelligence Simulation Center**

The committee supports the Defense Intelligence Agency's efforts to develop an Intelligence Simulation Center. The center will fulfill a critical intelligence community-wide need for a collaborative venue for classified presentations within the National Capital Region to support intelligence planning, evaluation of Department of Defense and intelligence community requirements, senior leader seminars, modeling and simulations, and other high-level intelligence and operational events. The co-location of the center with the National Intelligence University will enhance Defense Intelligence Enterprise capabilities, and the committee believes the other defense intelligence agencies must be integrated into the center to maximize the potential benefits. The committee directs the Under Secretary of Defense for Intelligence to develop a plan to integrate the other defense intelligence agencies into the Intelligence Simulation Center, and to provide a briefing to the House Committee on Armed Services and the House Permanent Select Committee on Intelligence not later than February 1, 2018, on the plan. The briefing should include plans to integrate sources of intelligence, analytic capabilities, and any agency-specific capabilities available to the intelligence community and combatant commanders.

# Intelligence, Surveillance, and Reconnaissance Capability Imbalance

The committee is concerned about the Department of Defense's intelligence, surveillance, and reconnaissance (ISR) capability mix.

Over the past 15 years, the Department has rightfully focused its capability development on supporting counterterrorism efforts in the Middle East, but emerging intelligence challenges will require a renewed focus on traditional military intelligence collection capabilities. Understanding advanced foreign military capability development activities, developing operational understanding of integrated air defense networks, maintaining robust order of battle information for potential nuclear and conventional adversaries, and collection on traditional military activities undertaken by foreign nations will require different collection capabilities than are required to support counterterrorism operations. The committee also notes that combatant commanders with the most capable potential adversaries receive a disproportionately small allocation of collection assets when compared to the stated priorities of the Department. The committee directs the Chairman of the Joint Chiefs of Staff to provide a briefing to the House Committee on Armed Services and House Permanent Select Committee on Intelligence, by February 1, 2018 on efforts to develop capabilities to collect ISR on foreign military activities, and the ISR prioritization process.

Joint Intelligence, Surveillance, and Reconnaissance Management

The committee recognizes the importance of Department of Defense intelligence, surveillance, and reconnaissance (ISR) capabilities as vital enablers of U.S. military power. The committee also recognizes that demand for ISR capabilities continue to vastly outpace supply despite significant investments over the past decade. In this context, the committee views the effective and efficient management of joint force ISR capabilities as an essential element of a national military strategy capable of addressing transregional, multi-functional, and multi-domain security challenges across the spectrum of conflict. The committee also considers investments made in developing, fielding, and leveraging fifth-generation aircraft advanced sensors to be of immense value to joint force employment and the intelligence enterprise.

The committee notes that the collection, analysis, and dissemination of moving target indicator (MTI) ISR information obtained through airborne active radar capability remains a high-priority ISR requirement by many geographic combatant commanders, and is woefully under-resourced by the Secretary of the Air Force. Recent evolutions in the security environment resulting from counterterror, counterinsurgency, contingency ground-maneuver force, and steady-state operations have brought renewed emphasis on the need for MTI ISR information as a critical source of indicator, warning, and targeting information. Additionally, the committee remains concerned that the Department of Defense is highly constrained by the lack of an integrated, interoperable joint framework for the tasking, collection, processing, exploitation, and dissemination (TCPED) of MTI information across the Department's intelligence analysis enterprise.

Finally, the committee supports the decision to realign joint force ISR management functions from U.S. Strategic Command to a Chairman of the Joint Chiefs of Staff (CJCS) controlled activity under the Joint Staff, but is concerned that the speed and scope of this transition has been insufficient to facilitate effective coordination between the military services, combatant commands, combat

support agencies, and key allies and partners in implementing the CJCS vision of a single, integrated joint force ISR enterprise.

The committee therefore directs the Secretary of Defense, in coordination with the Chairman of the Joint Chiefs of Staff, to provide a briefing to the House Committee on Armed Services and the House Permanent Select Committee on Intelligence not later than December 1, 2017, on the following areas of joint force ISR management:

(1) an assessment of joint force ISR effectiveness by region;

(2) a summary of ISR global force management sourcing trends by region and force category;

(3) a summary of progress, shortfalls, and challenges in establishing an integrated and interoperable joint force TCPED enter-

prise;

(4) a summary of joint force development initiatives that should include new joint concepts and doctrine for ISR employment, as well as development of automated tools and processes to manage the joint ISR enterprise more effectively and efficiently; and

(5) An explanation of the CJCS policy that governs how combatant commanders should define and assign different levels of priority to ISR capability requirements to inform the CJCS global force management process that allocates ISR capabilities and force

structure to combatant commanders.

Further, the committee directs the Chairman of the Joint Chiefs of Staff to submit a report to the congressional defense committees and congressional intelligence committees not later than March 1, 2018, that includes a Joint Force Sufficiency Assessment (JFSA) for ISR capability and capacity based on a stress test of current operationally fielded ISR assets and capabilities for all approved level three and level four warfighting plans. The JFSA for ISR should include a thorough explanation of underlying assumptions and an analysis of requirements and shortfalls of ISR platforms, sensors, multi-intelligence TCPED capabilities, and related command, control, and communications architectures. The JFSA should be unclassified, but may include a classified annex.

The committee also directs the Secretary of Defense to provide a report to the congressional defense committees and congressional intelligence committees not later than June 1, 2018, that includes a comprehensive strategy for the coordinated development and integration of ISR capabilities with key allies and partners as a means to enhance the capability, capacity, access, agility, and resilience of the joint ISR enterprise in support of U.S. national security objectives. The strategy should address foreign military sales of ISR platforms; integrated global force management processes; combined basing strategies; TCPED and information-sharing requirements; and integrated training and logistics support. The strategy also should address, at a minimum, relationships and information-sharing opportunities between the United Kingdom of Great Britain and Northern Ireland, Canada, the Commonwealth of Australia, New Zealand, Japan, the Republic of Korea, and the North Atlantic Treaty Organization.

In addition, the committee directs the Secretary of Defense to provide a briefing to the House Committee on Armed Services and the House Permanent Select Committee on Intelligence by March 1, 2018, that describes the Department of Defense's strategy and implementation plan regarding the storage, recovery, management, processing, exploitation, and dissemination of ISR information collected by fifth-generation aircraft sensors. The committee expects the strategy to address data sharing and exchange with select allies and partners, as well as integration into the U.S. intelligence

enterprise at large.

The committee also directs the Chairman of the Joint Chiefs of Staff, in coordination with the Secretary of Defense, to provide a briefing to the House Committee on Armed Services and the House Permanent Select Committee on Intelligence not later than March 1, 2018, that describes a strategy and implementation plan to establish common standards and management procedures among Department of Defense stakeholders to ensure joint, integrated TCPED of MTI information collected from Department of Defense aircraft. Elements of the strategy and implementation plan should include achieving commonality regarding joint TCPED training, analysis, and product standards; enterprise management procedures that capture best TCPED practices among MTI collection platforms, regardless of service or organization; Department plans to integrate into future programs and architectures the MTI and TCPED capabilities funded with Overseas Contingency Operations resources to meet various Operational Needs Statements/Joint Urgent Operational Needs Statements; and common information exchange and sharing policies, in accordance with applicable U.S. national disclosure policy and export controls, that enable and maximize cooperative MTI collection and TCPED activities among North Atlantic Treaty Organization allies and closest U.S. partners.

Finally, the committee, elsewhere in this title, includes a provision that would require continuation of a current Department of Defense plan to transition the roles, missions, and responsibilities of Joint Functional Component Command for Intelligence, Surveillance, and Reconnaissance from U.S. Strategic Command to the Chairman of the Joint Chiefs of Staff (CJCS) as a CJCS controlled activity, and designate the Department of the Air Force as the controlled activity's funding sponsor, not later than 30 days after the

date of the enactment of this Act.

### Report on National Intelligence Program and Military Intelligence Program Integration Against Hard Targets

The committee believes that the intelligence community is underinvested in capabilities to understand the military capabilities of hard target countries. Over the last 15 years, the community has rightfully invested heavily in counterterrorism capabilities, and has accepted risk in understanding the emerging military capabilities of peer and near-peer countries. Department of Defense leadership has recently identified to the committee several emerging foreign military developments that provide particularly grave challenges. While the committee supports the efforts to identify emerging threats and provide options for countermeasures, it remains concerned about the need for further coordination between the National Intelligence Program and the Military Intelligence Program to develop capabilities and programs to understand hard targets. Therefore, the committee directs the Secretary of Defense and the Director of National Intelligence to provide a briefing to the House Committee on Armed Services and the House Permanent Select

Committee on Intelligence not later than November 1, 2017, on the integration of programs funded by the National Intelligence Program and programs funded by the Military Intelligence program to address hard targets.

Review by Comptroller General of the United States of the General Defense Intelligence Program

The committee is concerned about the ability of the Defense Intelligence Enterprise to effectively prioritize and allocate resources to address the strategic intelligence requirements of the Department of Defense and the military departments. The committee directs the Comptroller General of the United States to review the prioritization processes of the General Defense Intelligence Program (GDIP) managed by the Defense Intelligence Agency (DIA) and provide a briefing to the House Committee on Armed Services and the House Permanent Select Committee on Intelligence not later than February 1, 2018. The briefing shall:

(1) identify the processes and procedures for prioritizing resource allocations across the Defense Intelligence Enterprise, including

with respect to the needs of the military departments;

(2) identify the process and methodology used by the Director of DIA to balance the internal priorities of DIA with the needs of the Defense Intelligence Enterprise; and

(3) identify methods of recourse available to the military depart-

ments to resolve prioritization disputes with DIA.

Secure Compartmented Information Facility Standardization

The committee is concerned by the duplication effort imposed by the Department of Defense and the intelligence community on the cleared contractor community to certify and operate Secure Compartmented Information Facilities (SCIFs). The committee notes that all SCIFs are constructed and accredited to the same Intelligence Community Directive standards, and believes the current practice of requiring co-utilization agreements on a contract-by-contract, facility-by-facility basis is unnecessarily costly, without providing additional security benefits. Therefore, the committee directs the Under Secretary of Defense for Intelligence and the Director of National Intelligence to review current policy not later than June 1, 2018. The committee further directs the Under Secretary and the Director to make recommendations, as part of the review, to maximize the co-utilization of SCIFs to support Department of Defense and intelligence community work within cleared contractor facilities. The review should include potential consolidation or elimination of the duplicative requirements for industry to certify a SCIF with multiple agencies. In the event a specific agency has additional requirements beyond those identified in the applicable Intelligence Community Directive or Department of Defense policy, the Under Secretary and Director should make recommendations for addressing those requirements at the enterprise level. Finally, the committee directs the Under Secretary of Defense for Intelligence and the Director of National Intelligence to provide a briefing to the House Committee on Armed Services and House Permanent Select Committee on Intelligence on the results of the review, not later than 30 days after completion.

# Strengthening Intelligence Input to Milestone Decisions

The committee is concerned about the Defense Intelligence Enterprise's ability to provide accurate and timely information to the acquisition community to make decisions about capability development. Intelligence inputs are required for each acquisition milestone and throughout each program's life cycle, but often do not play a significant role in acquisition decisions. Threat assessments are often developed out of cycle with program timelines, creating data latency issues, and the quality of intelligence data varies greatly across the Department of Defense. The committee is aware of at least one case in which a capability development requirement was fundamentally incorrect because the program office did not have access to highly classified threat information. This uncertainty about the timeliness and accuracy of threat information creates requirements instability, which in turn drives up acquisition costs. Even after systems are fully developed and fielded, many systems require regular intelligence mission data support, such as electronic warfare database updates and measurement and signatures intelligence support.

The committee supports the Department's initial efforts to plan for and prioritize intelligence mission data support and encourages continued refinement of intelligence mission data support processes. The committee directs the Under Secretary of Defense for Intelligence, the Under Secretary of Defense for Research and Engineering, the Under Secretary of Defense for Acquisition and Sustainment, and the Director of the Defense Intelligence Agency to provide a briefing to the House Committee on Armed Services and the House Permanent Select Committee on Intelligence not later than March 1, 2018, on proposals to ensure that intelligence support to acquisition is relevant and provides value to the acquisition community. The briefing should also include proposals to ensure adequate access to compartmented information that may contain key judgments that would change a program's understanding

#### Threat Awareness Programs

of a threat.

The committee has conducted multiple hearings and briefings that have provided information on the sophistication and increasing number of counterintelligence threats to the Department of Defense. For example, the People's Republic of China and other nation-state actors seek to impair U.S. technology superiority through espionage and exploitation of the regulatory processes that govern foreign investment, technology transfer, and international scientific cooperation to legally obtain access to technology and research. As noted elsewhere in this report, Russian military intelligence services are using influence operations to undermine global democratic institutions and frameworks. Unrelenting pressure on terrorist organizations overseas is leading them to prioritize the radicalization of individuals in their country of origin, resulting in increased homegrown threats. Therefore, the committee encourages more investments in counterintelligence, security, and insider threat programs to protect Department of Defense and the National Nuclear Security Administration personnel, property, and technology. These increases should be reinforced by policies that emphasize the responsibility of all individuals to maintain awareness of potential threats. Further discussion is contained in the classified annex to this report.

# Underground Facility Targeting Capabilities

The committee is aware of gaps in the intelligence community's capability to identify, characterize, and target foreign underground facilities that force combatant commanders to accept unacceptable risk in specific mission areas. The committee is also aware of Department of Defense plans to develop an automated analytic capability, but believes additional underground facility analytic expertise is necessary to provide adequate support to operational planning requirements. The committee directs the Secretary of Defense and the Director of National Intelligence to provide a briefing to the House Committee on Armed Services and House Permanent Select Committee on Intelligence not later than November 1, 2017, on intelligence community capabilities to characterize and target adversary underground facilities. The briefing should include an assessment of the capacity and efficacy of National Intelligence Program and Military Intelligence Program resources currently supporting combatant commander underground facility target requirements, and an assessment of the analytic workforce required to address those requirements that cannot be addressed within the current resource framework. The committee believes this capacity gap is not limited to the Underground Facility Analysis Center at the Defense Intelligence Agency, and expects the capabilities and resources of the other combat support agencies to be reflected in the briefing.

#### LEGISLATIVE PROVISIONS

# SUBTITLE A—MANAGEMENT AND ORGANIZATION OF SPACE PROGRAMS

Section 1601—Establishment of Space Corps in the Department of the Air Force

This section would authorize the creation of a Space Corps within the Department of the Air Force and require the Secretary of the Air Force to certify its establishment by January 1, 2019. The Space Corps would be led by the Chief of Staff of the Space Corps and would be composed of such offices and officials determined appropriate by the Secretary of the Air Force, in consultation with the Chief of Staff of the Space Corps. This section would further provide that the Chief of Staff of the Space Corps would be appointed for a term of 6 years, be a member of the Joint Chiefs of Staff, and would report directly to the Secretary of the Air Force, as a co-equal of the Chief of Staff of the Air Force.

The Secretary of the Air Force would be given Milestone Decision Authority for space acquisition programs, including with respect to research, development, test, and evaluation and procurement. This section would not affect the authority of the other Services to pursue Service-specific user terminals for space programs. This section would also not affect the authorities of the Director of the National Reconnaissance Office and the Director of the National Geospatial-

intelligence Agency. This section would terminate the Principal Department of Defense Space Advisor and Defense Space Council.

Nothing in this section would authorize or require the relocation of any facilities, infrastructure, or military installations of the Air Force.

Lastly, this section would require the Secretary of Defense to provide to the congressional defense committees an interim report by March 1, 2018, and a final report by August 1, 2018, on the plan for the establishment of the Space Corps, recommendations by the Secretary of Defense, and other specified matters related to such.

Section 1602—Establishment of Subordinate Unified Command of the United States Strategic Command

This section would direct the Secretary of Defense to establish United States Space Command as a subordinate unified command under United States Strategic Command not later than January 1, 2019. This section would also require the commander of such command to hold a four-star rank and be appointed by the President and confirmed by the Senate. The commander would exercise command of joint space activities or missions, and the United States Space Command would be jointly staffed.

#### SUBTITLE B—SPACE ACTIVITIES

Section 1611—Codification, Extension, and Modification of Limitation on Construction on United States Territory of Satellite Positioning Ground Monitoring Stations of Foreign Governments

This section would amend chapter 135 of title 10, United States Code, by adding a new section, 2279c. Subsection (b) of section 1602 of the National Defense Authorization Act for Fiscal Year 2014 (Public Law 113–66), which is a limitation on construction on United States territory of satellite positioning ground monitoring stations of certain foreign governments, would be transferred to section 2279c of title 10, United States Code. This section would exclude foreign governments that are allies of the United States from the underlying limitation and would extend the underlying limitation's sunset date to December 31, 2023.

## Section 1612—Foreign Commercial Satellite Services: Cybersecurity Threats and Launches

This section would amend section 2279 of title 10, United States Code, by adding a new subsection concerning cybersecurity risk for the Department of Defense. This section would further amend section 2279 of title 10, United States Code, by adding a subsection that would prohibit the Secretary of Defense from entering into a contract for satellite services with any entity if such services will be provided using satellites launched from a covered foreign country or using a launch vehicle that is designed or manufactured in a covered foreign country, or that is provided by the government of a covered foreign country or by an entity controlled in whole or in part by, or acting on behalf of, the government of a covered foreign country, regardless of the location of the launch. Such prohibition would not apply to launches in the United States using launch vehicles with engines designed or manufactured or provided by any

entity of the Russian Federation or affect any other provision of law authorizing the use of Russian rocket engines within a United States launch vehicle.

This section would also add the Russian Federation to the list of covered foreign countries, and would make a number of conforming and clerical amendments to section 2279 of title 10, United States Code.

Section 1613—Extension of Pilot Program on Commercial Weather Data

This section would amend section 1613 of the National Defense Authorization Act for Fiscal Year 2017 (Public Law 114–328) by extending the pilot program on commercial weather data by 1 year. This section would also add the congressional intelligence committees to the existing reporting requirements.

Section 1614—Conditional Transfer of Acquisition and Funding Authority of Certain Weather Missions to National Reconnaissance Office

This section would amend section 1614 of the National Defense Authorization Act for Fiscal Year 2017 (Public Law 114–328), by requiring the Secretary of the Air Force and the Director of the National Reconnaissance Office to execute the transfer of certain weather missions from the Air Force to the National Reconnaissance Office unless the Secretary and Director both issued the waivers described in section 1614(c) of Public Law 114–328.

Section 1615—Evolved Expendable Launch Vehicle Modernization and Sustainment of Assured Access to Space

This section would prohibit the Secretary of Defense from obligating or expending funds authorized by this Act or otherwise made available for fiscal year 2018 for research, development, test, and evaluation, Air Force, for the evolved expendable launch vehicle (EELV) program for any use other than the activities specified by this Act. This section would not affect or prohibit the Secretary from procuring launch services of EELV launch systems.

This section would require the Secretary to notify the congressional defense committees, and, in some circumstances, the congressional intelligence committees, not later than 30 days before the Secretary publishes a draft or final request for proposals, or obligates funds, for the development activities specified by this section. This section would further direct the Secretary, in coordination with the Director of Cost Assessment and Program Evaluation, to submit a report to the congressional defense committees within 120 days after the date of the date of the enactment of this Act, that contains an assessment of the cost-effective method to meet the assured access to space requirements pursuant to section 2273 of title 10, United States Code, with respect to several specified time periods.

Lastly, this section would define the circumstances for what the Government would pay for as unique to national security space missions.

#### Section 1616—Commercial Satellite Communications Pathfinder Program

This section would state the sense of Congress regarding the Air Force's commercial satellite communications pathfinder program.

This section would also require the Secretary of the Air Force to submit a report, by March 1, 2018, to the Committees on Armed Services of the House of Representatives and the Senate regarding the views and plans of the Secretary related to carrying out a portion of the activities of such pathfinder program under the transaction authority provided by section 2371 of title 10, United States Code.

The committee has been concerned for several years that the Department of Defense is not using sound business practices to procure commercial satellite communications, which has resulted in millions of dollars in inefficient procurement of this key resource. The committee believes that leveraging Other Transaction Authority would further the activities of the Department to more effectively and efficiently procure commercial satellite communications.

Section 1617—Demonstration of Backup and Complementary Positioning, Navigation, and Timing Capabilities of Global Positioning System

This section would require, during fiscal year 2018, the Secretary of Defense, the Secretary of Transportation, and the Secretary of Homeland Security to jointly develop a plan for carrying out a backup capability demonstration for the Global Positioning System (GPS). The plan would be required to be based on the results of the study conducted under section 1618 of the National Defense Authorization Act for Fiscal Year 2017 (Public Law 114–328) and include the activities that the Secretaries determine necessary to carry out such demonstration. The Secretaries would be required to provide a briefing on this plan to the appropriate congressional committees within 120 days of the date of the enactment of this Act.

This section would further state that, subject to the availability of appropriations, the Secretaries would be required to jointly initiate the backup GPS capability demonstration and that the demonstration would terminate 18 months after the date of the enactment of this Act. At this date of termination, the Secretaries would be required to submit a report on the demonstration.

Finally, this section would authorize for this demonstration, for fiscal year 2018, \$10.0 million as specified in the funding tables.

# Section 1618—Enhancement of Positioning, Navigation, and Timing Capacity

This section would require the Secretary of Defense to develop and implement a plan to increase resilience for the positioning, navigation, and timing (PNT) capacity for the Department of Defense. This section would require the plan to ensure that military Global Positioning System (GPS) user equipment (MGUE) terminals have the capability to receive signals from the Galileo satellites of the European Union and the QZSS satellites of Japan, beginning with increment 2 of the acquisition of such terminals.

This plan would also include an assessment of the feasibility, benefits, and risks of military GPS MGUE terminals having the capability to receive foreign PNT signals, beginning with increment 2 of the acquisition of such terminals. Such plan would also include an assessment of options to use hosted payloads to provide redundancy for the GPS signal; ensure that the Secretary of Defense, with the concurrence of the Secretary of State, engages with relevant U.S. allies to enable MGUE terminals to receive allied signals and negotiates other potential agreements relating to PNT enhancement; and include any other options the Secretary of Defense determines appropriate.

Finally, this section would require the Secretary of Defense to submit the plan along with certain evaluations to specified congressional committees not later than 180 days after the date of the en-

actment of this Act.

### Section 1619—Establishment of Space Flag Training Event

This section would require the Secretary of Defense to establish, not later than December 31, 2020, an annual capstone training event titled "Space Flag" for space professionals to develop and test doctrine, concepts of operation, and tactics, techniques, and procedures. The event would also serve to inform and develop the appropriate design of the operational training infrastructure of the space domain. This section would further require the Secretary to model the event on the Red Flag and Cyber Flag exercises and ensure that Space Flag includes live, virtual, and constructive training and on-orbit threat replication, as appropriate.

Lastly, this section would require the Secretary, in coordination with the Commander of Air Force Space Command, Commander, Army Space and Missile Defense Command, and Commander, Navy Space and Naval Warfare Systems Command to submit a plan to the congressional defense committees, not later than 1 year after the date of the enactment of this Act, on the establishment of Space Flag, including a description of each of the objectives of the event.

The committee recognizes that the Air Force has started initial activities for Space Flag training, but the committee expects a more comprehensive, Department of Defense-wide approach for exercise participation and infrastructure, consistent with this provision. Additionally, the committee notes the related ongoing testing and development activities in the Air Force, such as the Big Top program, and fully supports these activities.

## Section 1620—Report on Operational and Contingency Plans for Loss or Degradation of Space Capabilities

This section would require the Secretary of Defense and the Chairman of the Joint Chiefs of Staff, in coordination with each commander of a combatant command, to assess the implications of a loss or degradation of U.S. space capabilities on operational and contingency plans. The Secretary and Chairman, in coordination with the combatant commanders, would then be required to submit a report of their assessment to the appropriate congressional committees within 180 days after the date of the enactment of this Act.

## Section 1621—Limitation on Availability of Funding for Joint Space Operations Center Mission System

This section limits the funds authorized for fiscal year 2018 for the Joint Space Operations Center mission system until the Secretary of the Air Force develops and implements a plan to operationalize existing commercial space situational awareness capabilities.

## Section 1622—Limitation on Availability of Funds Relating to the Advanced Extremely High Frequency Program

This section would limit the funds authorized to be appropriated by this Act for fiscal year 2018 for research, development, test, and evaluation, Air Force, for protected tactical enterprise, protected tactical service, or protected satellite communication services for the Evolved Strategic Satellite Communications (SATCOM) system until several certifications, reports, and plans are submitted to the congressional defense committees ensuring that a protected SATCOM system other than Advanced Extremely High Frequency (AEHF) will meet the relevant validated military requirements.

# SUBTITLE C—DEFENSE INTELLIGENCE AND INTELLIGENCE-RELATED ACTIVITIES

# Section 1631—Security Clearances for Facilities of Certain Contractors

This section would provide the Department of Defense with the authority to approve facility clearances for a company in the event its senior management official does not have a security clearance at the level of the facility clearance, if a company designates an official with the appropriate clearance to act as the senior management official for the purposes of the facility clearance.

#### Section 1632—Extension of Authority to Engage in Certain Commercial Activities

This section would amend section 431(a) of title 10, United States Code, to extend the authority to engage in commercial activities as security for intelligence collection activities through December 31, 2023.

Section 1633—Submission of Audits of Commercial Activity Funds

This section would modify section 432 of title 10, United States Code, for audits to be submitted to the congressional defense committees and the congressional intelligence committees by not later than December 31 of each year.

Section 1634—Clarification of Annual Briefing on the Intelligence, Surveillance, and Reconnaissance Requirements of the Combatant Commands

This section would modify section 1626 of the Carl Levin and Howard P. "Buck" McKeon National Defense Authorization Act for Fiscal Year 2015 (Public Law 113–291) by including space-based intelligence, surveillance, and reconnaissance in the briefing.

Section 1635—Review of Support Provided by Defense Intelligence Elements to Acquisition Activities of the Department

This section would require the Secretary of Defense to review the support provided by the defense intelligence enterprise to Department of Defense acquisition activities, and to develop a specific budget structure for intelligence support to acquisition that would be implemented beginning with the budget submission for fiscal year 2020. It also would require the Secretary to provide a briefing to the congressional defense committees and congressional intelligence committees not later than May 1, 2018, on the results of the review and the plan for the budget structure.

## Section 1636—Limitation on Availability of Funds for Certain Offensive Counterintelligence Activities

This section would limit the availability of funds for certain offensive counterintelligence operation (OFCO) activities until specified certification and briefing requirements are fulfilled not later than March 1, 2018. It would require the Secretary of Defense to certify that elements of the Department of Defense with OFCO authorities have appropriate oversight procedures. It would require the Director of the Defense Intelligence Agency (DIA) to provide the congressional defense committees and congressional intelligence committees with an accounting of certain resources transferred from the Defense Counterintelligence Field Activity. It also would require a briefing to the same committees from the Under Secretary of Defense for Intelligence and the Director of DIA on improvement of OFCO management. The committee has serious concerns about the lack of rigorous internal oversight of the Department's OFCO program. Recent briefings have shown several elements of the OFCO community are exposing the Department to unacceptable risk by failing to adhere to Department policies. The committee expects the Under Secretary of Defense for Intelligence to conduct rigorous, proactive oversight of all aspects of counterintelligence across the Department to ensure compliance with applicable regulations.

Section 1637—Prohibition on Availability of Funds for Certain Relocation Activities for NATO Intelligence Fusion Center

This section would prohibit certain funds authorized to be appropriated by this Act or otherwise made available for fiscal year 2018 from being used to support the relocation of the NATO Intelligence Fusion Center from Royal Air Force Molesworth, United Kingdom, to Royal Air Force Croughton, United Kingdom.

Section 1638—Establishment of Chairman's Controlled Activity Within Joint Staff for Intelligence, Surveillance, and Reconnaissance

This section would require continuation of a current Department of Defense plan to transition the roles, missions, and responsibilities of Joint Functional Component Command for Intelligence, Surveillance, and Reconnaissance from U.S. Strategic Command to the Chairman of the Joint Chiefs of Staff (CJCS) as a CJCS con-

trolled activity, and designate the Department of the Air Force as the controlled activity's funding sponsor.

Section 1639—Sense of Congress and Report on Geospatial Commercial Activities for Basic and Applied Research and Development

This section expresses the sense of Congress and requires a report on authorities needed to establish commercial activities for the purposes of Research and Technology development.

## Section 1640—Department of Defense Counterintelligence Polygraph Program

This section would authorize the Secretary of Defense to add dual citizens in positions with access to highly classified information to their counterintelligence polygraph program, for the purposes of assessing risk.

## Section 1641—Security Clearance for Dual-Nationals

This section would authorize the Secretary of Defense to apply additional security reviews to dual citizens seeking positions that require access to highly classified information.

Section 1642—Suspension or Revocation of Security Clearances Based on Unlawful or Inappropriate Contacts With Representatives of a Foreign Government

This section would authorize the Secretary of Defense to suspend or revoke the security clearances of individuals who engage in unlawful or inappropriate contacts with representatives of foreign governments.

#### SUBTITLE D—CYBERSPACE-RELATED MATTERS

### Section 1651—Notification Requirements for Sensitive Military Cyber Operations and Cyber Weapons

This section would amend title 10, United States Code, to require the Secretary of Defense to promptly submit in writing to the congressional defense committees notice of any sensitive military cyber operation and notice of the results of the review of any cyber capability that is intended for use as a weapon. This section would also require the Secretary of Defense to establish procedures for providing such notice in a manner consistent with national security of the United States and the protection of operational integrity.

The term "sensitive military cyber operation" would include cyber actions carried out by the Armed Forces and actions intended to cause effects outside a geographic location where United States forces are involved in hostilities (as that term is used in section 1543 of title 50, United States Code).

This section is not intended to create or alter reporting requirements of any other agency or department of the Department of Defense.

#### Section 1652—Modification to Quarterly Cyber Operations Briefings

This section would amend section 484 of title 10, United States Code, related to quarterly cyber operations briefings by including all of the congressional defense committees in the requirement, as well as increasing the fidelity of the items to be included in each quarterly briefing. In addition, the committee encourages the Department of Defense to also include reporting on the Cybersecurity Scorecard, how measures of resilience may be addressed by this scorecard, and means for measuring or tracking supply chain risk management activities.

# Section 1653—Cyber Scholarship Program

This section would amend chapter 112 of title 10, United States Code, to establish the Department of Defense Cyber Scholarship Program, setting aside 5 percent of the available funding for pursuit of associate degrees in cyber and authorizing \$10.0 million in fiscal year 2018 for such scholarships.

The committee is concerned that lack of funding under this program may further aggravate the challenges the Department is experiencing in recruiting and retaining cyber security personnel. The committee believes that providing additional opportunities under the program will be beneficial in continuing to address Department requirements for a qualified cyber workforce. Further, the committee encourages the Department to use the opportunity to educate the public on this program and to focus on institutions with high-quality computer science, engineering, and cyber security programs, including historically black colleges and universities, and minority-serving institutions, as a way to expand the pool of talented applicants.

## Section 1654—Plan To Increase Cyber and Information Operations, Deterrence, and Defense

This section would direct the Secretary of Defense to develop a plan to increase regional cyber planning and enhance information operations and strategic communication strategies to counter Chinese and North Korean information warfare, malign influence, and propaganda activities. It would further direct the Secretary to provide a briefing to the congressional defense committees on the plan not later than 180 days after the date of the enactment of this Act.

Section 1655—Report on Termination of Dual-Hat Arrangement for Commander of the United States Cyber Command

This section would require the Secretary of Defense to provide a report on the Department of Defense's progress in meeting the requirements of section 1642 of the National Defense Authorization Act for Fiscal Year 2017 (Public Law 114–328) to the congressional defense committees, the House Permanent Select Committee on Intelligence, and the Senate Select Committee on Intelligence.

#### SUBTITLE E—NUCLEAR FORCES

## Section 1661—Notifications Regarding Dual-Capable F-35A Aircraft

This section would amend section 179(f) of title 10, United States Code, to require the Nuclear Weapons Council to notify the congressional defense committees if either the United States Senate or the United States House of Representatives adopts a bill authorizing or appropriating funds for the Department of Defense that, as determined by the Council, provides funds in an amount that will result in a delay in the nuclear certification or delivery of F-35A dual-capable aircraft.

Section 1662—Oversight of Delayed Acquisition Programs by Council on Oversight of the National Leadership Command, Control, and Communications System

This section would amend section 171a of title 10, United States Code, to require each program manager of a covered acquisition program to transmit quarterly reports to the co-chairs of the Council on Oversight of the National Leadership Command, Control, and Communications System that identify (1) the covered acquisition program; (2) the requirements of the program; (3) the development timeline of the program; and (4) the status of the program, including whether the program is delayed and whether such delay will result in a program schedule delay.

This section would further require that, in the event an acquisition program is delayed by more than 180 days or in the event a program manager did not properly notify the Council, the co-chairs of the Council shall notify the congressional defense committees by

not later than 7 days after the end of a quarter.

Lastly, this section would require the Secretary of Defense to issue or revise a Department of Defense Instruction to ensure that program managers carry out subsection (k)(1) of section 171a of title 10, United States Code, as amended by this Act.

## Section 1663—Establishment of Nuclear Command and Control Intelligence Fusion Center

This section would direct the Secretary of Defense and the Director of National Intelligence to jointly establish an intelligence fusion center, not later than 180 days after the date of the enactment of this Act, for the purpose of enhancing the protection of nuclear command, control, and communications programs, systems, and processes and continuity of government programs, systems, and processes. In establishing the fusion center, the Secretary and Director would be required to develop a charter that includes the following:

- (1) the roles and responsibilities of officials and elements of the Federal Government that are key stakeholders;
  - (2) the organization reporting chain of the fusion center;
  - (3) the staffing of the fusion center; (4) the processes of the fusion center:
- (5) how the fusion center integrates with other elements of the Federal Government;

(6) the management and administrative processes required to carry out the fusion center; and

(7) procedures to ensure that the appropriate number of staff of the fusion center have the security clearance necessary, including with respect to programs that are designated special access programs.

This section would further require the Secretary and the Director to submit an initial report to the congressional defense committees and the congressional intelligence committees, not later than 120 days after the date of the enactment of this Act, on the development of the charter and the plan for budget and staffing of the fusion center.

Lastly, this section would require the Secretary and Director to submit an annual report to the congressional defense committees and the congressional intelligence committees at the same time as the President's budget request is submitted to Congress, beginning in fiscal year 2019 and each fiscal year thereafter, on any updates to the plan on the budget and staffing of the fusion center; any updates to the charter; and a summary of the activities and accomplishments of the fusion center. This reporting requirement would expire on December 31, 2021.

Section 1664—Security of Nuclear Command, Control, and Communications System From Commercial Dependencies

This section would make a series of findings related to Department of Defense use of systems produced by Huawei Technologies Company or ZTE Corporation. This section would also require the Secretary of Defense to certify whether the Secretary uses telecommunications equipment or services from Huawei Technologies Company or ZTE Corporation to carry out the Department's nuclear deterrence mission, including with respect to the nuclear command, control, and communications, integrated tactical warning and attack assessment, and continuity of government, or the homeland defense mission, including with respect to ballistic missile defense.

Beginning 1 year after the date of the enactment of this Act, this section would prohibit the Secretary from procuring, obtaining, or renewing a contract to do so, any equipment, system, or service that uses telecommunications equipment from Huawei Technologies Company or ZTE Corporation to carry out the Department's nuclear deterrence or homeland defense missions. Lastly, this section would provide for a waiver for such prohibition, on a case-by-case basis, for a single 1-year period, if the Secretary determines it to be in the national security interests of the United States and certifies to the congressional defense committees that certain criteria are met.

Section 1665—Oversight of Aerial-Layer Programs by Council on Oversight of the National Leadership Command, Control, and Communications System

This section would establish that any analysis of alternatives (AOA) for the Senior Leader Airborne Operations Center, the executive airlift program of the Air Force, and the E–6B modernization program may not receive final approval by the Joint Requirements

Oversight Council and the Director of Cost Assessment and Program Evaluation may not complete the AOA sufficiency review unless:

- (1) the Council on Oversight of the National Leadership Command, Control, and Communications System determines that the alternatives are capable of meeting the requirements for senior leadership communications in support of the nuclear command, control, and communications missions of the Department of Defense and the continuity of government mission of the Department;
- (2) the Council submits to the congressional defense committees such a determination; and
- (3) a period of 30 days elapses following the date of such submission.

Section 1666—Security Classification Guide for Programs Relating to Nuclear Command, Control, and Communications and Nuclear Deterrence

This section would require that, not later than 90 days after the date of the enactment of this Act, the Secretary of Defense shall require the issuance of a security classification guide for nuclear weapons, and nuclear command and control programs and continuity of Government programs of the Department of Defense to ensure the protection of sensitive information of such programs. Such classification guides would be jointly approved by the Nuclear Weapons Council and the Council on Oversight of the National Leadership Command, Control, and Communications System and should be in place not later than March 19, 2019.

Section 1667—Evaluation and Enhanced Security of Supply Chain for Nuclear Command, Control, and Communications and Continuity of Government Programs

This section would direct the Secretary of Defense to evaluate by December 31, 2019, the supply chain vulnerabilities of programs related to nuclear weapons; nuclear command, control, and communications (NC3); continuity of Government; and ballistic missile defense. As part of the evaluation, the Secretary would be required to develop a plan to carry out such evaluation and submit the plan to the congressional defense committees not later than 180 days after the date of the enactment of this Act. This section would also provide a waiver, on a case-by-case basis, for any program, weapon system, or system of systems, that the Secretary certifies to the congressional defense committees within 180 days after the date of the enactment of this Act that all known supply chain vulnerabilities have minimal consequences for the capability of such systems.

This section would further require the Secretary to develop strategies for mitigating the risks of supply chain vulnerabilities identified in the course of the evaluation. The Secretary would also be required to issue a Department of Defense Instruction, or update such an Instruction, not later than 180 days after the date of the enactment of this Act, establishing the prioritization of supply chain risk management programs, including supply chain risk management threat assessment reporting, to ensure that programs related to nuclear weapons, NC3, continuity of Government, and

ballistic missile defense receive the highest priority of such supply

chain risk management programs and reporting.

Lastly, this section would direct the Secretary to establish a requirement to carry out supply chain risk management threat assessment collections and analyses under acquisition and sustainment programs related to nuclear weapons, NC3, continuity of government, and ballistic missile defense programs and submit such requirement not later than 120 days after the date of the enactment of this Act.

## Section 1668—Limitation on Pursuit of Certain Command and Control Concept

This section would provide that the Secretary of the Air Force may not award a contract for engineering and manufacturing development for the Ground Based Strategic Deterrent (GBSD) program that would result in a command and control concept for such program that consists of less than 15 fixed launch control centers per missile wing unless the Commander of U.S. Strategic Command determines that:

- (1) the plans of the Secretary for a command and control concept consisting of less than 15 fixed launch control centers per missile wing are appropriate, meet requirements, and do not contain excessive risk;
- (2) the risks to schedules and costs from such concepts are minimized and manageable;
- (3) the strategy and plan of the Secretary for addressing cyber threats for such concept are robust; and
- (4) with respect to such concept, the Secretary has established an appropriate process for considering and managing trade-offs among requirements relating to survivability, long-term operations and sustainment costs, procurement costs, and military personnel needs.

This section would require the Commander to submit to the Secretary and the congressional defense committees the Commander's determination. If the Commander is unable to make the determination under subsection (a), the Commander would be required to submit the reasons for not making such determination.

Finally, this section would state that the requirements of this section shall not be construed to affect or prohibit the ability of the Secretary to use fair and open competition procedures in soliciting,

evaluating, and awarding contracts for this program.

The committee is concerned about cost, schedule, and technology maturity risks in the GBSD program, particularly as the program considers significant deviations from proven, reliable, and survivable command and control concepts. The committee believes this provision will enable the Commander of U.S. Strategic Command to more closely track and assess how the Air Force is implementing the Commander's requirements and minimizing risk in this important nuclear modernization program.

#### Section 1669—Procurement Authority for Certain Parts of Intercontinental Ballistic Missile Fuzes

This section would authorize \$6.3 million of the funds made available by this Act for Missile Procurement, Air Force, for the

procurement of certain commercially available parts of intercontinental ballistic missile fuzes, notwithstanding section 1502(a) of title 31, United States Code, under contracts entered into under section 1645(a) of the Carl Levin and Howard P. "Buck" McKeon National Defense Authorization Act for Fiscal Year 2015 (Public Law 113-291).

Section 1670—Sense of Congress on Importance of Independent Nuclear Deterrent of United Kingdom

This section would express the sense of Congress regarding the independent nuclear deterrent of the United Kingdom of Great Britain and Northern Ireland.

Section 1671—Prohibition on Availability of Funds for Mobile Variant of Ground-Based Strategic Deterrent Missile

This section would provide that none of the funds authorized to be appropriated by this Act or otherwise made available for fiscal years 2017 through 2019 may be obligated or expended to retain the option for, or develop, a mobile variant of the ground-based strategic deterrent missile.

This section would also repeal section 1664 of the National Defense Authorization Act for Fiscal Year 2017 (Public Law 114–328).

Section 1672—Report on Impacts of Nuclear Proliferation

This section would express a Sense of Congress regarding nuclear proliferation as a serious threat to national security and require the Secretary of Defense to submit a report to the congressional defense committees not later than 90 days after enactment of this Act regarding the impacts of nuclear proliferation, how the Department of Defense is contributing to the current strategy to respond to the threat of nuclear proliferation, and if and how nuclear proliferation is being addressed in the Nuclear Posture Review and other pertinent strategy reviews.

#### SUBTITLE F—MISSILE DEFENSE PROGRAMS

## Section 1681—Administration of Missile Defense and Defeat **Programs**

This section would amend chapter 9 of title 10. United States Code, by creating a new section that would establish a unified major force program for missile defense and missile defeat programs. This section would require the Secretary of Defense to submit a report on such programs for fiscal years 2019-2023, included with the budget materials submitted as part of the President's budget request for such years.

This section would further require the Secretary to transfer acquisition authority and total obligation authority for each program covered by this section from the Missile Defense Agency to a military department not later than the date on which the President's budget is submitted for fiscal year 2020. The Secretary would also be required to submit a report, not later than 1 year after the date of the enactment of this Act, to the congressional defense commit-

tees on the plans for such a transition.

Lastly, this section would change the term of the Director of the Missile Defense Agency to 6 years and require that the Director report to and be under the authority of the Under Secretary of Defense for Research and Engineering.

### Section 1682—Preservation of the Ballistic Missile Defense Capacity of the Army

This section would prohibit the Army from obligating or expending any funds authorized to be appropriated by this Act or otherwise made available for fiscal year 2018 or any fiscal year thereafter to demilitarize any Guidance Enhanced Missile TBM (GEM—T) interceptor or remove any such interceptor from the operational inventory of the Army until the date on which the Secretary of the Army submits an evaluation to the congressional defense committees of the ability of the Army to meet warfighter requirements and operational needs if GEM—T interceptors are removed from the operational inventory of the Army. Such an evaluation shall consider whether the Army can maintain such an inventory by either (1) recertifying GEM—T interceptors either with or without modification; or (2) developing, testing, and fielding a new low-cost interceptor that can be added to the Army's inventory prior to the retirement of GEM—T interceptors.

#### Section 1683—Modernization of Army Lower Tier Air and Missile Defense Sensor

This section would direct the Secretary of the Army to issue an acquisition strategy not later than April 15, 2018, for a 360-degree lower tier air and missile defense sensor that achieves initial operating capability by January 1, 2022. This section would also establish the requirements, including the use of competitive procedures, that must be satisfied by such an acquisition strategy.

If the Secretary of the Army does not issue such an acquisition strategy by April 15, 2018, the Secretary would no longer be authorized to obligate or expend funding for the lower tier air and missile defense sensor. Additionally, the Secretary of Defense would be required to transfer the acquisition responsibility for such a sensor to the Missile Defense Agency, and its Director would be required to issue such acquisition strategy by not later than December 15, 2018.

If the Secretary of Defense carries out such transfer, this section would further require that after the 360-degree sensor achieves milestone-B approval (or equivalent), but before such sensor achieves milestone C approval (or equivalent), the Secretary of Defense would transfer the responsibility to procure such sensor and the funding authorized to carry out such procurement from the Director of the Missile Defense Agency to the Secretary of the Army.

## Section 1684—Enhancement of Operational Test and Evaluation of Ballistic Missile Defense System

This section would require that, not later than 90 days after the date of the enactment of this Act, the Director of the Missile Defense Agency, the Director of Operational Test and Evaluation, the Secretary of the Army, and the Secretary of the Navy shall jointly ensure that the test plans of the Integrated Master Test Plan of

the ballistic missile defense system prioritize the integration of missile defense capabilities including Patriot, Aegis ballistic missile defense, and Terminal High Altitude Area Defense (THAAD).

The committee notes the recent emergency deployment of a THAAD battery to the Republic of Korea to protect U.S. and allied forces against the rapidly escalating ballistic missile threat from the Democratic People's Republic of Korea. While the committee supports this deployment, it remains concerned about substantial delays to the integration of and coordination between THAAD and other critical forward-deployed integrated air and missile defense systems, such as Patriot. The committee believes it is imperative that the Department of Defense be able to fully leverage forward-deployed missile defense assets as part of one integrated system capable of discriminating, tracking, and defeating advanced threats. Further, the committee believes that field commanders should have access to the full range of effectors and sensors to address any incoming missile threat.

The committee will continue to monitor efforts by the Department to fully integrate the various missile defense capabilities that have been developed.

Additionally, the committee looks forward to receiving the report on "Integration and Interoperability of Allied Missile Defense Capabilities" required to be submitted not later than December 31, 2017, by section 1676 of the National Defense Authorization Act for Fiscal Year 2016 (Public Law 114–92).

## Section 1685—Defense of Hawaii from North Korean Ballistic Missile Attack

This section would state findings of Congress concerning the North Korean ballistic missile threat, and the sense of Congress concerning the improvement of the missile defense of Hawaii. This section also would direct the Secretary of Defense to protect the test and training operations of the Pacific Missile Range Facility, and assess the siting and functionality of a discrimination radar throughout the Hawaiian Islands before assessing the feasibility of using existing missile defense assets to improve the missile defense of Hawaii.

Further, this section would direct the Director of the Missile Defense Agency to conduct a test to evaluate the capability to defeat a simple intercontinental ballistic missile (ICBM) using the standard missile 3 (SM-3) block IIA interceptor and to develop a plan, as part of the integrated master test plan for the ballistic missile defense system, to defeat a complex ICBM threat, including a complex threat posed by North Korean ICBMs.

Lastly, this section would require the Secretary of Defense to submit a report to the congressional defense committees within 120 days after the enactment of this Act that indicates whether the nuclear deterrence capabilities of any adversary of the United States would be undermined by a capability to defend against North Korean ICBMs using SM-3 block IIA interceptors and whether the Secretary has developed a strategy to address any such effect upon an adversary's nuclear deterrent capabilities.

#### Section 1686—Aegis Ashore Anti-Air Warfare Capability

This section would authorize the Secretary of Defense to use funds authorized by sections 101 and 201 of this Act or otherwise made available for fiscal year 2018 for procurement, research, development, test, and evaluation, to continue development, procurement, and deployment of anti-air warfare capabilities at each Aegis Ashore site in Romania and the Republic of Poland.

This section would further require the Secretary to ensure that such capabilities are deployed at the site in Romania by not later than 1 year after the date of the enactment of this Act, and at the site in Poland by not later than 1 year after the declaration of oper-

ational status of that site.

Any reprogramming or transfer made to carry out this section would be carried out in accordance with established procedures for reprogramming or transfers.

Section 1687—Iron Dome Short-Range Rocket Defense System, Israeli Cooperative Missile Defense Program Codevelopment and Coproduction, and Arrow 3 Testing

This section would make available \$92.0 million of the funds authorized to be appropriated by this Act or otherwise made available for fiscal year 2018 for procurement, defense-wide, and for the Missile Defense Agency, for the Government of the State of Israel for the procurement of Tamir interceptors for the Iron Dome shortrange rocket defense system.

This section would condition those funds subject to the terms, conditions, and coproduction targets specified for fiscal year 2018 in a bilateral international agreement amending the "Agreement Between the Department of Defense of the United States of America and the Ministry of Defense of the State of Israel Concerning Iron Dome Defense System Procurement."

This section would also require that not less than 30 days prior to the initial obligation of these funds, the Director of the Missile Defense Agency and the Under Secretary of Defense for Acquisition, Technology, and Logistics shall jointly submit to the congressional defense committees, the Committee on Foreign Affairs of the House of Representatives, and the Committee on Foreign Relations of the Senate, a certification that such agreement is being implemented as provided in the agreement and an assessment detailing any risks relating to the implementation of such agreement.

This section would authorize \$221.5 million and \$287.3 million out of such funds as are authorized to be appropriated by this Act or otherwise made available for fiscal year 2018 for procurement, defense-wide, and for the Missile Defense Agency, for procurement and coproduction of the David's Sling Weapon System and the

Arrow 3 Upper Tier missile defense system, respectively.

This section would further specify the terms and conditions that shall be achieved by the Director of the Missile Defense Agency and the Under Secretary of Defense for Acquisition, Technology, and Logistics prior to the disbursement of the authorized funds for David's Sling and Arrow 3. These terms and conditions would include achievement of the knowledge points and production readiness agreements within the current bilateral research, development, test, and evaluation agreements; matched funding by the

Government of the State of Israel; the successful negotiation of a bilateral international agreement between the United States and the Government of Israel; agreed coproduction targets based on the teaming agreements for the codevelopment programs; and certain other matters, including apportionment of the costs of any delays

for coproduction.

This section would also require the Under Secretary of Defense for Acquisition, Technology, and Logistics to provide a briefing to the congressional defense committees, the Committee on Foreign Affairs of the House of Representatives, and the Committee on Foreign Relations of the Senate, on the plans for improving the affordability of the David's Sling Weapon system and the Arrow 3 Upper Tier Interceptor Program not later than 30 days after such plans are approved.

Lastly, this section would limit the funds to be authorized by this Act or otherwise made available during fiscal year 2018 for the Missile Defense Agency for the testing of the Arrow 3 Upper Tier Development Program in ranges located in the United States and expenses related to such testing to not more than \$105.0 million.

The committee recommends the authorization of these funds for procurement of missile defense system batteries and interceptors for the Government of Israel; however, it is not establishing specific production goals or commitments.

### Section 1688—Review of Proposed Ground-Based Midcourse Defense System Contract

This section would prohibit the Director of the Missile Defense Agency from changing the contracting strategy for the systems integration, operations, and test of the Ground-based Midcourse Defense (GMD) system until 30 days after the report specified at the end of this section is submitted to the congressional defense committees.

This section would require the Director of Cost Assessment and Program Evaluation (CAPE) to conduct a review of the contract for the systems integration, operations, and test of the GMD system, and submit such review to the Under Secretary of Defense for Research and Engineering and the Missile Defense Executive Board.

Lastly, this section would direct the Under Secretary of Defense for Research and Engineering and the Missile Defense Executive Board to submit a report to the congressional defense committees within 30 days after the review is received that includes the review itself, without change, and any views and recommendations of the Under Secretary and the Board on the review.

The committee has previously imposed limits on the use of lead system integrator (LSI) contracts. For example, section 807 of the John Warner National Defense Authorization Act for Fiscal Year 2007 (Public Law 109–364) prohibited the use of new LSI contracts under most circumstances. The committee believes that, generally, such contract arrangements have been of limited utility. In the case of the contract for the Ground-based Midcourse Defense System, which was in place at the time section 807 of Public Law 109–364 was enacted, the committee is concerned that while threats to the homeland are increasing, not enough information is known about the potential risks of disaggregating this contract. Moreover,

the GMD system is in the midst of robust and diverse modernization and test efforts.

Section 1689—Sense of Congress and Plan for Development of Space-Based Sensor Layer for Ballistic Missile Defense

This section would express the sense of Congress on the impor-

tance of a space-based missile defense sensor layer.

This section would require the Director of the Missile Defense Agency, in coordination with the Secretary of the Air Force and the heads of the appropriate Defense Agencies and combat support agencies, to develop a space-based sensor layer for ballistic missile defense that provides precision tracking data of missiles beginning in the boost phase and continuing throughout subsequent flight regimes; serves other intelligence, surveillance, and reconnaissance requirements; and achieves an operational prototype payload at the earliest practicable opportunity.

This section would require the Director to submit a plan within 1 year after the date of the enactment of this Act to the appropriate congressional committees that explains how the Director will carry out the development of a space-based sensor layer; the estimated costs of such a layer, including development, acquisition, deployment, and operations and sustainment; his assessment of the maturity of critical technologies necessary to make such a sensor layer operational and recommendations for any research and development activities; his assessment of the capabilities that can be provided by a space sensor layer that other ballistic missile sensor layers cannot provide; how the Director will leverage certain capabilities, including national technical means, hosted payloads, small satellites, among others; and any other matters the Director determines appropriate.

Section 1690—Sense of Congress and Plan for Development of Space-Based Ballistic Missile Intercept Layer

This section expresses the sense of Congress regarding the natural advantages of space systems and their potential integration into ballistic missile defense systems. It directs the Missile Defense Agency to submit a plan to develop a space-based ballistic missile intercept layer and establishes a space test bed for space-based ballistic missile intercept.

Section 1691—Limitation on Availability of Funds for Ground-Based Midcourse Defense Element of the Ballistic Missile Defense System

This section would limit the funds authorized by this Act for fiscal year 2018 for the Ground-Based Midcourse Defense (GMD) System by \$50 million until the Secretary of Defense provides a written certification that risk of mission failure of GMD enhanced kill vehicles due to foreign object debris has been minimized; or if the certification cannot be made, a briefing on the corrective measures that will be carried out to minimize such risk.

Section 1692—Conventional Prompt Global Strike Weapon System

This section would direct the Secretary of Defense, in coordination with the Chairman of the Joint Chiefs of Staff, to plan to reach early operational capability for the conventional prompt global strike weapon system by September 30, 2022. Further, this section would limit the funds authorized by this Act for fiscal year 2018 for the conventional prompt global strike weapons system by 50% until the Chairman of the Joint Chiefs submits the report specified within this section to the congressional defense committees.

## Section 1693—Determination of Location of Continental United States Interceptor Site

This section would require the Secretary of Defense to determine the location of a potential additional continental United States interceptor site within 30 days after the Ballistic Missile Defense Review is issued. The section would also require the Secretary to consider specified contributing factors when making such determination. Lastly, this section would direct the Secretary to submit a report to the congressional defense committees within 30 days after the site determination is made.

## SUBTITLE G—OTHER MATTERS

#### Section 1695—Protection of Certain Facilities and Assets From Unmanned Aircraft

This section would amend section 130i of title 10, United States Code, to provide the authority to protect against a threat posed by unmanned aircraft against certain military ranges.

## Section 1696—Use of Commercial Items in Distributed Common Ground Systems

This section would require that procurement for each Distributed Common Ground System (DCGS) be carried out in accordance with section 2377 of title 10, United States Code.

#### Section 1697—Independent Assessment of Costs Relating to Ammonium Perchlorate

This section would require the Secretary of Defense to seek to enter into a contract with a federally funded research and development center (FFRDC) for an assessment of the costs to the Department of Defense associated with Department contractors and subcontractors utilizing a new supplier for ammonium perchlorate in Department weapon systems that utilize such materials. The Secretary would be required to provide a report to the congressional defense committees containing the FFRDC's assessment, unchanged, along with any comments or views of the Secretary by not later than 120 days after the date of the enactment of this Act.

#### Section 1698—Limitation and Business Case Analysis Regarding Ammonium Perchlorate

This section would require the Secretary of Defense, acting through the Director of the Cost Assessment and Program Evaluation, to conduct a business case analysis regarding the options of the Federal Government to ensure a robust domestic industrial base to supply ammonium perchlorate for use in solid rocket motors and submit a report including such analysis to the Comptroller General of the United States and the Committees on Armed Services of the Senate and House of Representatives by March 1, 2018. This section would also require the Comptroller General to review the report and provide a briefing to the Committees on Armed Services of the Senate and House of Representatives within 30 days after receiving the report. This section would also prohibit the use of any funds authorized by this Act for fiscal year 2018 for the Department of Defense to be obligated or expended for the development or construction of a new source for ammonium perchlorate until 45 days after the report containing the business case analysis is submitted.

### Section 1699—Industrial Base for Large Solid Rocket Motors and Related Technologies

This section would require the Secretary of Defense, in consultation with the Administrator of the National Aeronautics and Space Administration, to develop a plan to ensure a robust domestic industrial base for large solid rocket motors and critical technologies, subsystems, components, and materials related to such rocket motors. The Secretary would be required to ensure the plan sustains not less than two domestic suppliers of:

- (1) large solid rocket motors;
- (2) small liquid-fueled rocket engines;
- (3) aeroshells for reentry vehicles or reentry bodies;
- (4) strategic radiation-hardened microelectronics; and
- (5) any other critical technologies, subsystems, components, and materials within and relating to large solid rocket motors that the Secretary determines appropriate.

The Secretary would be required to submit a report that contains this plan and the views of the Secretary on various related matters to pertinent congressional committees by February 1, 2018.

# Section 1699A—Pilot Program on Enhancing Information Sharing for Security of Supply Chain

This section would direct the Secretary of Defense to establish a pilot program by June 1, 2019, to enhance information sharing with cleared defense contractors for the purpose of ensuring supply chain security. This section would require the Secretary to select 10 acquisition or sustainment programs to participate in the pilot program and would further provide criteria that the Secretary would be required to satisfy when selecting the 10 programs.

This section would also require the Secretary to submit a report to the congressional defense committees by March 1, 2018, that includes details on how the Secretary will establish the pilot program and the identification of any legislative action or administrative action required to provide the Secretary with specific additional authorities required to fully implement the pilot program.

Section 1699B—Commission to Assess the Threat To the United States From Electromagnetic Pulse Attacks and Events

This section would establish a "Commission to Assess the Threat to the United States from Electromagnetic Pulse Attacks and Events." Members of the Commission would be appointed by the chairmen and ranking members of the House Committee on Armed Services and the Senate Committee on Armed Services.

This section would state that the duties of the Commission would be to review and assess various matters related to electromagnetic pulse attacks and events, both natural and man-made, that could be directed at or affect the United States within the next 20 years. The Commission would be required to submit a final report and interim briefing on its findings, conclusions, and recommendations, and the Secretary of Defense would be required to submit any views of the Secretary on the Commission's final report. This section would authorize \$3.0 million for the activities of the Commission, would terminate the Commission 3 months after the Secretary submits views on the Commission's report, and would state that the Federal Advisory Committee Act (5 U.S.C. App.) applies to the Commission.

Finally, this section would repeal title XIV of the Floyd D. Spence National Defense Authorization Act for Fiscal Year 2001 (Public Law 106–398).

# Section 1699C—Pilot Program on Electromagnetic Spectrum Mapping

This section would establish a pilot program to assess the viability of space-based mapping of the electromagnetic spectrum used by the Department of Defense. It also directs an interim and final briefing by the Secretary of the Defense demonstrating how the Secretary plans to implement the pilot program.

# TITLE XVII—MATTERS RELATING TO SMALL BUSINESS PROCUREMENT

## LEGISLATIVE PROVISIONS

SUBTITLE A—IMPROVING TRANSPARENCY AND CLARITY FOR SMALL BUSINESSES

Section 1701—Improving Reporting on Small Business Goals

This section would amend section 15(h) of the Small Business Act (15 U.S.C. 644(h)) to require the Small Business Administration, using data already required to be collected from contractors, to track companies that outgrow or no longer qualify for a small business program, as well as identify how prime contracting goals are met. The Small Business Administration would provide this information in its annual report, but only after relevant data systems have been modified to facilitate data collection and reporting. The committee expects the Office of Small Business Programs at the Department of Defense to take a leadership role in ensuring that the systems are appropriately modified.

## Section 1702—Uniformity in Procurement Terminology

This section would amend section 3(m) of the Small Business Act (15~U.S.C.~632(m)) and section 15(j) of the Small Business Act (15~U.S.C.~644(j)) to update procurement terminology consistent with the Federal Acquisition Regulation and with terminology used in titles 10 and 41, United States Code.

## Section 1703—Responsibilities of Commercial Market Representatives

This section would amend section 4(h) of the Small Business Act (15 U.S.C. 633(h)) to provide a clear definition of the duties and responsibilities of the commercial market representatives employed by the Small Business Administration. Responsibilities would include providing assistance to small business concerns seeking subcontracting opportunities on Federal contracts and assisting prime contractors with meeting the subcontracting obligations found in section 8(d) of the Small Business Act (15 U.S.C. 637(d)).

### Section 1704—Responsibilities of Business Opportunity Specialists

This section would amend section 4(g) of the Small Business Act (15 U.S.C. 633(g)) to add a job description and reporting hierarchy for business opportunity specialists of the Small Business Administration.

#### SUBTITLE B—WOMEN'S BUSINESS PROGRAMS

# Section 1711—Office of Women's Business Ownership

This section would amend section 29(g) of the Small Business Act (15 U.S.C. 656(g)) to clarify the duties of the Small Business Administration's Office of Women's Business Ownership and require that the office establish an accreditation program for its grant recipients.

#### Section 1712—Women's Business Center Program

This section would amend section 29 of the Small Business Act (15 U.S.C. 656), relating to the Women's Business Center Program, to provide definitions of key terms relating to eligibility; adjust the statutory cap on grants and requirement for matching funds by \$0.035 million; establish a mechanism for use of unobligated grant funds at the end of the fiscal year; and improve oversight of grant recipients. This section also would require longer term planning, provide for continued authorization levels, and improve the application process.

#### Section 1713—Matching Requirements Under Women's Business Center Program

This section would amend section 29 of the Small Business Act (15 U.S.C. 656), relating to the Women's Business Center Program, to limit the ability of the Administrator of the Small Business Administration to waive the requirement for matching funds by grant recipients. It also would provide that excess non-Federal dollars obtained by a grant recipient will not be subject to part 200 of title 2, Code of Federal Regulations, or any successor regulations.

#### SUBTITLE C—SCORE PROGRAM

#### Section 1721—SCORE Reauthorization

This section would amend section 20 of the Small Business Act (15 U.S.C. 631 note) to authorize the SCORE program through fiscal year 2019, and to permit the current level of appropriations to extend through that period.

### Section 1722—SCORE Program

This section would amend sections 8(b) and 8(c) of the Small Business Act (15 U.S.C. 637(b)–(c)) to rename the Service Corps of Retired Executives program as the "SCORE" program. This section would provide definitions for terms used in the SCORE program, require an annual report on the effectiveness of the program, and direct the Small Business Administration to establish standards protecting the information of entrepreneurs counseled by SCORE. Finally, this section would direct SCORE to utilize webinars and electronic mentoring as a way to increase SCORE's presence, and to engage in longer term strategic planning.

#### Section 1723—Online Component

This section would amend section 8(c) of the Small Business Act (15 U.S.C. 637(c)) to require SCORE to utilize webinars and electronic mentoring as a way to increase SCORE's presence. It would further require SCORE to provide a report to the Senate Committee on Small Business and Entrepreneurship and the House Committee on Small Business regarding the results of the online component requirement.

# Section 1724—Study and Report on the Future Role of the SCORE $$\operatorname{\textbf{Program}}$$

This section would require SCORE to engage in long-term strategic planning for how the program will evolve to meet the needs of America's entrepreneurs over the next 5 years.

### Section 1725—Technical and Conforming Amendments

This section makes technical and conforming amendments to the Small Business Act (15 U.S.C. 631) reflective of other changes made in this title, such as the changing of name of program from Services Corps of Retired Executives to SCORE.

# SUBTITLE D—SMALL BUSINESS DEVELOPMENT CENTERS IMPROVEMENTS

### Section 1731—Use of Authorized Entrepreneurial Development Programs

This section would amend the Small Business Act (15 U.S.C. 631) by creating a new section to prohibit the Administrator of the Small Business Administration (SBA) from using unauthorized programs to deliver entrepreneurial development assistance. It would further require the Administrator to issue a report to the Committee on Small Business of the House of Representatives and the Committee on Small Business and Entrepreneurship of the Senate

detailing all entrepreneurial development activities to ensure taxpayer dollars are being spent wisely and efficiently.

### Section 1732—Marketing of Services

This section would amend section 21 of the Small Business Act (15 U.S.C. 648) by creating a new subsection to provide more flexibility to Small Business Development Centers to market and advertise their products and services.

#### Section 1733—Data Collection

This section would amend section 21(a)(3)(A) of the Small Business Act (15 U.S.C. 648(a)(3)(A)) to require the Administrator of the Small Business Administration to collaborate with the Association of Small Business Development Centers, which acts as a resource partner, on the development of data collection documents. It further creates a new subsection that requires an annual report to the Committee on Small Business of the House of Representatives and the Committee on Small Business and Entrepreneurship of the Senate on data collection activities and establishes a working group on data collection.

Section 1734—Fees From Private Partnerships and Cosponsorships

This section would further amend Section 21(a)(3) of the Small Business Act (15 U.S.C. 648(a)(3)(C)), as amended by section 104, to allow Small Business Development Centers to collect fees for the operation of partnerships and cosponsorships, which is currently not permissible.

Section 1735—Equity for Small Business Development Centers

This section would amend section 21(a)(4)(C)(v) of the Small Business Act (15 U.S.C. 648(a)(4)(C)(v)) to increase by \$100,000 the authorized funding level that could be used by the Administrator of the Small Business Administration to pay the Association of Small Business Development Centers for accreditation services, which would help to ensure enhanced Small Business Development Centers across the United States.

## Section 1736—Confidentiality Requirements

This section would amend Section 21(a)(7)(A) of the Small Business Act (15 U.S.C. 648(a)(7)(A)) to prohibit the Small Business Administration from sharing Small Business Development Center client information with third parties. While the collection of certain information enhances the ability to track performance metrics, sharing sensitive information, such as the name of a business, is not necessary.

Section 1737—Limitation on Award of Grants to Small Business Development Centers

This section would amend Section 21 of the Small Business Act (15 U.S.C. 648) by creating a new subsection that prohibits entities other than higher education institutions from becoming a Small Business Development Center grantee. It also would provide an exception to those non-higher education entities that are currently

operating in the program. It would clarify that Women's Business Centers may receive funds from Small Business Development Center lead centers to act as subgrantees.

#### SUBTITLE E-MISCELLANEOUS

Section 1741—Modification of Past Performance Pilot Program to Include Consideration of Past Performance With Allies of the United States

This section would amend section 8(d)(17) of the Small Business Act (15 U.S.C. 637(d)(17)) to require that the past performance pilot program authorized in section 8(d) of the Small Business Act allow small businesses to submit performance of a contract for a sale of defense items to the Government of a North Atlantic Treaty Organization (NATO) ally, the Government of a major non-NATO ally, or the government of a country with which the United States has a defense cooperation agreement for consideration for a past performance rating. The committee believes that this provision would improve the ability of small businesses to compete for contracts with Federal agencies.

# DIVISION B—MILITARY CONSTRUCTION AUTHORIZATIONS

## **PURPOSE**

Division B provides military construction, family housing, and related authorities in support of the military departments during fiscal year 2018. As recommended by the committee, division B would authorize appropriations in the amount of \$10,221,942,000 for construction in support of the Active Forces, Reserve Components, defense agencies, and the North Atlantic Treaty Organization security infrastructure fund for fiscal year 2018.

# MILITARY CONSTRUCTION AND FAMILY HOUSING OVERVIEW

The Department of Defense requested \$8,119,429,000 for military construction, \$255,867,000 for Base Realignment and Closure (BRAC) activities, and \$1,407,155,000 for family housing for fiscal year 2018. The committee recommends authorization of appropriations of \$7,932,978,000 for military construction, \$290,867,000 for BRAC activities, and \$1,361,155,000 for family housing in fiscal year 2018. The Department of Defense also requested \$638,130,000 for Overseas Contingency Operations military construction for fiscal year 2018. The committee recommends authorization of appropriations of \$636,942,000 for Overseas Contingency Operations military construction within title XXIX.

## Section 2001—Short Title

This section would cite division B of this Act as the "Military Construction Authorization Act for Fiscal Year 2018."

Section 2002—Expiration of Authorizations and Amounts Required To Be Specified by Law

This section would ensure that the authorizations provided in titles XXI through XXVII and title XXIX of this Act shall expire on October 1, 2020, or the date of the enactment of an Act authorizing funds for military construction for fiscal year 2021, whichever is later

### Section 2003—Effective Date

This section would provide that titles XXI through XXVII and title XXIX of this Act shall take effect on October 1, 2017, or the date of the enactment of this Act, whichever is later.

## TITLE XXI—ARMY MILITARY CONSTRUCTION

#### **SUMMARY**

The budget request contained \$920,394,000 for Army military construction and \$529,287,000 for family housing for fiscal year 2018. The committee recommends authorization of appropriations of \$957,794,000 for military construction and \$511,287,000 for family housing for fiscal year 2018.

#### ITEMS OF SPECIAL INTEREST

#### **Explanation of Funding Adjustments**

The committee recommends an increase of funding for a project contained in the budget request submitted by the Department of the Army for military construction and family housing. Specifically, this increase is:

(1) \$10.0 million for Unspecified Minor Construction at various worldwide locations. The budget request included \$31.5 million in funding for this project. The committee recommends \$41.5 million, an increase of \$10.0 million, for this project.

In addition, the committee recommends reduction of funding for a project contained in the base budget request for military construction and family housing and recommends a transfer of this project to the Overseas Contingency Operations title of this Act. This reductions is:

(1) \$6.4 million for the Forward Operating Site at an unspecified location in Turkey. The budget request included \$6.4 million to support the expansion of Life and Mission support facilities for U.S. and host-nation personnel at a Missile Defense forward operating site (FOS). The committee supports this requirement. However, the committee recommends no funds in the base budget, a reduction of \$6.4 million, for this project in order to transfer this project to Title XXIX, Overseas Contingency Operations Military Construction.

Finally, the committee recommends the inclusion of funding for several projects requested by the Department of the Army but not contained in the budget request for military construction and family housing. These increases include:

(1) \$33.0 million for a Vehicle Maintenance Shop at Fort Hood, Texas. The committee notes that this project was included on a list of unfunded project requirements submitted by the Department of the Army. Therefore, the committee recommends \$33.0 million, an

increase of \$33.0 million, for this project.

(2) \$10.8 million for an Air Traffic Control Tower at Fort Benning, Georgia. The committee notes that this project was included on a list of unfunded project requirements submitted by the Department of the Army. Therefore, the committee recommends \$10.8 million, an increase of \$10.8 million, for this project.

# **Army Power Projection Platforms**

Army power projection platforms are critical to mission readiness. Consistent review, sustainment, and timely recapitalization are necessary to maintain airfield and rail infrastructure at the required mission functional and readiness ratings. Therefore, the committee directs the Secretary of the Army to provide a briefing to the House Committee on Armed Services, not later than March 1, 2018, detailing the Army's power projection platform infrastructure investment strategy. The briefing shall include an overview of the current mission function and readiness ratings for the Infrastructure Mobility Category at power project platforms as indicated in the Installation Status Report and a current Army Power Projection Platform Transportation Infrastructure Capability Assessment Study with the Army's recommendations and associated cost estimates for required infrastructure improvements.

### Pohakuloa Training Area

The committee notes that the Pohakuloa Training Area supports joint and combined arms training for military forces in the Pacific region. Its 133,000 acres, cantonment area, and airfield support company and battalion level live-fire training using small-arms and crew-served weapons as well as artillery and mortar live-fire training. The committee is aware that the Department of the Army currently leases land from the State of Hawaii that makes up a portion of the Pohakuloa Training Area. The committee recognizes the important role that Pohakuloa Training Area plays in support of building and sustaining Army and Joint Force readiness and believes that ensuring continued long-term access to Pohakuloa is in the Army's interests. While the committee recognizes that the current lease is set to expire in 2029, the committee believes the Army should begin the process as soon as possible to ensure continued long-term access to the land for training.

# LEGISLATIVE PROVISIONS

Section 2101—Authorized Army Construction and Land Acquisition Projects

This section would contain the list of authorized Army construction projects for fiscal year 2018. The authorized amounts are listed on an installation-by-installation basis. The State list contained in this Act is intended to be the binding list of the specific projects authorized at each location.

# Section 2102—Family Housing

This section would authorize new construction and planning and design of family housing units for the Army for fiscal year 2018.

Section 2103—Improvements to Military Family Housing Units

This section would authorize the Secretary of the Army to make improvements to existing units of family housing for fiscal year 2018.

Section 2104—Authorization of Appropriations, Army

This section would authorize appropriations for Army military construction at the levels identified in section 4601 of division D of this Act.

Section 2105—Modification of Authority to Carry Out Certain Fiscal Year 2014 Project

This section would modify the authority provided by section 2101 of the Military Construction Authorization Act for Fiscal Year 2014 (division B of Public Law 113–66) and authorize the Secretary of the Army to make certain modifications to the scope of a previously authorized construction project.

Section 2106—Modification of Authority to Carry Out Certain Fiscal Year 2015 Project

This section would modify the authority provided by section 2101 of the Military Construction Authorization Act for Fiscal Year 2015 (division B of Public Law 113–291) to authorize the Secretary of the Army to make certain modifications to the scope of a previously authorized construction project.

Section 2107—Extension of Authorization of Certain Fiscal Year 2014 Project

This section would extend the authorization of a certain project originally authorized by section 2101 of the Military Construction Authorization Act for Fiscal Year 2014 (division B of Public Law 113–66) until October 1, 2018, or the date of the enactment of an act authorizing funds for military construction for fiscal year 2019, whichever is later.

Section 2108—Extension of Authorizations of Certain Fiscal Year 2015 Projects

This section would extend the authorization of certain projects originally authorized by section 2101 of the Military Construction Authorization Act for Fiscal Year 2015 (division B of Public Law 113–291) until October 1, 2018, or the date of the enactment of an act authorizing funds for military construction for fiscal year 2019, whichever is later. This section was included in the President's request.

Section 2109—Additional Authority to Carry Out Certain Fiscal Year 2000, 2005, 2006, and 2007 Projects

This section provides additional authority to carry out certain fiscal year 2000, 2005, 2006, and 2007 projects.

# TITLE XXII—NAVY MILITARY CONSTRUCTION

# **SUMMARY**

The budget request contained \$1,616,665,000 for Navy military construction and \$411,964,000 for family housing for fiscal year 2018. The committee recommends authorization of appropriations of \$1,674,985,000 for military construction and \$403,964,000 for family housing for fiscal year 2018.

#### ITEMS OF SPECIAL INTEREST

# **Explanation of Funding Adjustments**

The committee recommends reduction of funding for a project contained in the budget request submitted by the Department of the Navy for military construction and family housing. This reduction is:

(1) \$45.19 million for Washington Navy Yard antiterrorism/force protection at the Washington Navy Yard, District of Columbia. The budget request included \$60.0 million to enable protection of critical assets from explosive threats, acoustic and electronic surveillance and encroachment. The committee believes the Navy should seek more fiscally responsible options to address antiterrorism and force protection issues at the Washington Navy Yard. The committee supports taking steps to address force protection at Navy installations, but believes a \$45.19 million land acquisition for real property on which to construct a museum is not a cost-effective or appropriate approach. Therefore, the committee recommends \$14.81 million, a reduction of \$45.19 million, for this project.

In addition, the committee recommends reduction of funding for a project contained in the base budget request submitted by the Department of the Navy for military construction and family housing and recommends a transfer of this projects to the Overseas

Contingency Operations title of this Act. This reduction is:

(1) \$13.39 million for an Aircraft Parking Apron Expansion at Camp Lemonnier, Djibouti. The budget request included \$13.39 million to support transient and steady-state aircraft parking requirements. The committee supports this requirement. However, the committee recommends no funds in the base budget, a reduction of \$13.39 million, for this project in order to transfer this project to Title XXIX, Overseas Contingency Operations Military Construction.

Finally, the committee recommends the inclusion of funding for several projects requested by the Department of the Navy but not contained in the budget request for military construction and family bearing. These increases include:

ily housing. These increases include:

(1) \$47.6 million for an F-35 Simulator Facility at Miramar, California. The committee notes that this project was included on a list of unfunded project requirements submitted by the Department of the Navy. Therefore, the committee recommends \$47.6 million, an increase of \$47.6 million, for this project.

(2) \$43.3 million for a Combat Vehicle Warehouse at Albany, Georgia. The committee notes that this project was included on a list of unfunded project requirements submitted by the Department of the Navy. Therefore, the committee recommends \$43.3 million,

an increase of \$43.3 million, for this project.

(3) \$36.0 million for an Úndersea Rescue Command Operations Building at Coronado, California. The committee notes that this project was included on a list of unfunded project requirements submitted by the Department of the Navy. Therefore, the committee recommends \$36.0 million, an increase of \$36.0 million, for this project.

Assessment of Department of Defense Equities for Operation and Maintenance of the George P. Coleman Memorial Bridge, Yorktown, VA

The committee notes that the George P. Coleman Memorial Bridge, spanning the York River between Yorktown and Gloucester Point, Virginia, is critical to the efficient transport of cargo to and from Naval Weapons Station Yorktown. The bridge's unique double swing design allows transport vessels bound for military installations upstream to reach their destinations without delay. In 1996, the bridge became a toll bridge to support construction of a new four-lane bridge to improve traffic flow. Daily bridge commuters can pay upwards of \$500 per year in toll fees, some of which may go to operate the bridge's double swing span. The committee wishes to better understand the benefit the Department is deriving from commuter tolls and whether commuters are bearing an unfair burden. Therefore, the committee directs the Secretary of Defense to provide a briefing to the House Committee on Armed Services, not later than March 1, 2018, that assesses the military value of the span, including details on the utilization rate of the span by the Department of Defense and other non-Department of Defense upriver traffic. In addition, the briefing should address the Department's discussions with local and State stakeholders that have fiduciary responsibility for the construction and management of the bridge, summarize any Department of Defense authorities and opportunities to help mitigate costs, and provide the Department's views whether such mitigations are appropriate.

# Red Hill Bulk Underground Fuel Storage Facility

The committee has previously noted the strategic value of the Red Hill Underground Fuel Storage Facility and the support that it provides to U.S. Pacific Command operations in peacetime and contingency. The committee continues to believe that the Red Hill Underground Storage Facility is a national strategic asset that supports combatant commander theater security requirements, contingency operations, and routine movements in the Indo-Asia-Pacific region. Despite its importance, the committee notes that the facility faces long-term challenges without adequate and timely resources to recapitalize the storage tanks to ensure their long-term integrity and environmental compliance.

The committee notes that in the committee report (H. Rept. 114–102) accompanying the National Defense Authorization Act for Fiscal Year 2016, the committee required the Director of the Defense Logistics Agency to provide a briefing to the committee 30 days after the approval of the best available and practicable technology (BAPT) solutions and the proposed recapitalization plan for the

Red Hill Underground Storage Facility. Similarly, in the committee report (H. Rept. 114-537) accompanying the National Defense Authorization Act for Fiscal Year 2017, the committee required the Secretary of the Navy to brief the committee 30 days after the approval of the completion of the Tank Upgrade Alternative decision document for application of the BAPT that will be used for the Red Hill Underground Storage Facility as well as address any updates to the Ground Water Protection Plan. The committee believes these briefing requirements remain valid and looks forward to receiving

these briefings within the specified timelines.

Finally, the committee believes it is important for the Department of Defense to provide a detailed plan that identifies funding requirements, scope of work, and timelines for the application of the BAPT solutions that will be used in the Red Hill Underground Storage Facility. The committee expects that much of these details would be included in the annual budget justification materials submitted to Congress in support of the Department of Defense budget for a given fiscal year, as well as the Future Years Defense Program. However, the committee also believes that it is important the Department make this information publicly available to ensure transparency of the work being performed and ensure continued safe operations while mitigating and preventing future fuel leaks at the Red Hill Bulk Fuel Storage Facility.

#### Requirements for Munitions and Explosives of Concern Clearance on Guam

The committee recognizes the efforts the Navy has undertaken to improve communication with stakeholders regarding the Explosive Safety Submission (ESS) requirements for Munitions and Explosives of Concern (MEC) clearance on military construction projects on Guam. The committee is supportive of these efforts and encourages the Navy to continue to hold regular sessions with stakeholders to solicit feedback on the ESS and its exemptions, consistency of application across projects, and impacts on military construction projects. The committee believes a key element to continuing to improve communication with stakeholders is to hire a full-time civilian employee to oversee, coordinate, and administer the implementation of the ESS and its associated amendments. The committee understands that the Navy has still not filled such a position and encourages the Navy to expedite the hiring process and consider temporarily assigning military or civilian personnel to fill that role in the interim. In addition, the committee believes the establishment of a Quality Assurance Surveillance Program would help better standardize the quality assurance requirements and streamline the implementation of the written requirements related to MEC clearance in support of military construction projects on

As this process has developed, the preponderance of possible hazardous explosives found at construction sites on Guam have been determined to be nonhazardous.

With that in mind, the committee believes the Navy should continue to periodically revisit the ESS and consider issuing additional exemptions that reflect stakeholder input and conditions on the ground to balance the cost, schedule, and efficacy of MEC clearance in support of military construction projects on Guam. The committee also notes that the Navy has not updated its MEC Likelihood Map for Guam to reflect data that has been gathered since the ESS was initially approved in 2010. The committee believes the Navy should update this document to better inform the ESS and additional exemptions to better inform MEC clearance on Guam. The committee directs the Secretary of the Navy to provide a briefing to the House Committee on Armed Services not later than September 30, 2017, on the status of the Navy's MEC response on Guam. Specifically the briefing should provide an update on the Navy's efforts to hire a full-time individual to oversee, coordinate, and administer the implementation of the ESS on Guam; how the Navy is addressing the Quality Assurance Surveillance Program requirements for MEC clearance on Guam; its plans to update the MEC Likelihood Map for Guam; and the data on hazardous versus nonhazardous anomalies detected, to include inoperable munitions, on Guam.

#### LEGISLATIVE PROVISIONS

Section 2201—Authorized Navy Construction and Land Acquisition Projects

This section would contain the list of authorized Navy construction projects for fiscal year 2018. The authorized amounts are listed on an installation-by-installation basis. The State list contained in this Act is intended to be the binding list of the specific projects authorized at each location.

#### Section 2202—Family Housing

This section would authorize new construction and planning and design of family housing units for the Department of the Navy for fiscal year 2018.

Section 2203—Improvements to Military Family Housing Units

This section would authorize the Secretary of the Navy to make improvements to existing units of family housing for fiscal year 2018.

Section 2204—Authorization of Appropriations, Navy

This section would authorize appropriations for Navy military construction at the levels identified in section 4601 of division D of this Act.

Section 2205—Extension of Authorizations for Certain Fiscal Year 2014 Projects

This section would extend the authorization of certain projects originally authorized by section 2201 of the Military Construction Authorization Act for Fiscal Year 2014 (division B of Public Law 113–66) until October 1, 2018, or the date of the enactment of an Act authorizing funds for military construction for fiscal year 2019, whichever is later.

Section 2206—Extension of Authorizations of Certain Fiscal Year 2015 Projects

This section would extend the authorization of certain projects originally authorized by section 2201 of the Military Construction Authorization Act for Fiscal Year 2015 (division B of Public Law 113–291) until October 1, 2018, or the date of the enactment of an Act authorizing funds for military construction for fiscal year 2019, whichever is later.

# TITLE XXIII—AIR FORCE MILITARY CONSTRUCTION

# **SUMMARY**

The budget request contained \$1,738,796,000 for Air Force military construction and \$403,386,000 for family housing for fiscal year 2018. The committee recommends authorization of appropriations of \$1,610,774,000 for military construction and \$383,386,000 for family housing for fiscal year 2018.

#### ITEMS OF SPECIAL INTEREST

# **Explanation of Funding Adjustments**

The committee recommends reduction of funding for a project contained in the budget request submitted by the Department of the Air Force for military construction and family housing. This reduction is:

(1) \$130.0 million for the Presidential Aircraft Recap Complex at Joint Base Andrews, Maryland. This budget request included \$254.0 million to construct a complex to support the beddown of the new aircraft for the Presidential Airlift Group. The committee supports the requirement for this project and provides the full project authorization of \$254.0 million included in the budget request. However, the committee supports the authorization of appropriations in an amount equivalent to the ability of the Department to execute in the year of the authorization for appropriations. For this project, the committee believes that the Department of Defense has exceeded its ability to fully expend the funding in fiscal year 2018. Therefore, the committee recommends \$124.0 million, a reduction of \$130.0 million, for this project.

In addition, the committee also recommends reduction of funding for several projects contained in the base budget request submitted by the Department of the Air Force for military construction and family housing and recommends a transfer of these projects to the Overseas Contingency Operations title of this Act. These reductions include:

(1) \$27.325 million for a Guardian Angel Operations Facility at Aviano Air Base, Italy. The budget request included \$27.325 million to support the relocation of search and rescue operations to Aviano Air Base, Italy. The committee supports this requirement. However, the committee recommends no funds in the base budget, a reduction of \$27.325 million, for this project in order to transfer this project to Title XXIX, Overseas Contingency Operations Military Construction.

- (2) \$25.977 million for a 216 Person Dormitory at Incirlik Air Base, Turkey. The budget request included \$25.977 million to construct a dormitory to support security forces and required response times. The committee supports this requirement. However, the committee recommends no funds in the base budget, a reduction of \$25.977 million, for this project in order to transfer this project to Title XXIX, Overseas Contingency Operations Military Construction.
- (3) \$15.0 million for a Consolidated Squadron Operations Facility at Al Udeid Air Base, Qatar. The budget request included \$15.0 million to support the consolidation of administration and management functions from separated temporary facilities into a consolidated permanent facility that is properly sized and configured. The committee supports this requirement. However, the committee recommends no funds in the base budget, a reduction of \$15.0 million, for this project in order to transfer this project to Title XXIX, Overseas Contingency Operations Military Construction.

The committee also recommends the inclusion of funding for several projects requested by the Department of the Air Force but not contained in the budget request for military construction and fam-

ily housing. These increases include:

(1) \$44.0 million for Dormitories (288 RM) at Eglin Air Force Base, Florida. The committee notes that this project was included on a list of unfunded project requirements submitted by the Department of the Air Force. Therefore, the committee recommends \$44.0 million, an increase of \$44.0 million, for this project.

(2) \$17.0 million for a Fire Station at Tyndall Air Force Base, Florida. The committee notes that this project was included on a list of unfunded project requirements submitted by the Department of the Air Force. Therefore, the committee recommends \$17.0 mil-

lion, an increase of \$17.0 million, for this project.

(3) \$9.3 million for a Fire Station at Kirtland Air Force Base, New Mexico. The committee notes that this project was included on a list of unfunded project requirements submitted by the Department of the Air Force. Therefore, the committee recommends \$9.3

million, an increase of \$9.3 million, for this project.

Finally, the budget request submitted by the Department of the Air Force for military construction and family housing included \$269.0 million for a KC-46A Main Operating Base 4 at an unspecified location. The committee notes that on January 12, 2017, the Secretary of the Air Force announced Joint Base McGuire-Dix-Lakehurst, New Jersey, and Travis Air Force Base, California, as preferred alternatives for KC-46A Main Operating Base 4, with 24 primary assigned aircraft at each base. Furthermore, on June 5, 2017, the Secretary of the Air Force announced the decision to sequence the aircraft to Joint Base McGuire-Dix-Lakehurst with first aircraft arrival in fiscal year 2021, and to Travis Air Force Base with first aircraft arriving fiscal year 2023, pending KC-46 delivery schedule. Based on these announcements, the Air Force provided the committee with a list of specific military construction projects to facilitate this basing action. Therefore, the committee recommends a reduction of \$269.0 million for the KC-46A Main Operating Base 4 project at an unspecified location and the inclusion of funding for several projects for the KC-46A Main Operating Base 4 requested by the Department of the Air Force but not contained in the budget request for military construction and family housing. These projects include:

(1) \$107.0 million for a KC-46A Aircraft 3-Bay Maintenance

Hangar at Travis Air Force Base, California;

- (2) \$72.0 million for a KC-46A Two-Bay General Purpose Maintenance Hangar at Joint Base McGuire-Dix-Lakehurst, New Jer-
- (3) \$18.0 million for a KC-46A ADAL B2324 Regional MX Training Facility at Joint Base McGuire-Dix-Lakehurst, New Jersey;

(4) \$17.0 million for a KC-46A Alter Apron & Fuel Hydrants

project at Joint Base McGuire-Dix-Lakehurst, New Jersey

- (5) \$9.0 million for a KC-46A Alter Bldgs for Ops and TFI AMU-
- AMXS project at Joint Base McGuire-Dix-Lakehurst, New Jersey; (6) \$7.7 million for a KC-46A Alter B811 Corrosion Control Hangar project at Travis Air Force Base, California; (7) \$6.9 million for KC-46A ADAL B1816 for Supply project at
- Joint Base McGuire-Dix-Lakehurst, New Jersey
- (8) \$6.4 million for a KC-46A Alter B181/185/187 Squad Ops/

AMU project at Travis Air Force Base, California;

- (9) \$6.1 million for KC-46A ADAL B2319 for Boom Operator Trainer project at Joint Base McGuire-Dix-Lakehurst, New Jersey;
- (10) \$5.8 million for a KC-46A Alter Facilities for Maintenance project at Joint Base McGuire-Dix-Lakehurst, New Jersey;

(11) \$4.1 million for a KC-46A Aerospace Ground Equipment Storage project at Joint Base McGuire-Dix-Lakehurst, New Jersey;

(12) \$3.3 million for a KC-46A ADAL B3209 for Fuselage Trainer project at Joint Base McGuire-Dix-Lakehurst, New Jersey;

(13) \$2.3 million for KC-46A Add to B1837 for Body Tanks Storage project at Joint Base McGuire-Dix-Lakehurst, New Jersey

- (14) \$2.0 million for KC-46A ADAL B1749 for ATGL & LST Servicing project at Joint Base McGuire-Dix-Lakehurst, New Jer-
- (15) \$1.4 million for KC-46A ADAL B14 Fuel Cell Hangar project at Travis Air Force Base, California.

# Air Force Dormitory Master Plan

The committee is aware that the Air Force maintains 866 permanent party dormitories world-wide and is in the process of developing an updated Dormitory Master Plan. The committee also understands the Air Force is reviewing its current unaccompanied housing strategy and policy as part of a working group led by senior Air Force enlisted personnel, with an emphasis on sustaining and improving the existing dormitory inventory. Therefore, the committee directs the Secretary of the Air Force to provide a briefing to the House Committee on Armed Services by March 1, 2018, on the results of the senior Airmen working group and the Air Force's updated Dormitory Master Plan. The briefing should include the total amount of military construction, sustainment, restoration, and modernization funding required to recapitalize unaccompanied dormitories by an Air Force determined date and the annual sustainment funding required to maintain unaccompanied dormitories. The briefing should also include an analysis of the feasibility of privatizing dormitories in some locations to speed improvements and reduce costs.

# Lincoln Laboratory Recapitalization

The committee recognizes the critical role that Lincoln Laboratory plays in conducting research and developing technologies that address critical national security challenges. The committee notes that the National Defense Authorization Act for Fiscal Year 2017 (Public Law 114-328) included \$40.0 million, as requested by the Air Force, for the planning and design of two military construction projects to support the recapitalization of facilities to support Lincoln Laboratory. The committee understands that the Air Force intends to award an architectural and engineering contract for the design of these facilities by early October 2017. Furthermore, the committee notes that the Future Years Defense Program submitted with the budget request for fiscal year 2018 has \$225.0 million programmed for the construction of a West Laboratory Compound Semi-Conductor Lab/Microelectronics Integration Facility in fiscal year 2019, and \$216.0 million programmed for a West Laboratory Engineering Prototype Facility in fiscal year 2022. The committee commends the Secretary of the Air Force for programming these investments and for committing to the recapitalization of the facilities and Lincoln Laboratory. The committee supports these important recapitalization efforts in order to keep the Department of Defense and the military services at the cutting edge of technology.

# LEGISLATIVE PROVISIONS

# Section 2301—Authorized Air Force Construction and Land Acquisition Projects

This section would contain the list of authorized Air Force construction projects for fiscal year 2018. The authorized amounts are listed on an installation-by-installation basis. The State list contained in this Act is intended to be the binding list of the specific projects authorized at each location.

#### Section 2302—Family Housing

This section would authorize new construction and planning and design of family housing units for the Air Force for fiscal year 2018

Section 2303—Improvements to Military Family Housing Units

This section would authorize the Secretary of the Air Force to make improvements to existing units of family housing for fiscal year 2018.

Section 2304—Authorization of Appropriations, Air Force

This section would authorize appropriations for Air Force military construction at the levels identified in section 4601 of division D of this Act.

# Section 2305—Modification of Authority To Carry Out Certain Fiscal Year 2017 Projects

This section would modify the authority provided by section 2301 of the Military Construction Authorization Act for Fiscal Year 2017 (division B of Public Law 114–328) and authorize the Secretary of

the Air Force to make certain modifications to the scope of previously authorized construction projects.

Section 2306—Extension of Authorizations of Certain Fiscal Year 2015 Projects

This section would extend the authorization of certain projects originally authorized by section 2301 of the Military Construction Authorization Act for Fiscal Year 2015 (division B of Public Law 113–291) until October 1, 2018, or the date of the enactment of an act authorizing funds for military construction for fiscal year 2019, whichever is later.

# TITLE XXIV—DEFENSE AGENCIES MILITARY CONSTRUCTION

#### **SUMMARY**

The budget request contained \$3,114,913,000 for defense agency military construction and \$62,518,000 for family housing for fiscal year 2018. The committee recommends authorization of appropriations of \$2,763,832,000 for military construction and \$62,518,000 for family housing for fiscal year 2018.

#### ITEMS OF SPECIAL INTEREST

# **Explanation of Funding Adjustments**

The committee recommends reduction of funding for several projects contained in the budget request submitted by the Department of Defense for military construction and family housing. These reductions include:

(1) \$181.0 million for Next NGA West (N2W) Complex at St. Louis, Missouri. The budget request included \$381.0 million to construct the first phase of a new complex for the National Geospatial-Intelligence Agency as it relocates to a new location in St. Louis, Missouri. The committee is aware that a \$439.1 million second phase is also required to support the relocation. The committee believes it is more appropriate to authorize the full scope of a military construction requirement and provide incremental funding as opposed to bifurcating a construction project into separate phases. Therefore, the committee recommends combining the two phases into a single project and provides a total authorization of \$812.0 million for the Next NGA West (N2W) Complex in St. Louis, Missouri. However, the committee supports providing an authorization of appropriations for fiscal year 2018 only in an amount equivalent to the ability of the National Geospatial-Intelligence Agency to execute in the year of the authorization of appropriations. Therefore, the committee recommends \$200.0 million, a reduction of \$181.0 million, for this project in fiscal year 2018.
(2) \$100.0 million for the Hospital Replacement at Fort Leonard

(2) \$100.0 million for the Hospital Replacement at Fort Leonard Wood, Missouri. The budget request includes \$250.0 million to construct the first phase of a replacement hospital at Fort Leonard Wood, Missouri. The committee is aware that a \$135.0 million second phase is also required to support the medical requirements at Fort Leonard Wood. The committee believes it is more appropriate

to authorize the full scope of a military construction requirement and provide incremental funding as opposed to bifurcating a construction project into separate phases. Therefore, the committee recommends combining the two phases into a single project and provides a total authorization of \$381.3 million for the Hospital Replacement at Fort Leonard Wood, Missouri. However, the committee supports providing an authorization of appropriations for fiscal year 2018 only in an amount equivalent to the ability of the Defense Health Agency to execute in the year of the authorization of appropriations. Therefore, the committee recommends \$150.0 million, a reduction of \$100.0 million, for this project in fiscal year 2018.

(3) \$11.941 million for the Blood Processing Center Replacement at Fort Leonard Wood, Missouri. The budget request included \$11.941 million to construct a new blood processing center at Fort Leonard Wood, Missouri. The committee notes that a project was also included in the budget request to construct a hospital replacement at Fort Leonard Wood, Missouri. The committee believes there is a valid requirement for a new blood processing center, but believes the Defense Health Agency should consider including it in the scope of the new hospital as opposed to constructing it as a separate, stand-alone project. Therefore, the committee recommends no funds, a reduction of \$11.941 million, for this project.

(4) \$8.3 million for a Blood Processing Center at Fort Bliss, Texas. The budget requests includes \$8.3 million to construct a new blood processing center at Fort Bliss, Texas. The committee notes that a project was also included in the budget request to provide an authorization of appropriations for the 8th increment for a hospital replacement project at Fort Bliss. The committee believes there is a valid requirement for a new blood processing center, but believes the Defense Health Agency should consider including it in the scope of the new hospital as opposed to constructing it as a separate, stand-alone project. Therefore, the committee recommends

no funds, a reduction of \$8.3 million, for this project.

(5) \$10.0 million for Contingency Construction at Unspecified Worldwide Locations. The budget request included \$10.0 million to support contingency construction requirements not previously authorized by law. The committee notes that the Department of Defense has not requested a military construction project using funds from this account since 2008. In addition, the committee notes that unobligated balances remain available in the military construction account and other authorities exist to construct projects that are in keeping with a national security interest. As such, the committee recommends no funds, a reduction of \$10.0 million, for this program.

In addition, the committee recommends reduction of funding for a project contained in the base budget request for military construction and family housing and recommends a transfer of this project to the Overseas Contingency Operations title of this Act. This reduction is:

(1) \$22.4 million to Construct Hydrant System at Naval Air Station Sigonella, Italy. The budget request included \$22.4 million to replace an aging and inadequate jet fuel hydrant system and piping loop needed to support U.S. and North Atlantic Treaty Organization aircraft. The committee supports this requirement. However, the committee recommends no funds in the base budget, a reduction of \$22.4 million, for this project in order to transfer this project to Title XXIX, Overseas Contingency Operations Military Construction.

Finally, the committee recommends an increase of funding for a project for military construction and family housing. Specifically, this increase is:

(1) \$10.0 million for the Missile Defense Agency Military Construction Planning and Design activities for an East Coast site for homeland missile defense. The budget request did not include funding for this project. The committee recommends \$10.0 million, an increase of \$10.0 million, for this project.

#### LEGISLATIVE PROVISIONS

Section 2401—Authorized Defense Agencies Construction and Land Acquisition Projects

This section would contain the list of authorized defense agencies' construction projects for fiscal year 2018. The authorized amounts are listed on an installation-by-installation basis. The state list contained in this Act is intended to be the binding list of the specific projects authorized at each location.

Section 2402—Authorized Energy Resiliency and Conservation Projects

This section would authorize the Secretary of Defense to carry out energy conservation projects valued at a cost greater than \$3.0 million at the amounts authorized for each project at a specific location. This section would also authorize the sum total of projects across various locations, each project of which is less than \$3.0 million.

Section 2403—Authorization of Appropriations, Defense Agencies

This section would authorize appropriations for defense agencies' military construction at the levels identified in section 4601 of division D of this Act.

Section 2404—Modification of Authority To Carry Out Certain Fiscal Year 2017 Project

This section would modify the authority provided by section 2401(b) of the Military Construction Authorization Act for Fiscal Year 2017 (division B of Public Law 114–328) and authorize the Secretary of Defense to make certain modifications to the scope of a previously authorized construction project.

Section 2405—Extension of Authorizations of Certain Fiscal Year 2014 Projects

This section would extend the authorization of certain projects originally authorized by section 2401 of the Military Construction Authorization Act for Fiscal Year 2014 (division B of Public Law 113–66) until October 1, 2018, or the date of the enactment of an Act authorizing funds for military construction for fiscal year 2019, whichever is later.

Section 2406—Extension of Authorizations of Certain Fiscal Year 2015 Projects

This section would extend the authorization of certain projects originally authorized by section 2401 of the Military Construction Authorization Act for Fiscal Year 2015 (division B of Public Law 113–291) until October 1, 2018, or the date of the enactment of an Act authorizing funds for military construction for fiscal year 2019, whichever is later.

# TITLE XXV—INTERNATIONAL PROGRAMS

#### **SUMMARY**

The budget request contained \$154,000,000 for the North Atlantic Treaty Organization Security Investment Program (NSIP) for fiscal year 2018. The committee recommends authorization of appropriations of \$152,932,000 for NSIP for fiscal year 2018.

# ITEMS OF SPECIAL INTEREST

# **Explanation of Funding Adjustments**

The committee recommends an increase of funding for a project contained in the budget request submitted by the Department of Defense for the North Atlantic Treaty Organization (NATO) Security Investment Program. Specifically, this increase is:

(1) \$23.932 million for the NATO Security Investment Program. The budget request includes \$154.0 for the NATO Security Investment Program. The committee recommends \$177.932 million, an increase of \$23.932 million, for this program.

# Infrastructure Capabilities, Capacity, and Investments

Elsewhere in this report, the committee notes its position that there is operational and strategic value in maintaining forward presence of U.S. military forces in the U.S. European Command area of responsibility. As the Department of Defense considers what infrastructure investments may be required in Europe to support enduring and rotational U.S. forces, the committee believes it is important to identify the infrastructure capacity, capabilities, and planned investments of our North Atlantic Treaty Organization (NATO) partners. Therefore, the committee directs the Secretary of Defense to provide a briefing to the House Committee on Armed Services by March 1, 2018, on the capability and capacity of the current and planned European infrastructure available to the Department of Defense by our NATO allies and partners. The briefing should address the current and planned capabilities and capacity of our NATO allies' and partners' infrastructure (to include transportation and logistics infrastructure); an assessment of any capability and capacity gaps that limit military exercises and operations with NATO allies and partners; and planned investments.

# LEGISLATIVE PROVISIONS

# SUBTITLE A—NORTH ATLANTIC TREATY ORGANIZATION SECURITY INVESTMENT PROGRAM

Section 2501—Authorized NATO Construction and Land Acquisition Projects

This section would authorize the Secretary of Defense to make contributions to the North Atlantic Treaty Organization Security Investment Program in an amount equal to the sum of the amount specifically authorized in section 2502 of this Act and the amount collected from the North Atlantic Treaty Organization as a result of construction previously financed by the United States.

Section 2502—Authorization of Appropriations, NATO

This section would authorize appropriations for the North Atlantic Treaty Organization Security Investment Program at the levels identified in section 4601 of division D of this Act.

SUBTITLE B—HOST COUNTRY IN-KIND CONTRIBUTIONS

Section 2511—Republic of Korea Funded Construction Projects

This section would authority the Secretary of Defense to accept four military construction projects totaling \$105.5 million pursuant to agreement with the Republic of Korea for required in-kind contributions.

Section 2512—Modification of Authority To Carry Out Certain Fiscal Year 2017 Projects

This section would modify the authority provided by section 2511 of the Military Construction Authorization Act for Fiscal Year 2017 (division B of Public Law 114–328) and authorize the Secretary of Defense to make certain modifications to the scope of previously authorized construction projects.

# TITLE XXVI—GUARD AND RESERVE FORCES FACILITIES

# **SUMMARY**

The budget request contained \$574,661,000 for military construction of National Guard and Reserve facilities for fiscal year 2018. The committee recommends authorization of appropriations of \$772,661,000 for military construction for fiscal year 2018.

# ITEMS OF SPECIAL INTEREST

# **Explanation of Funding Adjustments**

The committee recommends the inclusion of funding for several projects requested by the Department of the Army for the Army Reserve that were not contained in the budget request for military construction and family housing. These increases include:

(1) \$30.0 million for a Reserve Center at Joint Base Lewis-McChord, Washington. The committee notes that this project was

included on a list of unfunded project requirements submitted by the Department of the Army. Therefore, the committee recommends \$30.0 million, an increase of \$30.0 million, for this

project.

(2) \$26.0 million for a Reserve Center at Fort Buchanan, Puerto Rico. The committee notes that this project was included on a list of unfunded project requirements submitted by the Department of the Army. Therefore, the committee recommends \$26.0 million, an increase of \$26.0 million, for this project.

In addition, the committee recommends the inclusion of funding for several projects requested by the Department of the Army for the Army National Guard that were not contained in the budget request for military construction and family housing. These in-

creases include:

(1) \$15.0 million for a Readiness Center Add/Alt at Fort Belvoir, Virginia. The committee notes that this project was included on a list of unfunded project requirements submitted by the Department of the Army. Therefore, the committee recommends \$15.0 million, an increase of \$15.0 million, for this project.

(2) \$32.0 million for an Aircraft Maintenance Hangar at Springfield, Missouri. The committee notes that this project was included on a list of unfunded project requirements submitted by the Department of the Army. Therefore, the committee recommends \$32.0

million, an increase of \$32.0 million, for this project.

(3) \$9.0 million for an Enlisted Barracks Transient Training at Mission Training Center Gowen, Idaho. The committee notes that this project was included on a list of unfunded project requirements submitted by the Department of the Army. Therefore, the committee recommends \$9.0 million, an increase of \$9.0 million, for this project.

In addition, the committee recommends the inclusion of funding for several projects requested by the Department of the Air Force for the Air Force Reserves that were not contained in the budget request for military construction and family housing. These in-

creases include:

(1) \$32.0 million for a Consolidated Mission Complex, Phase 2 at Robins Air Force Base, Georgia. The committee notes that this project was included on a list of unfunded project requirements submitted by the Department of the Air Force. Therefore, the committee recommends \$32.0 million, an increase of \$32.0 million, for this project.

(2) \$3.1 million for a Munitions Training/Admin Facility at Naval Air Station Joint Reserve Base Fort Worth, Texas. The committee notes that this project was included on a list of unfunded project requirements submitted by the Department of the Air Force. Therefore, the committee recommends \$3.1 million, an increase of \$3.1

million, for this project.

(3) \$9.0 million for an Indoor Small Arms Range at Minneapolis-St. Paul International Airport, Minnesota. The committee notes that this project was included on a list of unfunded project requirements submitted by the Department of the Air Force. Therefore, the committee recommends \$9.0 million, an increase of \$9.0 million, for this project.

Finally, the committee recommends the inclusion of funding for several projects requested by the Department of the Air Force for the Air National Guard that were not contained in the budget request for military construction and family housing. These increases include:

(1) \$8.0 million to Construct Small Arms Range at Hulman Regional Airport, Indiana. The committee notes that this project was included on a list of unfunded project requirements submitted by the Department of the Air Force. Therefore, the committee recommends \$8.0 million, an increase of \$8.0 million, for this project.

(2) \$8.0 million to Construct Small Arms Range at Tulsa International Airport, Oklahoma. The committee notes that this project was included on a list of unfunded project requirements submitted by the Department of the Air Force. Therefore, the committee recommends \$8.0 million, an increase of \$8.0 million, for this project.

(3) \$8.0 million to Construct Small Arms Range at Jackson International Airport, Mississippi. The committee notes that this project was included on a list of unfunded project requirements submitted by the Department of the Air Force. Therefore, the committee recommends \$8.0 million, an increase of \$8.0 million, for this project.

(4) \$8.0 million to Construct Small Arms Range at Dane County Regional Airport/Truax Field, Wisconsin. The committee notes that this project was included on a list of unfunded project requirements submitted by the Department of the Air Force. Therefore, the committee recommends \$8.0 million, an increase of \$8.0 million, for this project.

(5) \$1.9 million for an Addition to Building 764 for Weapons Release at Fort Wayne International Airport, Indiana. The committee notes that this project was included on a list of unfunded project requirements submitted by the Department of the Air Force. Therefore, the committee recommends \$1.9 million, an increase of \$1.9 million, for this project.

(6) \$8.0 million to Construct Small Arms Range at Rickenbacker International Airport, Ohio. The committee notes that this project was included on a list of unfunded project requirements submitted by the Department of the Air Force. Therefore, the committee recommends \$8.0 million, an increase of \$8.0 million, for this project.

# LEGISLATIVE PROVISIONS

SUBTITLE A—PROJECT AUTHORIZATIONS AND AUTHORIZATIONS OF APPROPRIATIONS

Section 2601—Authorized Army National Guard Construction and Land Acquisition Projects

This section would contain the list of authorized Army National Guard construction projects for fiscal year 2018. The authorized amounts are listed on an installation-by-installation basis. The State list contained in this Act is intended to be the binding list of the specific projects authorized at each location.

Section 2602—Authorized Army Reserve Construction and Land Acquisition Projects

This section would contain the list of authorized Army Reserve construction projects for fiscal year 2018. The authorized amounts are listed on an installation-by-installation basis. The State list contained in this Act is intended to be the binding list of the specific projects authorized at each location.

Section 2603—Authorized Navy Reserve and Marine Corps Reserve Construction and Land Acquisition Projects

This section would contain the list of authorized Navy Reserve and Marine Corps Reserve construction projects for fiscal year 2018. The authorized amounts are listed on an installation-by-installation basis. The State list contained in this Act is intended to be the binding list of the specific projects authorized at each location.

Section 2604—Authorized Air National Guard Construction and Land Acquisition Projects

This section would contain the list of authorized Air National Guard construction projects for fiscal year 2018. The authorized amounts are listed on an installation-by-installation basis. The State list contained in this Act is intended to be the binding list of the specific projects authorized at each location.

Section 2605—Authorized Air Force Reserve Construction and Land Acquisition Projects

This section would contain the list of authorized Air Force Reserve construction projects for fiscal year 2018. The authorized amounts are listed on an installation-by-installation basis. The State list contained in this Act is intended to be the binding list of the specific projects authorized at each location.

Section 2606—Authorization of Appropriations, National Guard and Reserve

This section would authorize appropriations for the National Guard and Reserve military construction at the levels identified in section 4601 of division D of this Act.

#### SUBTITLE B—OTHER MATTERS

Section 2611—Modification of Authority to Carry Out Certain Fiscal Year 2015 Project

This section would modify the authority provided by section 2602 of the Military Construction Authorization Act for Fiscal Year 2015 (division B of Public Law 113–291) to authorize the Secretary of the Army to make certain modifications to the scope of a previously authorized construction project.

Section 2612—Extension of Authorizations of Certain Fiscal Year 2014 Projects

This section would extend the authorization of certain projects originally authorized by sections 2602, 2604, and 2605 of the Military Construction Authorization Act for Fiscal Year 2014 (division B of Public Law 113–66) until October 1, 2018, or the date of the enactment of an act authorizing funds for military construction for fiscal year 2019, whichever is later.

Section 2613—Extension of Authorizations of Certain Fiscal Year 2015 Projects

This section would extend the authorization of certain projects originally authorized by sections 2602 and 2604 of the Military Construction Authorization Act for Fiscal Year 2015 (division B of Public Law 113–291) until October 1, 2018, or the date of the enactment of an Act authorizing funds for military construction for fiscal year 2019, whichever is later.

# TITLE XXVII—BASE REALIGNMENT AND CLOSURE ACTIVITIES

# **OVERVIEW**

The budget request contained \$255,867,000 for activities related to Base Realignment and Closure (BRAC) activities. The committee recommends authorization of appropriations of \$290,867,000 for BRAC activities.

# ITEMS OF SPECIAL INTEREST

# **Explanation of Funding Adjustments**

The committee recommends an increase of funding for a project contained in the budget request submitted by the Department of the Navy for Base Realignment and Closure (BRAC) activities from legacy rounds. Specifically, this increase is:

(1) \$35.0 million for Base Realignment and Closure, Navy, at various worldwide locations. The budget request contained \$93.474 million in funding for this project. The committee recommends \$128.474 million, an increase of \$35.0 million, for this project.

# LEGISLATIVE PROVISIONS

Section 2701—Authorization of Appropriations for Base Realignment and Closure Activities Funded Through Department of Defense Base Closure Account

This section would authorize appropriations for ongoing activities that are required to implement the Base Realignment and Closure activities authorized by the Defense Base Closure and Realignment Act of 1990 (part A of title XXIX of Public Law 101–510), at the levels identified in section 4601 of division D of this Act.

Section 2702—Prohibition on Conducting Additional Base Realignment and Closure (BRAC) Round

This section would affirm that nothing in this Act shall be construed to authorize an additional Base Realignment and Closure (BRAC) round.

# TITLE XXVIII—MILITARY CONSTRUCTION GENERAL PROVISIONS

#### ITEMS OF SPECIAL INTEREST

Air Training Ranges in the Department of Defense

The committee notes that the Department of the Air Force is in the process of developing an Enterprise Range Plan (ERP) to support and implement the live portion of the Air Force Operational Training Infrastructure Flight Plan. The ERP's ten-year servicewide investment strategy addresses current capabilities and training gaps for aircrew, mission crews, and battlefield airmen across the live training spectrum. The ERP proposes the establishment of 6 regional CONUS training ranges, down from 32 Air Force training ranges currently. This regional approach to investment in range capabilities addresses concerns with the airspace and simulated threat environment needed to train aircrews in 5th Generation weapon systems and advanced munitions. The Air Force is including a comprehensive review of the requirements for advanced training to include realistic live simulations of threats, targets, and air adversaries, as well as the efficiencies gained by proximity of regional ranges to flying units, the availability of air refueling and command-and-control assets, and instrumentation and range integration. The Air Force further views regionalization as not just a 5th Generation solution but one that can provide more opportunities for sophisticated team training, optimize 4th and 5th Generation integration opportunities, while continuing investment and procurement of 5th Generation training equipment.

The committee commends the Air Force for the frank assessment that current training systems for Contested, Degraded & Operationally Limited (CDO) operations have not kept pace with adversary capabilities, that training is degraded by lack of joint communication, review, and range control, and that encroachment of frequencies, airspace, and land continues to challenge the live enterprise. The committee is aware that the other military services face similar air combat training shortfalls which affect the readiness of their forces to simulate the range of threats posed by potential adversaries. These challenges are increased by reduced funding for electronic warfare (EW) range equipment such as mobile Advanced Long Range Strategic threat systems, an Advanced Medium Range Tactical Threat System (Double Digit Replicators) and legacy threat emitters to provide, along with simulated Integrated Air Defense System, the density to be expected in a contested environment.

Addressing these challenges, the committee notes that the Air Force budget request for fiscal year 2018 includes \$8.9 million to start development of versions 3 and 4 of an Advanced Radar Threat System (ARTS) for combat training ranges, leveraging in part the Navy's program system development and demonstration of previous versions. The systems being developed by the Air Force will provide their combat training ranges with highly advanced surface-to-air threat simulation capabilities replicating current tactical highly mobile threats that, with the fielding of Joint Threat

Emitters (JTE), will ensure comprehensive EW training for aircrews of 5th Generation weapon systems for all the services.

The committee is concerned, though, that current funding plans at the six regional CONUS ranges for the installation of ARTS and JTEs systems will not result in an operational capability until 2026. Given the concerns of military leaders about the readiness and preparedness of current forces to deter or respond to the capabilities of near-peer competitors, the committee believes the extended funding profile adds more risk to readiness. In addition, the Air Force training systems may not be compatible with the Navy's Electronic Warfare Infrastructure Improvement Project intended to develop full power, multi-function, threat emitters and threat simulators.

The committee is also concerned that the ERP will only partially satisfy the need for expanded range capabilities and training space for each of the Services in order to support 5th Generation weapon systems and advanced munitions. In addition, the new threat simulation assets being developed by each Service are expensive to procure and operate. The committee is aware that the concept of regional ranges in the ERP can provide advanced training access to the largest number of users based on proximity and regional density. Properly executed regionalization for all the services can vastly improve the ability of units to access advanced training from home station with a Total Force and Joint approach.

Therefore, the committee directs the Secretary of Defense to review the efforts of the Air Force to date and to submit a briefing to the committee no later than December 1, 2017, on the following

items:

(1) A review of the aircrew training requirements for 5th generation weapons systems and advanced munitions for each service and the current capabilities of air ranges operated by the service to meet emerging needs;

(2) To what extent the Air Force ERP, as linked to the broader Operational Training Infrastructure Flight Plan, can meet the

aviation training requirements for the other services;

(3) The value of expanding the development of the ERP to incor-

porate the training needs of the other services;

(4) A review of costs and benefits of combining service development efforts and accelerating the acquisition timeline for new combat air training systems;

(5) An assessment of the risk to aircrew readiness as a result of deferred funding for investments in a complete array of threat sim-

ulation systems; and

(6) A review of the extent to which the Secretary of Defense can improve the effectiveness and efficient use of resources by promoting a policy for the collaborative and joint use of airspace range ranges by all the Services.

# Aircraft Stationing, Basing, and Laydown Process

The committee believes that the military departments' selection process for stationing, basing, and laydown decisions for units and missions should be transparent, repeatable, and defendable in nature. This includes transparency during the initial evaluation of basing criteria at the installation level. While the military departments each have their own unique requirements that may require

variations in their stationing, basing, and laydown decisions, the committee notes that the capacity of a military installation, its associated training areas, and their ability to support mission requirements remain the primary drivers in the process. The committee believes this emphasis on mission requirements and capacity is appropriate and believes that continued engagement with the congressional defense committees at multiple points throughout each of the military services' stationing, basing, and laydown processes is critical.

The committee directs the Secretary of Defense to provide a report to the House Committee on Armed Services by January 31, 2018, on each military service's existing process for stationing, basing, and laydown decisions for the F–35 Joint Strike Fighter. Specifically, the report should detail how the current selection criteria take into consideration elements such as capacity, availability, and access to training areas and whether military requirements may drive changes to the criteria for future stationing, basing, or laydown decisions. The report shall address how each military service assesses the importance of having immediate access to training areas and how each service accounts for the impact of weather at the training areas. Finally, the report shall also address how current basing criteria consider the capacity, availability, and access to training areas in support of the other services or to host joint exercises to fully utilize the F–35 Joint Strike Fighter's capabilities when making their basing decision.

# Collaboration with Federal Aviation Administration on Unmanned Aerial Systems

The committee believes that the significant military training demand for Unmanned Aerial Systems suggests that Federal Aviation Administration (FAA) regulations regarding line-of-sight requirements be reevaluated. The committee encourages the Secretary of Defense and the Administrator of the Federal Aviation Administration to continue to collaborate on the development of plans and policies that would allow the Department's Unmanned Aerial Systems to operate within military operating area airspace contiguous to existing restricted airspace without line-of-sight requirements. Furthermore, the committee is interested in understanding in detail the Department's current engagement on this issue with the Federal Aviation Administration. Therefore, the committee directs the Chair of the Department of Defense's Policy Board on Federal Aviation to provide a briefing to the House Committee on Armed Services, not later than March 1, 2018, detailing the board's efforts to advocate for the elimination regulatory restrictions that prevent routine access to national airspace for the Department of Defenses' Unmanned Aerial Systems.

# Efficient and Integrated Military Installations

The committee notes that the Department of Transportation initiated the Smart City Challenge in December 2015, seeking innovative ideas for an integrated smart transportation system to move people and goods more quickly, cheaply, and efficiently. The committee notes that this program resulted in seven cities being selected to further develop their proposals. The committee is inter-

ested in how the Department of Defense can leverage Smart City concepts and apply them to military installations to improve military readiness and the delivery of services to military personnel and military families, manage infrastructure more efficiently, and enhance installation physical and cyber security. Therefore, the committee directs the Secretary of Defense, in coordination with the Secretaries of the military departments, to provide a briefing to the House Armed Services Committee not later than March 1, 2018. The briefing should provide an overview of initiatives the Department has undertaken to incorporate a broad range of government, commercial, and other innovative technological and processes that improve the performance, efficiency, and effectiveness of military infrastructure and services provided on military installations and how these initiatives are being incorporated into installation master plans.

# Enhanced Use Leases

The committee notes that the military departments have authorities provided by section 2667 of title 10, United States Code, to enter into long-term agreements commonly referred to as "enhanced use leases" (EULs). Under these agreements, the military departments are able to receive cash or in-kind consideration for non-excess military land that is then developed by a private entity. This authority has been used to develop electricity generation, commercial and industrial facilities, and other infrastructure projects that have benefited both the military installation as well as the surrounding communities. However, the committee notes that concerns have been raised on the length of time it can take to initiate, negotiate, and implement an EUL. The committee encourages the military departments to seek opportunities to streamline this process where possible while continuing to ensure that agreements are in the Government's best interest. If the Secretary of Defense believes legislative changes are needed to speed the process, the committee welcomes any recommendations he may choose to make.

# Financial Institutions on Military Installations

The committee is aware that the Department of Defense has not established a standardized method of calculating and considering the in-kind value of the financial education, support, and services provided by financial institutions when determining the terms of a facility lease to support the operation of financial institutions on a military installation. Therefore, the committee directs the Secretary of Defense to provide a briefing to the House Committee on Armed Services, not later than March 1, 2018, regarding the Department's progress in establishing a standardized process. At a minimum, the briefing should address how the Department calculates the in-kind value of services provided by financial institu-tions on military installations, as well as whether the in-kind value calculated for these services can be used to partially or fully satisfy the fair market value requirement for leasing non-excess property on military installations pursuant to section 2667 of title 10, United States Code. It should also address the Department's efforts to ensure appropriate policies and instructions are in place to support the consistent calculation of the in-kind value of services when negotiating facility leases to support the operation of financial institutions on military installations.

Infrastructure Master Plan for Defense Laboratory and Research, Development, Test, and Evaluation Infrastructure

The committee notes that the Department of Defense laboratory enterprise and facilities supporting research, development, test, and evaluation (RDT&E) are critical to ensuring the Department of Defense and the military services are at the cutting edge of technology. The committee notes that the National Defense Authorization for fiscal year 2016 (Public Law 114-92) established a pilot program authorizing the use of up to \$150.0 million per year in RDT&E funding to support military construction projects to support laboratory and research and development infrastructure requirements. In addition, the National Defense Authorization for fiscal year 2017 (Public Law 114-328) increased the minor military construction threshold for laboratory facilities to \$6.0 million. These authorities were provided as a supplement to the traditional military construction process to provide additional flexibility and options for recapitalizing laboratory and RDT&E infrastructure. The committee encourages the Department to utilize these authorities to sustain the health of infrastructure critical to the in-house enterprise. However, the committee notes that many of the laboratory and RDT&E facilities do not currently have fully developed master plans that synchronize required infrastructure investments with current and emerging military requirements. Therefore, the committee directs the Secretary of Defense to provide a briefing to the House Committee on Armed Services not later than March 1, 2018 on the Department's timeline and efforts to develop infrastructure master plans to support laboratory and RDT&E infrastructure requirements.

# Overseas Infrastructure and Facility Investments

The committee asserts that there is operational and strategic value in maintaining infrastructure and access to facilities that can support forward presence of U.S. military forces. Forward-positioned forces provide rapid response capabilities to geographic combatant commanders, serve as a deterrent to potential adversaries while assuring partners and allies, and facilitate cooperative efforts to build and develop partner-nation security capabilities. The committee recognizes that infrastructure and facilities contribute to developing and sustaining readiness, projecting military capabilities, and supporting the quality-of-life for military personnel and their families.

As the Department of Defense develops its military construction and facility investment program, the committee encourages the Department to propose military construction and facility investments that support strategic or operational requirements, including projects at overseas locations. The committee welcomes overseas military construction projects or facility investments connected to validated operational or strategic requirements that support the forward-deployed posture of the U.S. Armed Forces.

#### Railroads for National Defense

The committee is aware that the Military Surface Deployment and Distribution Command Transportation Engineering Agency manages the Railroads for National Defense Program. This program helps ensure the readiness capability and capacity of the national railroad network to support defense deployment and peacetime needs. While the program has no funding to support rail infrastructure investments, the committee notes that the program helps to integrate defense rail needs into civil sector planning, policies, and standards working in concert with the Federal Railroad Administration through the establishment of the Strategic Rail Corridor Network (STRACNET). The committee notes that STRACNET is an interconnected and continuous rail line network that is supplemented by defense connector lines that serve locations that generate military rail shipments. Together STRACNET and the defense connector lines consist of over 36,000 miles of track serving over 100 defense installations.

The committee is aware that the Railroads for National Defense Program reviews, analyzes, and identifies rail line requirements to support military rail service and movement of oversize and overweight cargo. This analysis is updated every 5 years, with the most recent report published in October 2013. Therefore, the committee directs the Commander of the Military Surface Deployment and Distribution Command to provide a briefing to the House Committee on Armed Services, not later than 30 days after completion of the next updated STRACNET report, regarding the analysis and findings of the report. At minimum, the briefing should address rail networks that have been identified as part of the Strategic Rail Corridor Network or defense connector lines, identify any rail infrastructure capability or capacity gaps that impact military installations requiring rail service, and discuss mitigations or plans to address any rail infrastructure capability or capacity gaps that have been identified.

#### Sentinel Landscapes Partnership Program

The committee notes the successful initial implementation of the Sentinel Landscapes Partnership Program. The interagency, intergovernmental, and public private partnership approach of the Sentinel Landscapes Partnership Program contributes to a strong rural economy, to advancing natural resource goals, and to achieving the overall goal of the Department of Defense's Readiness and Environmental Protection Integration (REPI) program to address encroachment issues that limit or restrict military training, testing, and operations. Operating under an interagency Memorandum of Understanding since 2013, six partner landscapes at military installations around the country have been designated, which has provided additional opportunities for collaboration to achieve mutually beneficial outcomes both for the eligible landowners and agricultural producers who voluntarily choose to participate and for DoD and the other agencies participating in the Sentinel Landscapes Partnership Program. The committee encourages the Department to support the designation of additional Sentinel Landscapes in order to further enhance efforts to address current or potential restrictions on the testing and training activities that are vital to preserving military readiness.

The committee directs the Secretary of Defense to provide a briefing to the House Committee on Armed Services not later than

September 30, 2017:

- (1) How the program has benefited the military and defense communities in terms of limiting encroachment and protecting training and other readiness development and sustainment efforts, the benefits to landowners and agricultural producers who have elected to participate;
- (2) The process and criteria for designating an area as a Sentinel Landscape;
- (3) Steps taken or planned to expand the number of designated Sentinel; Landscapes; and
- (4) Whether codifying the Sentinel Landscapes Partnership program would be beneficial

# Sustainment and Recapitalization of Utilities

The committee believes that military installations must have modern, efficient, resilient utility infrastructure. The committee notes that while some installations have undergone a modernization of their utility infrastructure, many continue to rely on aging and inefficient systems that marginally support today's missions. The committee observes that some installations have utilized utility privatization authorities to reinvest, operate, and sustain their utility systems and other installations still maintain and operate their utility systems.

The committee seeks to better understand the Department of Defense's investment strategy to ensure military installations are supported by modern, efficient, and resilient utility infrastructure. Therefore, the committee directs the Secretaries of the military departments to provide a briefing to the House Committee on Armed Services by March 1, 2018, on their plans for recapitalizing aging utility infrastructure and systems. The briefing should include a discussion of the condition of utility systems that are currently owned, sustained, and operated by the military departments and a discussion on the military departments' plans for modernization or recapitalizing aging utility systems through appropriated funds or utility privatization authorities.

#### Use of Federal Facilities by Contractors

The Committee is aware that the Army is in the process of reviewing real property accountability and facility utilization with an eye towards reducing installation footprints and eliminating underused and unused excess facilities within the United States. Part of the Army's review will result in consolidating facility occupancy in accordance with Army standards to the minimum space needed to accomplish missions. The Army's planned completion date of the review and consolidation actions is currently October 2021. The Committee commends the Army for undertaking this endeavor and encourages the Department of the Navy and Air Force to devote resources to carry out reviews similar to the Army.

The Committee is concerned that contractors may occupy space in a DOD-owned or leased space co-located with military functions as a matter of convenience rather than a bona fide contractual obligation. As a result, facilities may be overcrowded even though the authorized number of personnel assigned to the facility falls within Unified Facilities Criteria standards. Also, in some cases, the military leases trailers or other temporary facilities in order to meet emerging mission requirements even as they accommodate extraneous civilian contractor personnel occupying a government facility.

Therefore, the committee directs the Secretary of Defense, in coordination with the secretaries of the military departments, to provide a briefing to the House Committee on Armed Services not later than March 30, 2018. At a minimum, the briefing shall quantify the amount of space currently occupied by government contractors and whether or not their occupancy is pursuant to a contractual obligation on the part of the government, or whether their occupancy is provided as a convenience for the contractor. The briefing shall include statements by the departments regarding actions taken to relocate contractors not required by federal contract to be co-located with the military on DOD-owned installations or in a federally leased space principally occupied by a DOD activity.

# Veteran Apprenticeship Programs and Military Construction

The committee notes that section 2805 of the Ike Skelton National Defense Authorization Act for Fiscal Year 2011 (Public Law 111–383) expressed the sense of Congress regarding the establishment of a "Veterans to Work" pilot program to provide an opportunity for apprentices, who are also veterans, to work on military construction projects. The committee continues to believe that state certified and Federally recognized apprenticeship training programs can help with a military service member's transition to a civilian career. Therefore, the committee encourages the Secretary of Defense and the Secretaries of the military departments to seek opportunities to increase the utilization of veterans' apprenticeship programs on military construction projects.

#### Wastewater Treatment Infrastructure

The committee notes that the budget request includes a number of military construction projects to provide potable water and wastewater treatment infrastructure to support military installations. The committee notes that the military departments have leveraged existing authorities to enter into intergovernmental support agreements with local municipalities as well as utilizing the Utility Privatization authorities to provide utility services to military installations. The committee has been supportive of the use of these authorities, and notes that they provide opportunities for military installations and neighboring communities to work together to provide mutually beneficial utility services in a more efficient and cost-effective manner. The committee believes that in certain cases, it may be in the interest of the military installation to enter into mutually beneficial agreements with local municipalities to provide utility services, to include water and wastewater. Therefore, the committee directs the Secretary of Defense, in coordination with the secretaries of the military departments, to provide a briefing to the House Committee on Armed Services not later than March 30, 2018. At minimum, the briefing shall address the process used to identify utility infrastructure investments required to support a military installation, how the development of those requirements is coordinated with local municipalities, and how the Department makes a determination to carry out a military construction project or enter into an agreement with a local municipality or private partner to meet the installation's requirement.

#### LEGISLATIVE PROVISIONS

# SUBTITLE A—MILITARY CONSTRUCTION PROGRAM AND MILITARY FAMILY HOUSING

Section 2801—Elimination of Written Notice Requirement for Military Construction Activities and Reliance on Electronic Submission of Notifications and Reports

This section would modify sections of title 10, United States Code, to eliminate the submission of a notification in writing for certain infrastructure, facility, and real property related investments while maintaining the requirement that the notification be provided in an electronic medium pursuant to section 480 of title 10, United States Code.

Section 2802—Modification of Thresholds Applicable to Unspecified Minor Construction Projects

This section would modify section 2805(a) of title 10, United States Code, to increase the unspecified minor military construction project threshold from \$3.0 million to \$6.0 million and to remove the differentiation between aforementioned unspecified minor military construction projects and "life-threatening, health-threatening, or safety-threatening" projects. This section would also modify section 2805(b) of title 10, United States Code, to decrease the unspecified minor military construction project advance approval threshold requirement for the service secretary concerned from \$1.0 million to \$0.75 million and would increase the threshold for use of operation and maintenance amounts to carry out an unspecified minor military construction project from \$1.0 million to \$2.0 million pursuant to section 2805(c) of title 10, United States Code.

Section 2803—Extension of Temporary, Limited Authority To Use Operation and Maintenance Funds for Construction Projects Outside the United States

This section would provide continued authority for the Secretary of Defense to use funds appropriated for Operation and Maintenance for military construction to meet temporary operational requirements during a time of declared war, national emergency, or contingency operation through the end of fiscal year 2018.

Section 2804—Use of Operation and Maintenance Funds for Military Construction Projects To Replace Facilities Damaged or Destroyed by Natural Disasters or Terrorism Incidents

This section would amend section 2854 of title 10, United States Code, to enable use of operation and maintenance funds to replace a facility damaged or destroyed by a natural disaster or a terrorism incident.

### SUBTITLE B—REAL PROPERTY AND FACILITIES ADMINISTRATION

Section 2811—Elimination of Written Notice Requirement for Military Real Property Transactions and Reliance on Electronic Submission of Notifications and Reports

This section would amend several sections of title 10, United States Code, to eliminate the submission of a notification in writing for certain real property related transactions while maintaining the requirement that the notification be provided in an electronic medium pursuant to section 480 of title 10, United States Code.

Section 2812—Clarification of Applicability of Fair Market Value Consideration in Grants of Easements on Military Lands for Rights-of-Way

This section would clarify section 2668 of title 10, United States Code, to ensure the Secretary of a military department receives fair market value when granting easements.

# Section 2813—Criteria for Exchanges of Property at Military Installations

This section would amend section 2869 of title 10, United States Code, to allow for the exchange of real property located on a military installation when it is determined to be advantageous to the United States.

Section 2814—Prohibiting Use of Updated Assessment of Public Schools on Department of Defense Installations To Supersede Funding of Certain Projects

This section would amend section 2814 of the National Defense Authorization Act for Fiscal Year 2017 (Public Law 114–328) to ensure that the schools contained in the top 33 highest priority schools on the Department of Defense July 2011 assessment of public schools on military installations that have not yet received funding would not be superseded by an updated assessment.

The committee encourages the Office of Economic Adjustment to work with school districts when administering the Public Schools on Military Installations program to find innovative funding solutions to meet State match requirements.

# Section 2815—Requirements for Window Fall Prevention Devices in Military Family Housing

This section would amend chapter 169 of title 10, United States Code, to require the Secretaries of the military departments to provide for the installation of fall prevention devices in windows meeting specific requirements at all current military family housing units, including housing under the Military Housing Privatization Initiative, family housing owned by the military departments, family housing leased by the Department of Defense, as well as units acquired or constructed in the future. This section would also require the Secretaries to brief the House Committee on Armed Services not later than 180 days after the date of the enactment of this Act on matters relating to the implementation of this section.

Section 2816—Authorizing Reimbursement of States for Costs of Suppressing Wildfires Caused by Department of Defense Activities on State Lands; Restoration of Lands of Other Federal Agencies for Damage Caused by Department of Defense Vehicle Mishaps

This section would amend section 2691 of title 10, United States Code, to allow the Secretary of Defense to reimburse a State for the reasonable costs of the State in suppressing wildland fires caused by the activities of the Department of Defense on State lands. In addition, this section would allow the Secretary of Defense to restore land under the administrative jurisdiction of another Federal agency when that land is damaged as the result of a mishap involving a vessel, aircraft, or vehicle of the Department of Defense. Finally, this section would also allow another Federal agency to restore land under the administrative jurisdiction of the Secretary of Defense or a military department if damaged as the result of a mishap involving a vessel, aircraft, or vehicle of a Federal agency that is not part of the Department of Defense.

Section 2817—Prohibiting Collection of Additional Amounts from Members Living in Units Under Military Housing Privatization Initiative

This section would add section 2879 to sub-chapter IV of chapter 169 of title 10, United States Code, to prohibit the collection of additional out of pocket fees from service members living in Military Housing Privatization Initiative housing.

# SUBTITLE C—LAND CONVEYANCES

Section 2821—Land Exchange, Naval Industrial Reserve Ordnance Plant, Sunnyvale, California

This section would authorize a land exchange of the Naval Industrial Reserve Ordnance Plant located in Sunnyvale, California, for property interests that meet the readiness requirements of the Department of the Navy.

Section 2822—Land Conveyance, Naval Ship Repair Facility, Guam

This section would direct the Secretary of the Navy to convey, without consideration, certain Navy real property to the Guam Economic Development Authority for the purpose of providing support for ship repair and other military maintenance requirements.

Section 2823—Lease of Real Property to the United States Naval Academy Alumni Association and Naval Academy Foundation at United States Naval Academy, Annapolis, Maryland

This section would provide authority for the Secretary of the Navy to lease approximately three acres at the United States Naval Academy in Annapolis, Maryland, to the United States Naval Academy Alumni Association and the United States Naval Academy Foundation.

Section 2824—Land Conveyance, Natick Soldier Systems Center, Massachusetts

This section would authorize the Secretary of the Army to sell and convey approximately 98 acres of real property in the vicinity of Hudson, Wayland, and Needham, Massachusetts in exchange for cash payment that is not less than the fair market value of the property. This section would also authorize the Secretary to use the proceeds of the sale to demolish, construct, or rehabilitate military family housing, unaccompanied soldier housing, or ancillary support facilities to support military personnel assigned to the U.S. Army Natick Soldier Systems Center.

Section 2825—Imposition of Additional Conditions on Land Conveyance, Castner Range, Fort Bliss, Texas

This provision would amend section 2844 of the National Defense Authorization Act for Fiscal Year 2013 (Public Law 112–239) to place additional conditions on an authorized conveyance of 7,081 acres of real property at Fort Bliss to the Parks and Wildlife Department of the State of Texas.

Section 2826—Land Conveyance, Wasatch-Cache National Forest, Rich County, Utah

This section would direct the Secretary of Agriculture to transfer 80 acres of U.S. Forest Service managed public land to the Utah State University Space Dynamics Laboratory Research Foundation, a non-profit organization exempt from Federal income taxes under section 501(c)(3) of title 26, United States Code.

Section 2827—Land Conveyance, Former Missile Alert Facility known as Quebec-01, Laramie County, Wyoming

This section would authorize the Secretary of the Air Force to convey, without consideration, certain Air Force real property to the State of Wyoming for the purpose of operating a museum for the benefit of the public.

# SUBTITLE D-MILITARY LAND WITHDRAWALS

Section 2831—Indefinite Duration of Certain Military Land Withdrawals and Reservations and Improved Management of Withdrawn and Reserved Lands

This section would amend the existing statutory military land withdrawals from Department of the Interior jurisdiction by extending them for an indefinite time period while putting in place a continuous review, coordinated between the Department of Defense and the Department of Interior, and public comment process regarding the resource management plans and military use of such lands.

Section 2832—Temporary Segregation from Public Land Laws of Property Subject to Proposed Military Land Withdrawal; Temporary Use Permits and Transfers of Small Parcels of Land between Departments of Interior and Military Departments; More Efficient Surveying of Lands

This section would amend chapter 6 of title 43, United States Code, to allow the Secretary of the Interior to grant permission to the Secretary of Defense to conduct military training or testing on land under the jurisdiction of the Department of the Interior for up to 30 days, provided such use would be consistent with the purposes for which the Secretary of the Interior manages the land. In addition, this section would authorize the transfer of parcels of land smaller than 5,000 acres between the Department of Defense and the Department of the Interior. Finally, this section would permit the use of geographic coordinates for conducting original surveys of land instead of using physical monuments.

SUBTITLE E-MILITARY MEMORIALS, MONUMENTS, AND MUSEUMS

Section 2841—Modification of Prohibition on Transfer of Veterans Memorial Objects to Foreign Governments without Specific Authorization in Law

This section would amend section 2572(e) of title 10, United States Code, to limit the restrictions in that section to veterans memorial objects brought to the United States prior to 1907. This section would also extend the prohibition of the return of veterans memorial objects to a foreign country or an entity controlled by a foreign government until September 30, 2022.

Section 2842—Recognition of the National Museum of World War II Aviation

This section would recognize the National Museum of World War II Aviation in Colorado Springs, Colorado, as America's National World War II Aviation Museum.

Section 2843—Principal Office of Aviation Hall of Fame

This section would amend section 23107 of title 36, United States Code, to remove the requirement that the Principal Office of the Aviation Hall of Fame be located in Dayton, Ohio, while retaining the requirement that the office be located in Ohio.

SUBTITLE F—SHILOH NATIONAL MILITARY PARK

Section 2851—Short Title

This section would provide that this subtitle may be cited as the "Shiloh National Military Park Boundary Adjustment and Parker's Crossroads Battlefield Designation Act."

Section 2852—Definitions

This section would provide definitions for specific terms used in this subtitle.

Section 2853—Areas to Be Added to Shiloh National Military Park

This section would modify the boundary of Shiloh National Military Park and provide the Secretary of the Interior with authority to acquire lands by donation, purchase from willing sellers with donated or appropriated funds, or exchange.

#### Section 2854—Establishment of Affiliated Area

This section would establish Parker's Crossroads Battlefield in the State of Tennessee as an affiliated area of the National Park System, authorize the Secretary of the Interior to provide technical assistance and to enter into cooperative agreements with the management entity, and require the development of a general management plan for the affiliated area.

# Section 2855—Private Property Protection

This section would prohibit the Secretary of the Interior from acquiring land or interests in land by condemnation for the purposes of this subtitle, would require written consent from property owners prior to their property being included in the Shiloh National Military Park, and prohibits the creation of buffer zones outside of the park.

#### SUBTITLE G—OTHER MATTERS

Section 2861—Modification of Department of Defense Guidance on Use of Airfield Pavement Markings

This section would direct the Secretary of Defense modify the Unified Facilities Guide Specifications for pavement markings, or any other Department of Defense guidance on airfield pavement markings, to prohibit the use of Type I glass beads or any glass bead with a 1.6 refractive index or less from use on airfield markings on airfields under the control of the Secretary.

Section 2862—Authority of Chief Operating Officer of Armed Forces Retirement Home to Acquire and Lease Property

This section would amend section 411 of title 24, United States Code, to authorize the Chief Operating Officer of the Armed Forces Retirement Home to acquire and lease property.

# TITLE XXIX—OVERSEAS CONTINGENCY OPERATIONS MILITARY CONSTRUCTION

# **SUMMARY**

The budget request contained \$638,130,000 for Overseas Contingency Operations military construction for fiscal year 2018. The committee recommends authorization of appropriations of \$636,942,000 for Overseas Contingency Operations military construction for fiscal year 2018.

#### ITEMS OF SPECIAL INTEREST

# **Explanation of Funding Adjustments**

The committee recommends reduction of funding for several projects contained in the budget request submitted by the Department of Defense for military construction and family housing. These reductions include:

(1) \$30.0 million to Construct Parallel Taxiway at Kecskemet Air Base, Hungary. The budget request included \$30.0 million in funding for this project. The committee supports the requirement for this project and provides the full project authorization of \$30.0 million included in the budget request. However, the committee supports the authorization of appropriations in an amount equivalent to the ability of the Department to execute in the year of the authorization for appropriations. For this project, the committee is concerned the Department may not be able to begin construction in fiscal year 2018. Therefore, the committee recommends no funds, a reduction of \$30.0 million, for the authorization of appropriation for this project.

(2) \$22.0 million for Airfield Upgrades at Sliac Airport, Slovakia. The budget request included \$22.0 million in funding for this project. The committee supports the requirement for this project and provides the full project authorization of \$22.0 million included in the budget request. However, the committee supports the authorization of appropriations in an amount equivalent to the ability of the Department to execute in the year of the authorization for appropriations. For this project, the committee is concerned the Department may not be able to begin construction in fiscal year 2018. Therefore, the committee recommends no funds, a reduction of \$22.0 million, for the authorization of appropriation for this project.

(3) \$20.0 million to Increase POL Storage Capacity at Malacky, Slovakia. The budget request included \$20.0 million in funding for this project. The committee supports the requirement for this project and provides the full project authorization of \$20.0 million included in the budget request. However, the committee supports the authorization of appropriations in an amount equivalent to the ability of the Department to execute in the year of the authorization for appropriations. For this project, the committee is concerned the Department may not be able to begin construction in fiscal year 2018. Therefore, the committee recommends no funds, a reduction of \$20.0 million, for the authorization of appropriation for this project.

(4) \$12.9 million for Airfield Upgrades at Kecskemet Air Base, Hungary. The budget request included \$12.9 million in funding for this project. The committee supports the requirement for this project and provides the full project authorization of \$12.9 million included in the budget request. However, the committee supports the authorization of appropriations in an amount equivalent to the ability of the Department to execute in the year of the authorization for appropriations. For this project, the committee is concerned the Department may not be able to begin construction in fiscal year 2018. Therefore, the committee recommends no funds, a reduction of \$12.9 million, for the authorization of appropriation for this project.

(5) \$12.5 million to Increase POL Storage Capacity at Kecskemet Air Base, Hungary. The budget request included \$12.5 million in funding for this project. The committee supports the requirement for this project and provides the full project authorization of \$12.5 million included in the budget request. However, the committee supports the authorization of appropriations in an amount equivalent to the ability of the Department to execute in the year of the authorization for appropriations. For this project, the committee is concerned the Department may not be able to begin construction in fiscal year 2018. Therefore, the committee recommends no funds, a reduction of \$12.5 million, for the authorization of appropriation for this project.

(6) \$10.3 million to Replace/Expand Quick Reaction Alert Pad at Rygge, Norway. The budget request included \$10.3 million in funding for this project. The committee supports the requirement for this project and provides the full project authorization of \$10.3 million included in the budget request. However, the committee supports the authorization of appropriations in an amount equivalent to the ability of the Department to execute in the year of the authorization for appropriations. For this project, the committee is concerned the Department may not be able to begin construction in fiscal year 2018. Therefore, the committee recommends no funds,

a reduction of \$10.3 million, for the authorization of appropriation for this project.

(7) \$4.0 million for Airfield Upgrades at Malacky, Slovakia. The budget request included \$4.0 million in funding for this project. The committee supports the requirement for this project and provides the full project authorization of \$4.0 million included in the budget request. However, the committee supports the authorization of appropriations in an amount equivalent to the ability of the Department to execute in the year of the authorization for appropriations. For this project, the committee is concerned the Department may not be able to begin construction in fiscal year 2018. Therefore, the committee recommends no funds, a reduction of \$4.0 million, for the authorization of appropriation for this project.

As noted earlier in this report, the committee recommended a reduction in funding for several projects included in the base budget request in order to transfer them to the Overseas Contingency Operations title of this Act. Therefore the committee recommends a commensurate increase in the Overseas Contingency Operations account to support these projects. Specifically, these projects include:

- (1) \$27.325 million for a Guardian Angel Operations Facility at Aviano Air Base, Italy.
- (2) \$25.997 million for a 216 Person Dormitory at Incirlik Air Base, Turkey.
- (3) \$22.4 million to Construct Hydrant System at Naval Air Station Sigonella, Italy.
- (4) \$15.0 million for a Consolidated Squadron Operations Facility at Al Udeid Air Base, Qatar.
- (5) \$13.39 million for an Aircraft Parking Apron Expansion at Camp Lemonnier, Djibouti.
- (6) \$6.4 million for the Forward Operating Site at an unspecified location in Turkey.

# LEGISLATIVE PROVISIONS

Section 2901—Authorized Army Construction and Land Acquisition Projects

This section would contain the list of certain authorized Army construction projects for fiscal year 2018. These projects represent a binding list of the specific projects authorized at these locations.

Section 2902—Authorized Navy Construction and Land Acquisition Project

This section would contain the list of a certain authorized Navy construction project for fiscal year 2018. This project represents a binding list of the specific project authorized at this location.

Section 2903—Authorized Air Force Construction and Land Acquisition Projects

This section would contain the list of certain authorized Air Force construction projects for fiscal year 2018. These projects represent a binding list of the specific projects authorized at these locations.

Section 2904—Authorized Defense Agencies Construction and Land Acquisition Project

This section would contain the list of a certain authorized defense agency's construction project for fiscal year 2018. This project represents a binding list of the specific project authorized at this location.

Section 2905—Authorization of Appropriations

This section would authorize appropriations for Overseas Contingency Operations military construction at the levels identified in section 4602 of division D.

Section 2906—Extension of Authorization of Certain Fiscal Year 2015 Projects

This section would extend the authorizations of certain projects originally authorized by section 2902 of the Military Construction Authorization Act for Fiscal Year 2015 (division B of Public Law 113-291) until October 1, 2018, or the date of the enactment of an act authorizing funds for military construction for fiscal year 2019, whichever is later.

# DIVISION C—DEPARTMENT OF ENERGY NATIONAL SECURITY AUTHORIZATIONS AND OTHER AUTHORIZATIONS

# TITLE XXXI—DEPARTMENT OF ENERGY NATIONAL SECURITY PROGRAMS

#### **OVERVIEW**

The budget request for fiscal year 2018 contained \$20.31 billion for atomic energy defense activities. The committee recommends \$20.64 billion, an increase of \$326.2 million to the budget request.

#### ITEMS OF SPECIAL INTEREST

#### NATIONAL NUCLEAR SECURITY ADMINISTRATION

#### Overview

The budget request for fiscal year 2018 contained \$13.93 billion for the programs of the National Nuclear Security Administration. The committee recommends \$14.18 billion, an increase of \$253.2 million to the budget request.

# Weapons Activities

Advanced simulation and computing

The committee understands the central role high-performance computing plays in stockpile stewardship, management, and responsiveness efforts, particularly in the absence of nuclear explosive testing. The committee acknowledges and supports NNSA's push towards exascale computing technologies, but is mindful of the need to ensure the long-term compatibility of supercomputer hardware architectures and critical nuclear weapons software codes. Accordingly, it will be essential to ensure that the computing industry is aware of NNSA's unique needs and that the industry develops the necessary technology. Also central will be reworking or remaking software codes to ensure future compatibility. Furthermore, trust in software results must be tempered by comparison to nuclear test histories and continued robust real-world, non-nuclear testing.

The committee recognizes that the Department of Energy's Office of Science is a key partner with NNSA in developing exascale computing and sustaining current high-performance computing capabilities. The committee expects NNSA and the Office of Science to remain closely linked and provide updates to the committee on dislocations or cuts in either program that could affect NNSA's nuclear weapons mission.

Analysis of alternatives for unobligated enriched uranium

The committee believes the Department of Energy must ensure the availability of a long-term supply of unobligated enriched uranium for national security purposes, notably for the production of tritium and to power naval reactors. The committee notes that in October 2015, the Department of Energy released its report entitled "Tritium and Enriched Uranium Management Plan Through 2060" that identified options the Department of Energy is currently undertaking to extend its existing inventory of unobligated low enriched uranium (LEU) for tritium production. In addition, in December 2016, the Department of Energy formally initiated an analysis of alternatives process to assess technology and policy options that could provide a supply of unobligated enriched uranium for the long term.

As it proceeds with its analysis of alternatives on the technology and policy options for providing future unobligated enriched uranium, the committee expects the Department of Energy to comprehensively and rigorously consider all alternatives, consistent with Department of Energy guidance and the Government Accountability Office's October 2015 report on best practices for analysis of alternatives processes. Such analysis of alternatives should comprehensively consider construction costs, total life-cycle costs, scheduled need dates, domestic industrial base impacts, opportunities to make changes in existing policy, and risks and benefits across all potential programs and options. The committee also expects that the Department of Energy will work closely with other pertinent departments and agencies to consider the options. The committee expects the Department of Energy to keep the committee updated on its progress related to these efforts.

### Beryllium

Beryllium is a critical strategic material used by the Department of Energy, the Department of Defense, and the defense industry. If manufactured or processed improperly or without adequate safety measures, it can cause fatal health problems in exposed workers. While research efforts are underway to determine the performance of possible alternative materials, beryllium remains unique in its ability to fulfill important material requirements, particularly for nuclear weapons. The committee believes that elements of the U.S. Government, in particular the Secretary of Energy, should be mindful of the need to ensure a reliable and efficient supply of beryllium and beryllium-oxide as long as such materials remain crucial to national defense. The committee believes the Secretary of Energy and the Administrator for Nuclear Security should consider whether to designate beryllium a strategic material for the nuclear weapons stockpile, similar to plutonium, uranium, lithium, and tritium, and apply similar rigor and attention to ensuring sufficient capacity and capability is available. The committee also expects the Administrator to keep the committee informed on issues or plans related to beryllium procurement and supply, including existing stocks, as well as timelines and costs for future production or procurement.

### Defense nuclear security

The budget request contained \$687.0 million for Defense Nuclear Security at the National Nuclear Security Administration (NNSA). This funding supports both day-to-day security operations across the nuclear security enterprise, as well as sustainment and recapitalization of physical security infrastructure and equipment.

With the change in administrations and senior leadership at NNSA and the Department of Energy, the committee emphasizes the need for continued leadership attention on physical security within the nuclear security enterprise. The committee believes recent efforts, such as the Security Management Improvement Program (S-MIP), the Security Infrastructure Revitalization Program (SIRP) and associated 10-Year Revitalization Plan, and the Center for Security Technology, Analysis, Response, and Testing (CSTART) are encouraging steps towards resolving longstanding deficiencies in NNSA's physical security program. The committee believes that clarity on roles, responsibilities, and accountability for physical security is essential. NNSA and the Department of Energy must continue efforts to bring greater effectiveness, clarity, and consistency to oversight and management practices, requirements, standards, and policies for physical security. Of particular importance will be efforts to provide and clearly document physical security roles, responsibilities, and accountability. The committee believes that there has been limited progress on this front, but that it is essential that a successful security program use scarce resources for maximum benefit while appropriately assessing, managing, mitigating, accepting, and overseeing risk. The committee therefore urges the Administrator for Nuclear Security, in consultation with appropriate officials from the Department of Energy, to provide a briefing to the Committees on Armed Services of the Senate and the House of Representatives by December 1, 2017, on efforts and plans to align and clarify roles, responsibilities, and accountability for physical security. The committee seeks additional information on efforts related to security risk assessments and acceptance, budgets, inspections, policy making, oversight, and operations.

The committee recommends \$720.0 million, an increase of \$33.0 million, for Defense Nuclear Security. The committee expects this increase to support CSTART efforts, accelerate the realization of significant cost savings via the Y–12 protected area reduction project, and enable SIRP to accelerate projects to recapitalize physical security infrastructure. Elsewhere in this title, the committee includes a provision to ensure the initiation of the Material Staging Facility at Pantex, which would provide a significant boost to security and operations while avoiding significant future costs to modernize outdated security infrastructure.

### Nuclear Survivability

The budget request contained \$45.2 million for the Nuclear Survivability subprogram, which is focused on ensuring U.S. nuclear weapons can survive in even the most extreme hostile environments.

In its December 2016 report, the Defense Science Board stated, "A consequence of the reduction in numbers of U.S. nuclear weapons is that an even higher premium is placed on reliability and survivability of the remaining force," and noted that, "It should be obvious that if U.S. nuclear forces are to be part of a credible deterrent, they must be able to survive and function in an adversary generated nuclear environment." The committee has no doubt that current U.S. nuclear forces and weapons meet this exacting and critical requirement today and for the foreseeable future.

However, as it looks to the future, including the current and planned major nuclear modernization programs before it, the National Nuclear Security Administration and the Department of Defense must be mindful of effectively countering and addressing the defensive capabilities that adversaries continue to advance and change. U.S. nuclear warheads and forces of the future must be capable of surviving and functioning for the entirety of their expected design lives in a highly uncertain and more dynamic adversarygenerated nuclear environment, particularly as the size of the stockpile declines. The committee recognizes that the world-class experts and cutting-edge capabilities in the national security laboratories and plants will be key to understanding and meeting this challenge. Robust capabilities and knowledge related to advanced radiography, subcritical and scaled experiments, inertial confinement fusion, pulsed power, high performance computing, hardened microelectronics, materials, systems engineering, and many more will all play a vital role for enhancing our understanding of how U.S. nuclear weapons perform. In addition, the plans and concepts of operation employed by U.S. Strategic Command will also play an important role in addressing requirements for a credible nuclear deterrent.

The committee recommends \$49.2 million for Nuclear Survivability, an increase of \$4.0 million to the budget request.

Secure transportation asset and mobile guardian transporter

The budget request for the National Nuclear Security Administration's (NNSA) Secure Transportation Asset includes funding for the Mobile Guardian Transporter (MGT) program, which will develop and procure new highly secure trailers for the transportation of nuclear weapons, nuclear components, and special nuclear material

The committee notes NNSA's submission, pursuant to section 3142 of the National Defense Authorization Act for Fiscal Year 2016 (Public Law 114–92), of its analysis of alternatives for the MGT design and appreciates its thoroughness. The committee believes a full understanding of requirements, risk, and cost tradeoffs is essential for the MGT program. As the current Safeguards Transporter (SGT) trailers near the end of their 20-year design life, the committee expects NNSA to execute the MGT program on schedule and on budget to ensure that the Office of Secure Transportation is prepared to support the coming workload of the nuclear security enterprise. Efforts to extend portions of the SGT fleet must also be made, but the committee stresses that new trailers must be a priority to ensure safety and security.

Single-point failures in the nuclear security enterprise

The committee supports the National Nuclear Security Administration's (NNSA) efforts to examine alternative means for acquiring key capabilities, components, or materials from industry partners when such alternative means make sense for both budgets and national security. The committee is aware of significant concerns regarding potential single-point failures within the nuclear security enterprise. As NNSA has appropriately sought to reduce redundancy within the enterprise over the past several decades, the impact from such a failure has increased and could potentially create large and long-term impacts on NNSA's nuclear weapons mission.

To better understand these concerns and potential avenues for addressing them, the committee directs the Administrator for Nuclear Security to provide a briefing to the House Committee on Armed Services by January 30, 2018, on what operations are carried out in aging or inadequate facilities within the nuclear security enterprise that are at significant risk of single-point failures. As part of this briefing, the Administrator should assess and describe the costs, benefits, risks, opportunities, and national security implications of: (1) recapitalizing or replacing these facilities, including how these facilities are being prioritized for recapitalization or replacement; (2) leveraging industry partners to provide the necessary capabilities, components, or materials; and (3) other courses of action the Administrator determines appropriate to ensure a robust but cost effective enterprise.

### Defense Nuclear Nonproliferation

Nuclear counterterrorism and incident response program and emergency preparedness

The committee has long highlighted the importance and value of the National Nuclear Security Administration's (NNSA) programs that counter and respond to nuclear terrorism threats. The unique capabilities and knowledge that NNSA's laboratories provide to these programs enable the nation's first responders and warfighters to detect, evaluate, and take decisive and technically informed action against all types of nuclear threats. The committee encourages continued close collaboration among NNSA and its partner agencies to prioritize technology development and deployment funding to ensure technical information and leading-edge capabilities are in the field and available.

The committee notes continued concerns about the Department of Energy's emergency preparedness and response programs. The Defense Nuclear Facilities Safety Board (DNFSB) has highlighted these concerns in two formal recommendations since 2014. The committee expects NNSA and the Department of Energy to take robust action to follow through on the commitments made in the implementation plans that were provided in response to these DNFSB recommendations.

### Nuclear detection and verification efforts

The committee is aware that nuclear detection and verification efforts, and improving related cooperation and engagement, were a focus of discussion at the May 2017 Preparatory Committee for the 2020 Nuclear Non-Proliferation Treaty Review Conference. To support the coming Review Conference and increase international support for a successful conference, the committee believes a comprehensive understanding of U.S. Government efforts related to research, development, policies, and plans is warranted.

In this context, the committee notes that section 3132 of the National Defense Authorization Act for Fiscal Year 2017 (Public Law 114–328) required an updated national roadmap for nuclear detection and verification. The committee remains concerned that, for a second year in a row, the report delivered pursuant to this statutory requirement failed to provide an adequate or comprehensive response. Instead, the report only described initial steps and lacked a clear explanation of the plan, current and planned capabilities,

near-term or long-term objectives, funding needs, actions, or recommendations.

Therefore, as a step toward increasing understanding of current and planned efforts, the committee directs the Administrator for Nuclear Security, in coordination with the relevant national security laboratories, to provide a briefing to the Committee on Armed Services of the House of Representatives not later than December 1, 2017, on nuclear verification and detection programs. In particular, such briefing should include a description of relevant current or potential research and development programs that could enhance international cooperation with foreign partners, and the opportunities, benefits, risks, and challenges associated with such programs.

### **Naval Reactors**

### Naval Reactors program

The Naval Reactors program is responsible for all aspects of naval nuclear propulsion efforts, including reactor plant technology design and development, reactor plant operation and maintenance, and reactor retirement and disposal. The program ensures the safe and reliable operation of reactor plants in nuclear-powered submarines and aircraft carriers. These ships comprise over 40 percent of the Navy's major combatants.

The committee notes that the recent identification of a manufacturing problem with the prototype electric-drive motor for the *Columbia*-class submarine will result in late delivery of the prototype motor to the test facility. Naval Reactors assures the committee that this delay will not delay delivery of the shipboard motor for the lead ship of the *Columbia* class. The committee understands that there is no margin left in the *Columbia*-class schedule and expects Naval Reactors to take strong action to ensure they meet all deliverables to the Navy.

The committee has long been supportive of the Naval Reactors program and believes it is an exceptional example of a nuclear-related government program that is safety-focused, mission-driven, and well-managed. Due to this success, the committee and the Navy will continue to have very high expectations for performance by Naval Reactors. The committee will continue its oversight of Naval Reactors' stewardship of the Navy's nuclear mission.

### Federal Salaries and Expenses

### Comptroller General review of support service contracts

In 2015, the Department of Energy's Inspector General conducted a review of the National Nuclear Security Administration's (NNSA) use and management of support service contracts (SSC) and concluded that certain NNSA SSCs exhibited characteristics that could create the appearance, depending on how they are managed, of violating Federal acquisition regulations. NNSA agreed to implement corrective actions in response to the Inspector General's findings.

The committee remains concerned about NNSA's use and management of SSCs, both from the perspective of compliance with pertinent acquisition regulations and laws, as well as a potential

means to circumvent the intent of the statutory cap on the number of Federal NNSA employees contained in section 3241A of the National Nuclear Security Administration Act (50 U.S.C. 2441a). The committee therefore directs the Comptroller General of the United States to conduct a review of NNSA's use and management of SSCs and to provide a briefing on such review to the Committee on Armed Services of the Senate and the House of Representatives by March 1, 2018. This review should include:

(1) the number and cost of NNSA's SSCs over the past 8 years, including the value of the contracts, the number of personnel working under SSCs, and the cost of such personnel as compared to costs of comparable Federal employees;

(2) the functions performed by SSC personnel and the type of funding used to support SSCs, and the extent to which such functions and funding sources were consistent with applicable rules, guidance, directives, and laws;

(3) an assessment of NNSA's potential use of SSC personnel to compensate for a perceived shortage in Federal employee billets;

- (4) actions taken by NNSA to address the findings and recommendations made by the Inspector General in its 2015 review; and
- (5) such other matters or additional opportunities for improvement in the use and management of SSCs by NNSA as the Comptroller General determines appropriate.

### ENVIRONMENTAL AND OTHER DEFENSE ACTIVITIES

### Overview

The budget request for fiscal year 2018 contained \$6.38 billion for environmental and other defense activities. The committee recommends \$6.46 billion, an increase of \$73.0 million to the budget request.

### Defense Environmental Cleanup

### Waste Isolation Pilot Plant

The committee continues its oversight of recovery efforts and operations at the Department of Energy's Waste Isolation Pilot Plant (WIPP) in Carlsbad, New Mexico. This unique facility is central to the nation's immediate and long-term plans for the disposal of transuranic nuclear waste created by the nuclear weapons program. It suffered several incidents in 2014, one of which was caused by improper packaging of waste at the Los Alamos National Laboratory that resulted in a release of radioactive material and shutdown of the facility, costing over \$500.0 million in repairs and delaying shipments to the facility for over 3 years.

The committee continues to monitor and oversee the Department's efforts to recover from the 2014 incidents, and acknowledges WIPP's resumption of limited waste emplacement operations in January 2017. Shipments of waste to WIPP also resumed in April. The committee believes that timely resumption of full operations at WIPP is essential to eliminating the risks posed by transuranic waste stored across the Department of Energy defense enterprise, but cautions that such efforts proceed with safety as the foremost priority. The committee supports the Department's efforts to drill

a new ventilation shaft and build a new filter building. The committee encourages the Department to explore options that would enable WIPP to be more efficient, effective, and safe with its disposal of waste, and expects the Department to keep Congress and the public apprised of its continued recovery actions.

### LEGISLATIVE PROVISIONS

### SUBTITLE A—NATIONAL SECURITY PROGRAMS AUTHORIZATIONS

### Section 3101—National Nuclear Security Administration

This section would authorize appropriations for the National Nuclear Security Administration for fiscal year 2018, including funds for weapons activities, defense nuclear nonproliferation programs, naval reactor programs, and Federal Salaries and Expenses (formerly known as the "Office of the Administrator"), at the levels specified in the funding table in division D of this Act.

This section would also authorize several new plant projects for the National Nuclear Security Administration.

### Section 3102—Defense Environmental Cleanup

This section would authorize appropriations for defense environmental cleanup activities for fiscal year 2018 at the levels specified in the funding table in division D of this Act.

This section would also authorize several new plant projects for the defense environmental cleanup program.

### Section 3103—Other Defense Activities

This section would authorize appropriations for Other Defense Activities for the Department of Energy for fiscal year 2018 at the levels specified in the funding table in division D of this Act.

### Section 3104—Nuclear Energy

This section would authorize appropriations for certain nuclear energy programs for the Department of Energy for fiscal year 2018 at the levels specified in the funding table in division D of this Act.

# SUBTITLE B—PROGRAM AUTHORIZATIONS, RESTRICTIONS, AND LIMITATIONS

### Section 3111—Nuclear Security Enterprise Infrastructure Recapitalization and Repair

This section would make a series of findings regarding the need to address infrastructure problems within the nuclear security enterprise.

This section would also require the Administrator for Nuclear Security to establish, within 30 days after the date of the enactment of this Act, a program known as the Facilities and Infrastructure Recapitalization and Repair Program (FIRRP) with a goal of reducing the nuclear security enterprise backlog of deferred maintenance and repair needs by at least 50 percent within 5 years.

Furthermore, this section would require the Secretary of Energy to provide the Administrator a process that will enhance and streamline the ability of the Administrator to carry out this program efficiently and effectively, including with respect to:

(1) demolition or construction of non-nuclear facilities where the total project cost is estimated to be less than \$100.0 million; and

(2) authority to decontaminate, decommission, and demolish (to be performed in accordance with applicable health and safety standards used by the defense environmental cleanup program) process-contaminated facilities if the total project cost is estimated to be less than \$50.0 million.

This section would authorize the Administrator to carry out this program without regard to certain requirements laid out in Office of Management and Budget Management Procedures Memorandum 2015–01. The Secretary and the Administrator would be required to provide, alongside the President's budget request for fiscal year 2019, a plan for achieving this goal. The program would terminate 5 years after the date of the enactment of this Act.

In addition, this section would require, within the annual Stockpile Stewardship, Management, and Responsiveness Plan mandated by section 2523 of title 50, United States Code, the Administrator to report metrics related to infrastructure deferred mainte-

nance and repair needs based on industry best practices.

Furthermore, this section would provide mechanisms such that, for any line item plant projects authorized by Congress, the Administrator ensures that all requirements that increase scope, schedule, or budgets for such projects do not change after certain steps in the design and construction process.

Finally, this section would also express the sense of Congress regarding the program authorized by this section and infrastructure needs within the nuclear security enterprise.

### Section 3112—Incorporation of Integrated Surety Architecture in Transportation

This section would create a new section, section 4222, in the Atomic Energy Defense Act (50 U.S.C. 2521) that would require the Administrator for Nuclear Security, in coordination with the Chairman of the Nuclear Weapons Council, to jointly ensure that all nuclear warhead development programs, life extension programs, and major alteration programs incorporate integrated designs compatible with the Integrated Surety Architecture (ISA) Program of the National Nuclear Security Administration (NNSA). The Administrator would further be required to ensure that over-the-road shipments of the NNSA involving any nuclear weapon planned to be in the active stockpile after 2025 incorporates surety technologies relating to transportation and shipping developed by the ISA Program. If, on a case-by-case basis, the Administrator determines that a shipment (or class of shipments) or program will not incorporate some or all of the technologies, the Administrator would be required to submit that determination and a documented risk analvsis to the congressional defense committees. The requirements of this section would terminate on December 31, 2029, and the Administrator would be required to implement direction relating to this section contained in the classified annex accompanying this Act.

### Section 3113—Cost Estimates for Life Extension Program and **Major Alteration Projects**

This section would amend section 4217(b) of the Atomic Energy Defense Act (50 U.S.C. 2537(b)) to require the Secretary of Energy, acting through the Administrator for Nuclear Security, to conduct an independent cost estimate or independent cost review at various phases of warhead life extension programs. The Administrator would be required to submit the independent cost estimate or independent cost review to the congressional defense committees not later than 30 days after approval of the pertinent acquisition phase. Not later than 30 days after that, the Administrator would be required to submit any views of the Administrator regarding the cost estimate or the program and whether the Administrator has changed the baseline cost estimate and the future years nuclear security program budget for the program.

### Section 3114—Budget Requests and Certification regarding Nuclear Weapons Dismantlement

This section would amend section 3125 of the National Defense Authorization Act for Fiscal Year 2017 (Public Law 114-328) to reguire that the Administrator for Nuclear Security ensure that the President's request submitted to Congress under section 1105(a) of title 31, United States Code, for each of the fiscal years 2019 through 2021 includes amounts for the nuclear weapons dismantlement and disposition activities of the National Nuclear Security Administration (NNSA) in accordance with the limitation in section 3125(a) of Public Law 114-328, which prescribes a maximum amount of \$56.0 million. This section would also require the Administrator to certify to the congressional defense committees by February 1, 2018, that the Administrator is carrying out NNSA's nuclear weapons dismantlement and disposition activities in accordance with the limitations in subsections (a) and (b) of section 3125 of Public Law 114-328.

### Section 3115—Improved Information Relating to Defense Nuclear Nonproliferation Research and Development Program

This section would create a new section 4310 in the Atomic Energy Defense Act (50 U.S.C. 2563) to require the Administrator for Nuclear Security to track and document, for efforts that are not focused on basic research, the technologies and capabilities developed by the Defense Nuclear Nonproliferation Research and Development (DNN R&D) program to better understand whether such technologies are transitioned to end users or deployed.

Furthermore, this section would require the Administrator, in assessing projects within the DNN R&D program and the Nonproliferation and Arms Control program, to compare the status of each project, including the final results of such projects, to baseline targets and goals established in the initial project plan.

Lastly, this section would require the Administrator to include, within the annual plan required by section 4309(b) of the Atomic Energy Defense Act (50 U.S.C. 2575(b)), information related to these requirements.

### Section 3116—Research and Development of Advanced Naval Reactor Fuel Based on Low-Enriched Uranium

This section would provide that none of the funds authorized to be appropriated by this Act or otherwise made available for fiscal year 2018 for the Department of Energy or the Department of Defense may be obligated or expended to plan or carry out research and development of an advanced naval nuclear fuel system based on low-enriched uranium. However, the section would authorize for these purposes, from within amounts made available for fiscal year 2018 for defense nuclear nonproliferation, \$5.0 million for the Deputy Administrator for Naval Reactors of the National Nuclear Security Administration. This section would also authorize an additional \$30.0 million for these purposes from the amounts made available for defense nuclear nonproliferation if the Secretary of Energy and Secretary of the Navy determine under section 3118(c)(1) of the National Defense Authorization Act for Fiscal Year 2016 (P.L. 114–92) that such research and development should continue.

This section would also create a new section, section 7319, in title 10, United States Code, to provide that activities related to planning or carrying out research and development of an advanced naval nuclear fuel system based on low-enriched uranium, and procuring of ships that use low-enriched uranium in naval nuclear propulsion reactors, may only be carried out using funding from the defense nuclear nonproliferation account of the Department of Energy. This section would state that this prohibition may not be superseded except by a provision of law that specifically supersedes, repeals, or modifies this section, section 7319.

Finally, this section would require two reports related to this program.

### Section 3117—Prohibition on Availability of Funds for Programs in Russian Federation

This section would provide that none of the funds authorized to be appropriated by this Act or otherwise made available for fiscal year 2018 for atomic energy defense activities may be obligated or expended to enter into a contract with, or otherwise provide assistance to, the Russian Federation. The Secretary of Energy, without delegation, would be provided the authority to waive this prohibition if the Secretary determines, in writing, that a nuclear-related threat arising in the Russian Federation must be addressed urgently and that it is necessary to waive the prohibition to address that threat. The waiver could only be used if the Secretary of State and the Secretary of Defense concur in that determination, and the Secretary of Energy submits a report to the appropriate congressional committees containing notification that such waiver is in the national security interest of the United States, a justification for such waiver, a description of the activities to be carried out pursuant to the waiver, and a period of 7 days elapses. The prohibition and waiver contained in this section would not apply to up to \$3.0 million that the Secretary of Energy may make available for the Department of Energy's Russian Health Studies Program.

### Section 3118—National Nuclear Security Administration Pay and Performance System

This section would require the Administrator for Nuclear Security to continue to carry out the National Nuclear Security Administration's (NNSA) Pay Banding and Performance-Based Pay Adjustment Demonstration Project authorized under section 4703 of title 5, United States Code, for 5 years after the date of the enactment of this Act. As part of this project, the Administrator for Nuclear Security would be required to enable and incentivize NNSA employees to undertake rotational assignments and ensure that employees complete certain requirements (as determined by the Administrator) related to rotational assignments, professional training, and continuing education before they may be considered for appointment to senior-level positions.

This section would further require the Administrator to take actions (as determined by the Administrator) to strengthen and increase the use of rotational assignments through intergovernmental personnel agreements or similar programs by NNSA employees and the employees of its management and operating contractors.

This section would also require the Director of the NNSA Office of Cost Estimating and Program Evaluation to carry out a redteam analysis of NNSA's Federal staffing structure.

Finally, the Administrator and the Director would be required to provide briefings to the appropriate congressional committees within 180 days after the date of the enactment of this Act on the matters contained in this section.

### Section 3119—Disposition of Weapons-Usable Plutonium

This section would require the Secretary of Energy to carry out construction and project support activities for the Mixed Oxide Fuel Fabrication Facility with any funds authorized to be appropriated or otherwise made available for such purposes for fiscal year 2018. The Secretary would be allowed to waive this requirement if the Secretary submits certain matters, notifications, and certifications to the Committees on Armed Services of the Senate and the House of Representatives.

### Section 3120—Modification of Minor Construction Threshold for Plant Projects

This section would amend section 4701 of the Atomic Energy Defense Act (50 U.S.C. 2741) to increase the minor construction threshold for projects authorized by a Department of Energy national security authorization from \$10.0 million to \$20.0 million and index such threshold to inflation.

### Section 3121—Design Competition

This section would make a series of findings and require the Administrator for Nuclear Security to plan and carry out a new and comprehensive design competition for a nuclear warhead that could be employed on ballistic missiles of the United States by 2030. The Administrator would be required to develop a plan to carry out this design competition in fiscal year 2018 and implement such plan in

fiscal year 2019. The Administrator would be required to provide a briefing to the Committees on Armed Services of the Senate and House of Representatives by March 1, 2018, on the plan to carry out this design competition.

### Section 3122—Department of Energy Counterintelligence Polygraph Program

This section would authorize the Secretary of Energy to add dual citizens in positions with access to highly classified information to their counterintelligence polygraph program, for the purposes of assessing risk.

Section 3123—Security Clearance for Dual-Nationals Employed by National Nuclear Security Agency

This section would authorize the Secretary of Energy to apply additional security reviews to dual citizens seeking positions that require access to highly classified information.

### SUBTITLE C—PLANS AND REPORTS

Section 3131—Modification of Certain Reporting Requirements

This section would eliminate, consolidate, or modify several existing reporting requirements.

Section 3132—Assessment of Management and Operating Contracts of National Security Laboratories

This section would require, within 30 days after the date of the enactment of this Act, the Administrator for Nuclear Security to seek to enter into a contract with a federally funded research and development center (FFRDC) to conduct an assessment of the benefits, costs, challenges, risks, efficiency, and effectiveness of the Administrator's strategy with respect to management and operating contracts for national security laboratories. This section would prohibit the Administrator from awarding such contract to an FFRDC for which the Department of Energy or the National Nuclear Security Administration (NNSA) is the primary sponsor.

This section would further require the Administrator and the director of each national security laboratory to provide the FFRDC conducting the assessment full cooperation and access to all information required to conduct the assessment. The FFRDC would be required to submit a report to the Administrator containing their assessment within 90 days of contract award. Such report would be required to include the FFRDC's assessment of matters related to the NNSA's acquisition strategy and contract oversight process, particularly with respect to the use of for-profit contracts as opposed to nonprofit approaches, and whether the NNSA is appropriately using, managing, and overseeing the laboratories with respect to their nature as FFRDCs. The Administrator would be required to provide the FFRDC report, unchanged, to the congressional defense committees.

Finally, this section would prohibit any funds authorized to be appropriated by this Act or otherwise made available for fiscal year 2018 for the NNSA to be obligated or expended to award, or extend, a management and operating contract for a national security

laboratory until the Administrator submits the FFRDC report to the Committees on Armed Services of the Senate and the House of Representatives. The Secretary of Energy would be authorized to waive this prohibition and extend such a contract only if the Secretary determines it is required in the interest of national security and notifies the Committees on Armed Services of the Senate and the House of Representatives.

This section would also express the sense of Congress that states that this section should not be construed to mandate or encourage an extension of an existing management and operating contract for a national security laboratory.

### Section 3133—Evaluation of Classification of Certain Defense Nuclear Waste

This section would require the Secretary of Energy to conduct an evaluation of the feasibility, costs, and cost savings of classifying, without decreasing safety requirements, certain defense nuclear waste as other than high-level radioactive waste. The Secretary would be required to submit a report on this evaluation to the appropriate congressional committees by February 1, 2018.

### Section 3134—Report on Critical Decision—1 on Material Staging Facility Project

This section would require that the Administrator for Nuclear Security submit a report to the congressional defense committees, not later than October 31, 2017, containing the Administrator's decision memorandum for Critical Decision—1 (CD—1) on the Material Staging Facility project at the Pantex Plant. The report would be required to contain the preferred alternative approved by the Administrator for CD—1 and several other key pieces of information regarding the project.

# Section 3135—Modification to Stockpile Stewardship, Management, and Responsiveness Plan

This section would amend section 4203 of the Atomic Energy Defense Act (50 U.S.C. 2523) to require the Administrator to include, within the Stockpile Stewardship, Management, and Responsiveness Plan (SSMRP), an assessment of whether the programs described by the SSMRP can be executed with current and projected budgets and any associated risks.

### Section 3136—Improved Reporting for Anti-Smuggling Radiation Detection Systems

This section would require the Administrator for Nuclear Security to submit to the congressional defense committees, with the President's budget request for fiscal years 2019 through 2021, a report regarding any anti-smuggling radiation detection systems that the Administrator proposes to deploy during the fiscal year covered by the budget request.

Section 3137—Annual Selected Acquisition Reports on Certain Hardware Relating to Defense Nuclear Nonproliferation

The section would require the Administrator for Nuclear Security to submit to the congressional defense committees, at the end of each fiscal year, selected acquisition reports for certain projects carried out by the defense nuclear nonproliferation research and development program that are focused on the production and deployment of hardware (including with respect to the development and deployment of satellites or satellite payloads) and exceed \$500.0 million in total program cost over the course of five years.

### Section 3138—Assessment of Design Trade Options of W80–4 Warhead

This section would require the Director for Cost Estimating and Program Evaluation of the National Nuclear Security Administration to conduct an assessment of the design trade options, and the associated costs and benefits of each option, for the W80–4 warhead. The Director would be required to submit such assessment to the Administrator for Nuclear Security within 60 days of enactment of this Act. The Administrator would be required to provide a briefing to the congressional defense committees 30 days later containing a copy of the assessment and any views of the Administrator.

# TITLE XXXII—DEFENSE NUCLEAR FACILITIES SAFETY BOARD

### LEGISLATIVE PROVISIONS

Section 3201—Authorization

The budget request contained \$30.6 million for the Defense Nuclear Facilities Safety Board for fiscal year 2018. The committee recommends \$30.6 million, the amount of the budget request.

### TITLE XXXIV—NAVAL PETROLEUM RESERVES

### LEGISLATIVE PROVISIONS

Section 3401—Authorization of Appropriations

This section would authorize \$4.9 million for fiscal year 2018 for operation and maintenance of the Naval Petroleum Reserves.

### TITLE XXXV—MARITIME ADMINISTRATION

### ITEMS OF SPECIAL INTEREST

National Security Multi-Mission Vessel

The committee continues to support the Maritime Administration's efforts to develop and procure the National Security Multi-Mission Vessel for the recapitalization of the state maritime academies training vessels. The state maritime academies play a vital role in the education and training of United States merchant mariners. A substantial portion of the training is done aboard training vessels provided by the Maritime Administration. Most of these vessels have reached the end of their service life and in some cases are over 50 years old. The committee is disappointed that the administration did not provide any funding in the budget request after 2 years of requirements review and design funding. Therefore, the committee recommends \$36.0 million for the continued development of the National Security Multi-Mission vessel.

### LEGISLATIVE PROVISIONS

Section 3501—Authorization of the Maritime Administration

This section would authorize appropriations for the national security aspects of the merchant marine for fiscal year 2018.

Section 3502—Merchant Ship Sales Act of 1946

This section would repeal the first section and sections 2, 3, 5, 12, and 14 of the Merchant Ship Sales Act of 1946. Additionally, the section transfers section 8(d) of the Act to chapter 563, Emergency Acquisition of Vessels, of title 46, United States Code. Finally, the section transfers section 11 of the Act to chapter 571, General Authority, of title 46, United States Code.

Section 3503—Maritime Security Fleet Program; Restriction on Operation for New Entrants

This section would amend section 53105 of title 46, United States Code, and prohibit a maritime security program payment to a vessel operating in the transportation of cargo between points in the United States and its territories either directly or via a foreign port. This section would further authorize the replacement of vessels under an existing operating agreement.

Section 3504—Codification of Sections Relating to Acquisition, Charter, and Requisition of Vessels

This section would move certain sections related to the acquisition, charter and requisition of vessels from title 50 to title 46 and make additional conforming changes.

Section 3505—Assistance for Small Shipyards

This section would amend section 54101 of title 46, United States Code, and limit small shippard grants to organizations relating to shipbuilding, ship repair and associated industries. Additionally, this section would authorize funds for small shippard grants for fiscal years 2018 and 2019.

Section 3506—Report on Sexual Assault Victim Recovery in the Coast Guard

This section would require the Commandant of the Coast Guard to submit a report on sexual assault prevention and response policies of the Coast Guard and strategic goals related to sexual assault victim recovery to the Committee on Transportation and Infrastructure no later than 180 days after the enactment of this Act.

### Section 3507—Centers of Excellence

This section would amend chapter 541 of title 46, United States Code, to authorize the Secretary of Transportation to designate centers of excellence for domestic maritime workforce training and education.

### **DIVISION D—FUNDING TABLES**

Section 4001—Authorization of Amounts in Funding Tables

This section would provide for the allocation of funds among programs, projects, and activities in accordance with the tables in division D of this Act, subject to reprogramming guidance in accordance with established procedures.

Consistent with the previously expressed views of the committee, this section would also require that a decision by an agency head to commit, obligate, or expend funds to a specific entity on the basis of such funding tables be based on merit-based selection procedures in accordance with the requirements of section 2304(k) and section 2374 of title 10, United States Code, and other applicable provisions of law.

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### SUMMARY OF NATIONAL DEFENSE AUTHORIZATIONS FOR FISCAL YEAR 2018

(In Thousands of Dollars)

FY 2018	House	House
Request	Change	Authorized

## DISCRETIONARY AUTHORIZATIONS WITHIN THE JURISDICTION OF THE ARMED SERVICES COMMITTEE

### National Defense Funding, Base Budget Request

### Function 051, Department of Defense-Military

Division A: Department of Defense Authorizations			
Title I—Procurement			
Aircraft Procurement, Army	4,149,894	1,443,667	5,593,561
Missile Procurement, Army	2,519,054	559,247	3,078,301
Weapons & Tracked Combat Vehicles, Army	2,423,608	2,535,039	4,958,647
Procurement of Ammunition, Army	1,879,283	355,964	2,235,247
Other Procurement, Army	6,469,331	1,993,891	8,463,222
Joint Improvised-Threat Defeat Fund	14,442		14,442
Aircraft Procurement, Navy	15,056,235	3,358,550	18,414,785
Weapons Procurement, Navy	3,420,107	74,200	3,494,307
Procurement of Ammunition, Navy & Marine Corps	792,345		792,345
Shipbuilding & Conversion, Navy	19,903,682	-680,300	19,223,382
Other Procurement, Navy	8,277,789	445,986	8,723,775
Procurement, Marine Corps	2,064,825	8,879	2,073,704
Aircraft Procurement, Air Force	15,430,849	2,917,162	18,348,011
Missile Procurement, Air Force	2,296,182	17,000	2,313,182
Space Procurement, Air Force	3,370,775	176,350	3,547,125
Procurement of Ammunition, Air Force	1,376,602		1,376,602
Other Procurement, Air Force	19,603,497	314,648	19,918,145
Procurement, Defense-Wide	4,835,418	457,100	5,292,518
Joint Urgent Operational Needs Fund	99,795	-99,795	0
Subtotal, Title I—Procurement	113,983,713	13,877,588	127,861,301
Title II—Research, Development, Test and Evaluation			
Research, Development, Test & Evaluation, Army	9,425,440	228,940	9,654,380
Research, Development, Test & Evaluation, Navy	17,675,035	309,200	17,984,235
Research, Development, Test & Evaluation, Air Force	34,914,359	278,255	35,192,614
Research, Development, Test & Evaluation, Defense-Wide	20,490,902	505,326	20,996,228
Operational Test & Evaluation, Defense	210,900	,	210,900
Subtotal, Title II—Research, Development, Test and	,		,
Evaluation	82,716,636	1,321,721	84,038,357
Title III—Operation and Maintenance			
Operation & Maintenance, Army	38,945,417	1,494,172	40,439,589
Operation & Maintenance, Army Reserve	2,906,842	1,282	2,908,124
Operation & Maintenance, Army National Guard		,	7,381,580
	7 307 170	/4 410	
Operation & Maintenance Navy	7,307,170 45 439 407	74,410 -3 689	, ,
Operation & Maintenance, Navy  Operation & Maintenance, Marine Corps	45,439,407	-3,689	45,435,718
Operation & Maintenance, Marine Corps	45,439,407 6,933,408	-3,689 123,733	45,435,718 7,057,141
Operation & Maintenance, Marine Corps Operation & Maintenance, Navy Reserve	45,439,407 6,933,408 1,084,007	-3,689 123,733 -9,800	45,435,718 7,057,141 1,074,207
Operation & Maintenance, Marine Corps  Operation & Maintenance, Navy Reserve  Operation & Maintenance, Marine Corps Reserve	45,439,407 6,933,408 1,084,007 278,837	-3,689 123,733 -9,800 -300	45,435,718 7,057,141 1,074,207 278,537
Operation & Maintenance, Marine Corps	45,439,407 6,933,408 1,084,007 278,837 39,429,232	-3,689 123,733 -9,800 -300 954,826	45,435,718 7,057,141 1,074,207 278,537 40,384,058
Operation & Maintenance, Marine Corps  Operation & Maintenance, Navy Reserve  Operation & Maintenance, Marine Corps Reserve	45,439,407 6,933,408 1,084,007 278,837	-3,689 123,733 -9,800 -300	45,435,718 7,057,141 1,074,207 278,537

\$348\$ Summary of National Defense authorizations for Fiscal Year 2018—Continued (In Thousands of Dollars)

	FY 2018 Request	House Change	House Authorized
Operation & Maintenance, Defense-Wide	34,585,817	207,025	34,792,842
US Court of Appeals for the Armed Forces, Defense	14,538	,	14,538
Overseas Humanitarian, Disaster and Civic Aid	104,900		104,900
Cooperative Threat Reduction	324,600		324,600
Environmental Restoration, Army	215,809		215,809
Environmental Restoration, Navy	281,415	42,234	323,649
Environmental Restoration, Air Force	293,749	30,000	323,749
Environmental Restoration, Defense	9,002		9,002
Environmental Restoration, Formerly Used Sites	208,673		208,673
Subtotal, Title III—Operation and Maintenance	188,570,298	3,074,093	191,644,391
Title IV—Military Personnel			
Military Personnel Appropriations	133,881,636	184,389	134,066,025
Medicare-Eligible Retiree Health Fund Contributions	7,804,427		7,804,427
Subtotal, Title IV—Military Personnel	141,686,063	184,389	141,870,452
Title XIV—Other Authorizations			
Working Capital Fund, Army	83,776	50,111	133,887
Working Capital Fund, Air Force	66,462		66,462
Working Capital Fund, DECA	1,389,340	-45,000	1,344,340
Working Capital Fund, Defense-Wide	47,018		47,018
National Defense Sealift Fund	509,327	7,000	516,327
Chemical Agents & Munitions Destruction	961,732		961,732
Drug Interdiction and Counter Drug Activities	790,814	17,000	807,814
Office of the Inspector General	336,887		336,887
Defense Health Program	33,664,466	-118,600	33,545,866
Subtotal, Title XIV—Other Authorizations	37,849,822	-89,489	37,760,333
Total, Division A: Department of Defense Authorizations	564,806,532	18,368,302	583,174,834
Division B: Military Construction Authorizations			
Military Construction			
Army	920,394	37,400	957,794
Navy	1,616,665	58,320	1,674,985
Air Force	1,738,796	-128,022	1,610,774
Defense-Wide	3,114,913	-351,081	2,763,832
NATO Security Investment Program	154,000	-1,068	152,932
Army National Guard	210,652	56,000	266,652
Army Reserve	73,712	56,000	129,712
Navy and Marine Corps Reserve	65,271		65,271
Air National Guard	161,491	41,900	203,391
Air Force Reserve	63,535	44,100	107,635
Unaccompanied Housing Improvement Fund	623		623
Subtotal, Military Construction	8,120,052	-186,451	7,933,601
Family Housing			
Construction, Army	182,662	-18,000	164,662
Operation & Maintenance, Army	346,625		346,625
Construction, Navy and Marine Corps	83,682	-8,000	75,682

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SUMMARY OF NATIONAL DEFENSE AUTHORIZATIONS FOR FISCAL YEAR 2018—Continued

(In Thousands of Dollars)

(In Thousands of	Dollars)		
	FY 2018 Request	House Change	House Authorized
Operation & Maintenance, Navy and Marine Corps	328,282		328,282
Construction, Air Force	85,062	-20,000	65,062
Operation & Maintenance, Air Force	318,324	20,000	318,324
Operation & Maintenance, Defense-Wide	59,169		59,169
Improvement Fund	2,726		2,726
Subtotal, Family Housing	1,406,532	-46,000	1,360,532
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Base Realignment and Closure	F0.000		F0 000
Base Realignment and Closure—Army	58,000		58,000
Base Realignment and Closure—Navy	143,644	35,000	178,644
Base Realignment and Closure—Air Force	54,223		54,223
Subtotal, Base Realignment and Closure	255,867	35,000	290,867
$\textbf{Total, Division B: Military Construction Authorizations} \ \dots \\$	9,782,451	-197,451	9,585,000
Total, 051, Department of Defense-Military	574,588,983	18,170,851	592,759,834
Division C: Department of Energy National Security Autho	rization and Other	Authorizations	
Function 053, Atomic Energ	v Dofonoo Antivitia		
Fullction 033, Atomic Energ	y Deletise Activitie	:3	
Environmental and Other Defense Activities			
Nuclear Energy	133,000		133,000
Weapons Activities	10,239,344	184,200	10,423,544
Defense Nuclear Nonproliferation	1,793,310	80,000	1,873,310
Naval Reactors	1,479,751	,	1,479,751
Federal Salaries and Expenses	418,595	-11,000	407,595
Defense Environmental Cleanup	5,537,186	70,000	5,607,186
Other Defense Activities	815,512	3,000	818,512
		3,000	
Defense Nuclear Waste Disposal	30,000 <b>20,446,698</b>	326,200	30,000 <b>20,772,898</b>
Subtotal, Elivironmental and other bereinse Activities	20,440,030	020,200	20,772,000
Independent Federal Agency Authorization			
Defense Nuclear Facilities Safety Board	30,600		30,600
Subtotal, Independent Federal Agency Authorization	30,600	0	30,600
Subtotal, 053, Atomic Energy Defense Activities	20,477,298	326,200	20,803,498
Function 054, Defense-R	elated Activities		
Other Agency Authorizations			
Maritime Security Program	210,000		210,000
Subtotal, Independent Federal Agency Authorization	210,000	0	210,000
Subtotal, 054, Defense-Related Activities	210,000	0	210,000
Subtotal Division C. Donortment of Francy National Co.			
Subtotal, Division C: Department of Energy National Security Authorization and Other Authorizations	20,687,298	326,200	21,013,498
Total, National Defense Funding, Base Budget Request	595,276,281	18,497,051	613,773,332

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## SUMMARY OF NATIONAL DEFENSE AUTHORIZATIONS FOR FISCAL YEAR 2018—Continued (In Thousands of Dollars)

	FY 2018 Request	House Change	House Authorized
National Defense Funding, Overseas	Contingency O	oerations	
National Defense Funding, Overseas Contingency Op	erations Fundin	g for Base Requ	irements
Function 051, Department of	Defense-Milita	ту	
Procurement			
Shipbuilding & Conversion, Navy		6,046,800	6,046,80
Subtotal, Procurement	0	6,046,800	6,046,80
Research, Development, Test and Evaluation			
Research, Development, Test & Evaluation, Army		85,866	85,86
Research, Development, Test & Evaluation, Navy		38,500	38,50
Research, Development, Test & Evaluation, Air Force		190,750	190,75
Research, Development, Test & Evaluation, Defense-Wide		463,500	463,50
Subtotal, Research, Development, Test and Evaluation	0	778,616	778,61
Operation and Maintenance			
Operation & Maintenance, Army		629,047	629,04
Operation & Maintenance, Army Reserve		82,619	82,61
Operation & Maintenance, Army National Guard		173,900	173,90
Operation & Maintenance, Navy		414,200	414,20
Operation & Maintenance, Marine Corps		217,487	217,48
Operation & Maintenance, Navy Reserve		11,500	11,50
Operation & Maintenance, Marine Corps Reserve		7,246	7,24
Operation & Maintenance, Air Force		507,700	507,70
Operation & Maintenance, Air Force Reserve		15,300	15,30
Operation & Maintenance, Air National Guard	_	47,600	47,60
Subtotal, Operation and Maintenance	0	2,106,599	2,106,59
Military Personnel			
Military Personnel Appropriations		1,017,700	1,017,70
Medicare-Eligible Retiree Health Fund Contributions		44,140	44,14
Subtotal, Military Personnel	0	1,061,840	1,061,84
Subtotal, 051, Department of Defense-Military	0	9,993,855	9,993,85
Total, National Defense Funding, Overseas Contingency			
Operations Funding for Base Requirements	0	9,993,855	9,993,85
National Defense Funding, Overseas Conting	ency Operations	Budget Reques	t
Function 051, Department of	Defense-Militai	у	
Procurement			
Aircraft Procurement, Army	424,686	110,234	534,92
Missile Procurement, Army	559,283	845,181	1,404,46
Weapons & Tracked Combat Vehicles, Army	1,191,139	-1,014,139	177,00
Procurement of Ammunition, Army	193,436	552,320	745,75

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SUMMARY OF NATIONAL DEFENSE AUTHORIZATIONS FOR FISCAL YEAR 2018—Continued
(In Thousands of Dollars)

(in inousands of i	,		
	FY 2018 Request	House Change	House Authorized
Other Procurement, Army	405,575	172,378	577,953
Joint Improvised-Threat Defeat Fund	483,058	, -	483,058
Aircraft Procurement, Navy	157,300	16,000	173,300
Weapons Procurement, Navy	152,373	12,000	164,373
Procurement of Ammunition, Navy & Marine Corps	225,587	42,500	268,087
Other Procurement, Navy	220,059	-58,586	161,473
Procurement, Marine Corps	65,274	149,129	214,403
Aircraft Procurement. Air Force	740,778	14,183	754,961
Missile Procurement, Air Force	395,400	,	395,400
Space Procurement, Air Force	2,256		2,256
Procurement of Ammunition, Air Force	501,509		501,509
Other Procurement, Air Force	4,008,887	262,549	4,271,436
Procurement, Defense-Wide	518,026	67,525	585,551
National Guard & Reserve Equipment	0	500,000	500,000
Subtotal, Procurement	10,244,626	1,671,274	11,915,900
Research, Development, Test and Evaluation			
Research, Development, Test & Evaluation, Army	119,368	183,239	302,607
Research, Development, Test & Evaluation, Navy	130,365	-11,600	118,765
Research, Development, Test & Evaluation, Air Force	135,358	14,000	149,358
Research, Development, Test & Evaluation, Defense-Wide	226,096	509,646	735,742
Subtotal, Research, Development, Test and Evaluation	611,187	695,285	1,306,472
Operation and Maintenance			
Operation & Maintenance, Army	16,126,403	-1,427,940	14,698,463
Operation & Maintenance, Army Reserve	24,699	33,279	57,978
Operation & Maintenance, Army National Guard	108,111	00,270	108,111
Afghanistan Security Forces Fund	4,937,515		4,937,515
Counter-ISIS Train & Equip Fund	1,769,000		1,769,000
Operation & Maintenance, Navy	5,875,015	39,489	5,914,504
Operation & Maintenance, Marine Corps	1,116,640	-164,733	951,907
Operation & Maintenance, Navy Reserve	23,980	101,700	23,980
Operation & Maintenance, Marine Corps Reserve	3,367		3,367
Operation & Maintenance, Air Force	10,266,295	-313,426	9,952,869
Operation & Maintenance, Air Force Reserve	58,523	010,420	58,523
Operation & Maintenance, Air National Guard	15,400		15,400
Operation & Maintenance, Defense-Wide	7,712,080	-424,519	7,287,561
Ukraine Security Assistance	7,712,000	150,000	150,000
Subtotal, Operation and Maintenance	48,037,028	<b>-2,107,850</b>	45,929,178
Military Parconnal			
Military Personnel Appropriations	A 276 276	21/1 200	A 061 097
Military Personnel Appropriations	4,276,276	-214,289	4,061,987
Subtotal, Military Personnel	4,276,276	-214,289	4,061,987
Other Authorizations	50.111	FO 111	•
Working Capital Fund, Army	50,111	-50,111	0
Working Capital Fund, Defense-Wide	98,845		98,845
Drug Interdiction and Counter Drug Activities	196,300		196,300
Office of the Inspector General	24,692		24,692
Defense Health Program	395,805		395,805

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SUMMARY OF NATIONAL DEFENSE AUTHORIZATIONS FOR FISCAL YEAR 2018—Continued
(In Thousands of Dollars)

	FY 2018 Request	House Change	House Authorized
Subtotal, Other Authorizations	765,753	-50,111	715,642
Military Construction			
Army	139,700	6,400	146,100
Navy	18,500	13,390	31,890
Air Force	478,030	-43,378	434,652
Defense-Wide	1,900	22,400	24,300
Subtotal, Military Construction	638,130	-1,188	636,942
Total, Overseas Contingency Operations Budget Request	64,573,000	-6,879	64,566,121
Total, National Defense Funding, Overseas Contingency			
Operations	64,573,000	9,986,976	74,559,976
Subtotal, 051, Department of Defense-Military	64,573,000	9,986,976	74,559,976
Total, National Defense Funding, Overseas Contingency Operations	64,573,000	9,986,976	74,559,976
Total, National Defense	659,849,281	28,484,027	688,333,308
MEMORANDUM: NON-DEFENSE AUTHORIZATIONS Title XII—Financial oblications pursuant to Section 432 of the Compact of Free Association with Palau (Func-			
tion 800)	0	123,900	123,900
Title XIV—Armed Forces Retirement Home (Function 600) Title XXXIV—Naval Petroleum and Oil Shale Reserves	64,300		64,300
(Function 270)	4,900		4,900
MEMORANDUM: TRANSFER AUTHORITIES (NON-ADD)			
Title X—General Transfer Authority	[5,000,000]		[5,000,000
Title XV—Special Transfer Authority	[4,500,000]	[-2,000,000]	[2,500,000
MEMORANDUM: DEFENSE AUTHORIZATIONS NOT UNDER THE MITTEE (NON-ADD)	JURISDICTION O	F THE ARMED SE	RVICES COM-
Defense Production Act	[37,401]		[37,401
NATIONAL DEFENSE BUDGET AU		CATION	
(III IIIOusanus oi L	FY 2018	House	House
	Request	Change	Authorized
Summary, Discretionary Authorizations Within the Jur SUBTOTAL, DEPARTMENT OF DEFENSE (051)			Committee 592,759,834
SUBTOTAL, ATOMIC ENERGY DEFENSE PROGRAMS (053) Subtotal, Defense-Related Activities (054)	20,477,298	326,200	20,803,498 210,000

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NATIONAL DEFENSE BUDGET AUTHORITY IMPLICATION—Continued

(In Thousands of Dollars)

	FY 2018 Request	House Change	House Authorized
TOTAL, NATIONAL DEFENSE (050)—BASE BILL TOTAL, OVERSEAS CONTINGENCY OPERATIONS	595,276,281 64,573,000	18,497,051 9,986,976	613,773,332 74,559,976
GRAND TOTAL, NATIONAL DEFENSE	659,849,281	28,484,027	688,333,308
Base National Defense Discretionary Programs that are I			ned Services
Committee or Do Not Require Additional A		l Estimates)	07.000
Defense Production Act Purchases	37,000		37,000
Indefinite Account: Disposal Of DOD Real Property	8,000		8,000
Indefinite Account: Lease Of DOD Real Property	38,000		38,000
Subtotal, Budget Sub-Function 051	83,000		83,000
Formerly Utilized Sites Remedial Action Program	118,000		118,000
Subtotal, Budget Sub-Function 053	118,000		118,000
Other Discretionary Programs	7,645,000		7,645,000
Subtotal, Budget Sub-Function 054	7,645,000		7,645,000
Total Defense Discretionary Adjustments (050)	7,846,000		7,846,000
Budget Authority Implication, National Defense Discretionar	v		
Department of DefenseMilitary (051)	639,244,983	28,157,827	667,402,810
Atomic Energy Defense Activities (053)	20,595,298	326,200	20,921,498
Defense-Related Activities (054)	7,855,000	320,200	7,855,000
Total BA Implication, National Defense Discretionary	667,695,281	28,484,027	696,179,308
National Defense Mandatory Programs, Current Law (CBO B	aseline)		
Concurrent receipt accrual payments to the Military Retire-			
ment Fund	7,496,000		7,496,000
Revolving, trust and other DOD Mandatory	1,333,000		1,333,000
Offsetting receipts	-1,889,000		-1,889,000
Subtotal, Budget Sub-Function 051	6,940,000		6,940,000
Energy employees occupational illness compensation pro-			
grams and other	1,273,000		1,273,000
Subtotal, Budget Sub-Function 053	1,273,000		1,273,000
Radiation exposure compensation trust fund	59,000		59,000
Payment to CIA retirement fund and other	514,000		514,000
Subtotal, Budget Sub-Function 054	573,000		573,000
BCA Mandatory Sequestration—Undistributed Plug	-691,000		-691,000
Total National Defense Mandatory (050)	8,095,000		8,095,000
Budget Authority Implication, National Defense Discretionar	y and Mandatory		
Department of DefenseMilitary (051)	646,184,983	28,157,827	674,342,810
Atomic Energy Defense Activities (053)	21,868,298	326,200	22,194,498
Defense-Related Activities (054)	8,428,000		8,428,000
Undistributed (050)	-691,000		-691,000
Total BA Implication, National Defense Discretionary and			
Mandatory	675,790,281	28,484,027	704,274,308

# TITLE XLI-PROGUREMENT

SEC. 4101. PROCUREMENT.

	SEC. 4101. PROCUREMENT (In Thousands of Dollars)	JREMENT Dollars)					
<u></u>	lbom	FY 2018 Request	lequest	House Change	Change	House Authorized	horized
<u> </u>		<b>Qty</b>	Cost	Qty	Cost	Qty	Cost
	AIRCRAFT PROCUREMENT, ARMY						
	FIXED WING						
005	UTILITY F/W AIRCRAFT	4	75,115			4	75,115
004	MQ-1 UAV	2	30,206	9	000'09	∞	90,206
				[9]	[60,000]		
	ROTARY						
900	HELICOPTER, LIGHT UTILITY (LUH)	13	108,383			13	108,383
900	AH-64 APACHE BLOCK IIIA REMAN	48	725,976			48	725,976
007	ADVANCE PROCUREMENT (CY)		170,910				170,910
800	AH-64 APACHE BLOCK IIIB NEW BUILD	13	374,100	∞	274,400	21	648,500
	Unfunded requirement			[8]	[274,400]		
600	ADVANCE PROCUREMENT (CY)		71,900				71,900
010	UH-60 BLACKHAWK M MODEL (MYP)	48	938,308	2	286,402	53	1,224,710
	Unfunded requirement—additional 5 for ARNG			[2]	[100,000]		
	Unfunded requirement—UH-60M ECPs				[186,402]		
011	ADVANCE PROCUREMENT (CY)		86,295				86,295
012	UH-60 BLACK HAWK A AND L MODELS	36	76,516	က	16,700	39	93,216
	Unfunded requirement—UH-60Vs			[3]	[16,700]		
013	CH-47 HELICOPTER	9	202,576	∞	354,500	14	557,076
	Emergent requirements—additional 4 CH-47F Block I			[4]	[108,000]		

014	Unfunded requirement—additional 4 MH-47GsADVANCE PROCUREMENT (CY)	17,820	[4]	[246,500]		17,820
015		5,910	10	24,000 [8,000]	10	29,910
016	UNIVERSAL GROUND CONTROL EQUIPMENT (UAS)	15,000	[10]	[10,000]		15,000
018	MULTI SENSOR ABN RECON (MIP)	68,812	7	58,950	7	127,762
019	realign European reassurance initiative to base	238,141	[7]	[29,475] [29,475] 144,800 [144,800]		382,941
020	CH-47 CARGO HELICOPTER MODS (MYP)  Linfunded requirement	20,166		61,000 61,000 [61,000]		81,166
021		5,514				5,514
023	DS (MP)	15,279				15,279
025 025		5,900 142,103				5,900
027	COMMS, NAV SURVEILLANCE	142,102 166,050	505	41,580	505	142,102 207,630
028	GATM ROLLUP RQ-7 UAV MODS Infinited requirement	37,403 83,160		111,000		37,403 194,160
030	UAS MODS Unfunded requirement ERRINA SUPPORT AVIONICS	26,109		320 [320]		26,429
031 032 033		70,913 5,884 26,825				70,913 5,884 26,825

	SEC. 4101. PROCUREMENT (In Thousands of Dollars)	UREMENT Dollars)					
<u>:</u>	lform	FY 2018 Request	Request	House	House Change	House Authorized	horized
	- IIIaii	Otty	Cost	Oty	Cost	Qty	Cost
034	COMMON INFRARED COUNTERMEASURES (CIRCM)		6,337				6,337
035 036	Unter Support Equipment  Avionics Support Equipment  Common Ground Equipment		7,038	92	8,900	92	7,038
	Unfunded requirement—grow the Army			[92]	[1,800] [7,100]		•
037 038	AIRCREW INTEGRATED SYSTEMS		47,066 83,790		1,115		47,066 84,905
039	Untunded requirement INDUSTRIAL FACILITIES LAUNCHER, 2.75 ROCKET		1,397		[1,115]		1,397
	TOTAL AIRCRAFT PROCUREMENT, ARMY	170	4,149,894	644	1,443,667	814	5,593,561
	MISSILE PROCUREMENT, ARMY Surface-to-air missile system						
001	LOWER TIER AIR AND MISSILE DEFENSE (AMD)	03	140,826			03	140,826
003	INDIRECT FIRE PROTECTION CAPABILITY INC 2–1 AR-TO-SURFACE MISSILE SYSTEM	8	57,742			8	57,742
900		866	94,790			866	94,790
900	JOINT AIR-TO-GROUND MSLS (JAGM)	824	178,432		-5,000	824	173,432
	Program decrease				[-2,000]		
800	JAVELIN (AAWS-M) SYSTEM SUMMARY	525	110,123	47	8,112	572	118,235
600	Realign European Reassurance Initiative to Base	1,156	85,851	[47] 49	[8,112] 3,907	1,205	89,758

010	Realign European Reassurance Initiative to Base		10 0/0	[49]	[3,907]		10 040
011	GUIDED MIRS ROCKET (GMLRS) Program reduction—unit cost savings	4,458	13,343 595,182		-1,300 [-2,800]	4,458	593,882
012	Unfunded requirement—training devices	3,306	28,321		[1,500]	3,306	28,321
013	HIGH MOBILITY ARTILLERY ROCKET SYSTEM (HIMARS			64	476,728	64	476,728
	Realign European Reassurance Initiative to Base			[32]	[41,000]		
	Unfunded requirement—grow the Army			[32]	[238,728]		
	MODIFICATIONS						
015	Patriot mods		329,073				329,073
016	ATACMS MODS		116,040				116,040
017	GMLRS MOD		531				531
018	Stinger Mods		63,090		28,000		91,090
	Realign European Reassurance Initiative to Base				[28,000]		
019	AVENGER MODS		62,931				62,931
020	ITAS/TOW MODS		3,500				3,500
021	MLRS MODS		138,235	32	48,800	32	187,035
	Unfunded requirement			[35]	[48,800]		
022	HIMARS MODIFICATIONS		9,566				9,566
	SPARES AND REPAIR PARTS						
023	Spares and repair parts		18,915				18,915
	SUPPORT EQUIPMENT & FACILITIES						
024	AIR DEFENSE TARGETS		5,728				5,728
026	Production base support		1,189				1,189
	TOTAL MISSILE PROCUREMENT, ARMY	11,360	2,519,054	192	559,247	11,552	3,078,301
	PROCUREMENT OF W&TCV, ARMY Tracked combat vehicles						
001	BRADLEY PROGRAM			09	200,000	09	200,000
	Kealign European Reassurance Initiative to Base			[09]	[200,000]		

	SEC. 4101. PROCUREMENT (In Thousands of Dollars)	REMENT Dollars)					
<u>:</u>	m vH	FY 2018 Request	Request	House	House Change	House Authorized	horized
		Qty	Cost	Qty	Cost	Qty	Cost
005	ARMORED MULTI PURPOSE VEHICLE (AMPV)	42	193,715	65 [65]	253,903 [253,903]	107	447,618
004	STRYKER (MOD) STRYKER UPGRADE		97,552		348,000		97,552 348,000
900	Unfunded requirement — completes 4th DVH SBCI		444,851	33	[348,000] 141,000 [30,000] [111,000]	33	585,851
007	MI09 FOV MODIFICATIONS		64,230	[66]	[000,111]		64,230
800	PALADIN INTEGRATED MANAGEMENT (PIM)Realign European Reassurance Initiative to Base	29	646,413	12 [12]	125,736 [125,736]	71	772,149
600	IMPROVED RECOVERY VEHICLE (M88A2 HERCULES)  Unfunded requirement	16	72,402	35 [35]	122,000 [122,000]	51	194,402
010	ASSAULT BRIDGE (MOD)	7	5,855	٣	30 000	10	5,855
012	Unfunded requirement	~	34,221	[3]	[30,000]	0	4.826
013	JOINT ASSAULT BRIDGE	27	128,350		309 700	27	128,350
100	Realign European Reassurance Initiative to Base		240,020		[138,700] [138,700] [171,000]		0.36,320
015	ABRAMS UPGRADE PROGRAM  Realign European Reassurance Initiative to Base Unfunded requirement  WEAPONS & OTHER COMBAT VEHICLES	20	275,000	65 [36] [29]	817,800 [442,800] [375,000]	82	1,092,800

018		1,992	161	1,300	161	3,292
019	MULTI-ROLE ANTI-PERSONNEL WEAPON S	6,520	742	52,000	742	58,520
020	MORTAS SYSTEMS  Infinited conjugace 1 190mm matass	21,452	[/42]	[32,000] 13,100 [12,100]		34,552
021	XM320 Grenabe requirement—	4,524	234	800	234	5,324
023	CARBINE	43,150	12311 12311 [7,656]	8,000 [5,000]	12,311	51,150
024	Unfunded requirement—grow the Army	750	[4,655]	[3,000] 10,000		10,750
025	HANDGUN	8,326	1389 [1,389]	400 400 [400]	1,389	8,726
026	MOD OF WEAPONS AND OTHER COMBAT VEH MK-19 Grenade Machine gun mods	2.000				2.000
027	M777 MODS Unfunded requirement	3,985	18	85,800	18	89,785
028	M4 CARBINE MODS M2 50 CAL MACHINE GUN MODS	31,315 47,414	188	2,000	188	31,315 52,414
030 031	Unfunded requirement—accessories Unfunded requirement—MZA1 machine guns	3,339 4,577	[188]	[2,600] [2,400] 6,600		3,339 11,177
032 033 034 035	Unfunded requirement—accessories  Unfunded requirement—M240Ls  SNIPER RIFLES MODIFICATIONS  M.19 MODIFICATIONS  MODIFICATION  MODIFICATION  SUPPORT EQUIPMENT & FACILITIES	1,488 12,678 3,998 2,219		[1,000] [5,600]		1,488 12,678 3,998 2,219

	SEC. 4101. PROCUREMENT (In Thousands of Dollars)	REMENT Dollars)					
<u>:</u>	moy!	FY 2018 Request	Request	House	House Change	House Authorized	horized
	וומווו	Qty	Cost	Qty	Cost	Qty	Cost
036	ITEMS LESS THAN \$5.0M (WOCV-WTCV)Infinded requirement		5,075		2,700		7,775
037 039	PRODUCTION BASE SUPPORT (WOCV-WTCV) SMALL ARMS EQUIPMENT (SOLDIER ENH PROG)		992 1,573		[7,700]		992 1,573
042	UNDISTRIBUTED				1,200		1,200
	SECUTIVY FOTCE ASSISTANCE BYIGGAGE TOTAL PROCUREMENT OF W&TCV, ARMY	171	2,423,608	15,316	[1,200] <b>2,535,039</b>	15,487	4,958,647
	PROCUREMENT OF AMMUNITION, ARMY						
001	SMALL/MEDIUM CAL AMMUNITUN CTG, 5.56MM, ALL TYPES		39,767				39,767
005			46,804				46,804
003			10,413		2		10,418
0	Realign European Reassurance Initiative to Base		760 63		[5]		62 050
4000	CIG, 30 CAL, ALL LITES		02,637		[121]		02,330
900	CTG, 20MM, ALL TYPES		8,208				8,208
900	25MM, ALL		8,640				8,640
200			76,850		25,000		101,850
					[25,000]		
800	CTG, 40MM, ALL TYPES		108,189				108,189
600			57,359				57,359
010 011	81MM MORTAR, ALL TYPES		49,471 91,528				49,471 91,528

	TANK AMMUNITION			
012	Cartridges, Tank, 105mm and 120mm, all types	133,500		133,500
	ARTILLERY AMMUNITION			
013	ARTILLERY CARTRIDGES, 75MM & 105MM, ALL TYPES	44,200		44,200
014	artillery projectile, 155mm, all types	187,149		187,149
015	PROJ 155MM EXTENDED RANGE M982 480	49,000	202,545 480	251,545
	Realign European Reassurance Initiative to Base		[19,045]	
	Unfunded requirement		[183,500]	
016	ARTILLERY PROPELLANTS, FUZES AND PRIMERS, ALL	83,046	16,678	99,724
	Realign European Reassurance Initiative to Base		[16,678]	
	MINES			
017	MINES & CLEARING CHARGES, ALL TYPES	3,942	11,615	15,557
	Realign European Reassurance Initiative to Base		[11,615]	
	ROCKETS			
019	SHOULDER LAUNCHED MUNITIONS, ALL TYPES	5,000		5,000
020	ROCKET, HYDRA 70, ALL TYPES	161,155		161,155
	OTHER AMMUNITION			
021	CAD/PAD, ALL TYPES	7,441		7,441
022	DEMOLITION MUNITIONS, ALL TYPES	19,345		19,345
023	Grenades, all types	22,759		22,759
024	SIGNALS, ALL TYPES	2,583		2,583
025	SIMULATORS, ALL TYPES	13,084		13,084
	MISCELLANEOUS			
026	AMMO COMPONENTS, ALL TYPES	12,237		12,237
027	NON-LETHAL AMMUNITION, ALL TYPES	1,500		1,500
028	ITEMS LESS THAN \$5 MILLION (AMMO)	10,730		10,730
029	ammunition peculiar equipment	16,425		16,425
030	FIRST DESTINATION TRANSPORTATION (AMMO)	15,221		15,221
	PRODUCTION BASE SUPPORT			
032	Industrial facilities	329,356	100,000	429,356
	Unfunded requirement		[100,000]	
033	CONVENTIONAL MUNITIONS DEMILITARIZATION	197,825		197,825

	SEC. 4101. PROCUREMENT (In Thousands of Dollars)	IREMENT Dollars)					
<u>:</u>	lom	FY 2018	2018 Request	House	House Change	House Authorized	horized
		Qty	Cost	Oty	Cost	Otty	Cost
034	ARMS INITIATIVE	480	3,719 <b>1,879,283</b>		355,964	480	3,719 <b>2,235,247</b>
Š	OTHER PROCUREMENT, ARMY TACTICAL VEHICLES		i r				, c
000	ACTICAL IKALLKS/DULLY SETS		9,716 14,151	263	22,000	263	9,716 36,151
003	Unfunded requirement—additional M872s		53,000	[263] 121	[22,000] 34,792	121	87,792
004	Unfunded requirement		40,935	[121]	[34,792]		40,935
900	JOINT LIGHT TACTICAL VEHICLE	2,110	804,440			2,110	804,440
007	Truck, Dump, 20T (GCE)		967 78,650	976	163,294	979	967 241,944
	Unfunded requirement—FMTVs			[710]	[154,100]		
600	FIRETRUCKS & ASSOCIATED FIREFIGHTING EQUIP		19,404	[502]	[9,134]		19,404
010	FAMILY OF HEAVY TACTICAL VEHICLES (FHTV)		81,656	31	33,002	31	114,658
	Realign European Reassurance Initiative to Base Unfunded requirement—forward repair systems			[31]	[25,874]		
011	PLS ESP		7,129	06	52,600	06	59,729
012	Unfunded requirement			[90] 200	[52,600] 150,878	200	150,878
013	Realign European Reassurance Initiative to Base		43,040	[200]	[38,628] [112,250]		43,040

89,470	269 1,320 6,964	420,492 92,718 227,997	6,065 5,051	161,383 62,600 11,622 6,799 7,065 21,667	70 2,658	363,760 25,100 11,160 2,041
		88				2,565
5,530 [2,599] [2,931]		77,500	[87,500]			8,409 [8,409]
		68	[68]			2565 [2,565]
83,940	269 1,320 6,964	420,492 92,718 150,497	6,065 5,051	161,383 62,600 11,622 6,799 7,065 21,667	70 2,658	355,351 25,100 11,160 2,041
MODIFICATION OF IN SVC EQUIP		COMMINIT—GROUND FORCES TACTICAL NETWORK SIGNAL MODERNIZATION PROGRAM TACTICAL NETWORK TECHNOLOGY MOD IN SVC	Unfunded requirement JOINT INCIDENT SITE COMMUNICATIONS CAPABILITY JCSE EQUIPMENT (USREDCOM)	DEFERENCE ENTERPRISE WIDEBAND SATCOM SYSTEMS TRANSPORTABLE TACTICAL COMMAND COMMUNICATIONS SHF TERM SMART-T (SPACE) GLOBAL BRDCST SVC—GBS ENROUTE MISSION COMMAND (EMC)	COMMA—COMBAT SUPPORT COMM  MOD-IN-SERVICE PROFILER  COMM—C3 SYSTEM  ARMY GLOBAL CMD & CONTROL SYS (AGCCS)	COMM—COMBAT COMMUNICATIONS  HANDHELD MANPACK SMALL FORM FIT (HMS)  Unfunded requirement  MID-TIER NETWORKING VEHICULAR RADIO (MNVR)  RADIO TERMINAL SET, MIDS LYT(2)  TRACTOR DESK
014	016 017 018	019 020 021	022 023	024 025 026 028 029	033	036 037 038 040

	SEC. 4101. PROCUREMENT (In Thousands of Dollars)	JREMENT Dollars)					
<u> </u>	libom	FY 2018	2018 Request	House	House Change	House Authorized	thorized
	- IIIali	ûty	Cost	Qty	Cost	Oty	Cost
041	TRACTOR RIDE		5,534		8,200		13,734
042	Unfunded requirement		966		[8,200]		966
043			4,500	18	2,358	18	6,858
045			4,411				4,411
047	FAMILY OF MED COMM FOR COMBAT CASUALTY CARE		15,964		761		15,275
	Unfunded requirement				[761]		
049	CI AUTOMATION ARCHITECTURE		9,560				9,560
020	DEFENSE MILITARY DECEPTION INITIATIVE		4,030				4,030
054	INFORMATION SECURITY Communications Security (Comsec)		107.804	2608	22.863	5.608	130.667
	Unfunded Requirement			[2,608]	[22,863]		
055	DEFENSIVE CYBER OPERATIONS		53,436	4	8,000	4	61,436
056	Unfunded Requirement		069	[4]	[8,000]		069
057	PERSISTENT CYBER TRAINING ENVIRONMENT		4,000				4,000
;	COMM—LONG HAUL COMMUNICATIONS		,		,		;
058	BASE SUPPORT COMMUNICATIONS		43,751		7,539		51,290
	COMM—BASE COMMUNICATIONS				[600,7]		
029	INFORMATION SYSTEMS		118,101				118,101
060 061	EMERGENCY MANAGEMENT MODERNIZATION PROGRAM		4,490 20,050				4,490 20,050

062	INSTALLATION INFO INFRASTRUCTURE MOD PROGRAM	186,251		2,500 [2,500]		188,751
900	JIT/Clark roughound	12,154		7,600		19,754
890	DCGS-A (MIP)	274,782	105	20,712	105	295,494
070	Unfunded requirement	16,052	[105] 7	[20,712] $19,160$	7	35,212
	Realign European Reassurance Initiative to Base		[	[6,000]		
071	MOD OF IN-SVC EQUIP (INTEL SPT) (MIP)	51.034	[/]	[10,100]		51,034
072	CI HUMINT AUTO REPRTING AND COLL(CHARCS)	7,815				7,815
073	CLOSE ACCESS TARGET RECONNAISSANCE (CATR)	8,050				8,050
074	MACHINE FOREIGN LANGUAGE TRANSLATION SYSTEM-M	292				292
	ELECT EQUIP—ELECTRONIC WARFARE (EW)					
9/0	LIGHTWEIGHT COUNTER MORTAR RADAR	20,459				20,459
077	EW PLANNING & MANAGEMENT TOOLS (EWPMT)	5,805				5,805
078	air Vigilance (av)	5,348				5,348
081	Z	469		5,900		6,369
	Realign European Reassurance Initiative to Base			[2,900]		
082	CI MODERNIZATION	285				285
	ELECT EQUIP—TACTICAL SURV. (TAC SURV)					
083	SENTINEL MODS	28,491	12	72,000	12	100,491
	Unfunded requirement		[12]	[72,000]		
084	NIGHT VISION DEVICES	166,493	449	62,896	449	229,389
	Unfunded requirement—grow the Army			[47,147]		
	Unfunded requirement—LTLM enhancement		[449]	[15,749]		
085	SMALL TACTICAL OPTICAL RIFLE MOUNTED MLRF	13,947				13,947
087	INDIRECT FIRE PROTECTION FAMILY OF SYSTEMS	21,380		434,623		456,003
				[434,623]		
088	Family of Weapon Sights (FWS)	59,105				59,105
680	ARTILLERY ACCURACY EQUIP	2,129				2,129

	SEC. 4101. PROCUREMENT (In Thousands of Dollars)	JREMENT Dollars)					
<u>ii</u>	lborn	FY 2018	FY 2018 Request	House	House Change	House Authorized	horized
<u> </u>		Oty	Cost	Oty	Cost	ûty	Cost
091	JOINT BATTLE COMMAND—PLATFORM (JBC-P)		282,549	3771	62,400	3,771	344,949
	Realign European Reassurance Initiative to Base				[2,300]		
	Unfunded requirement			[3,771]	[60,100]		
092	JOINT EFFECTS TARGETING SYSTEM (JETS)		48,664				48,664
093	Mod of In-SVC Equip (LLDR)		5,198		3,974		9,172
	Realign European Reassurance Initiative to Base				[3,974]		
094	COMPUTER BALLISTICS: LHMBC XM32		8,117				8,117
095	Mortar fire control system		31,813		15,775		47,588
	Realign European Reassurance Initiative to Base				[72]		
	Unfunded requirement				[15,700]		
960	COUNTERFIRE RADARS		329,057	4	64,200	4	393,257
	Unfunded requirement			[4]	[64,200]		
	ELECT EQUIP—TACTICAL C2 SYSTEMS						
097	FIRE SUPPORT C2 FAMILY		8,700	66	4,758	66	13,458
	Unfunded requirement			[66]	[4,758]		
860	AIR & MSL DEFENSE PLANNING & CONTROL SYS		26,635	133	106,078	133	132,713
	Realign European Reassurance Initiative to Base				[9,100]		
	Unfunded requirement			[133]	[96,978]		
100	)RT (L0		1,992				1,992
101	NETWORK MANAGEMENT INITIALIZATION AND SERVICE		15,179				15,179
102	MANEUVER CONTROL SYSTEM (MCS)		132,572	575	4,602	575	137,174
	Unfunded requirement			[575]	[4,602]		
103	GLOBAL COMBAT SUPPORT SYSTEM-ARMY (GCSS-A)		37,201				37,201
104	INTEGRATED PERSONNEL AND PAY SYSTEM-ARMY (IPP		16,140				16,140
105	RECONNAISSANCE AND SURVEYING INSTRUMENT SET		6,093	12	14,755	12	20,848
	Unfunded requirement			[12]	[14,755]		

ELECT EQUIP—AUTOMATION	1,134	11,575	4.465	66,363	1,001	26,183		4,441	20 16,414				499	25,050		4,819		1,613	500 23,696		11,110	16,610	28 43,761		112 61,446			455 17,800	
1,134 1,1575 11,575 11,575 11,983 4,465 66,363 1,001 26,183 4,441 3,414 3,414 3,414 1,613 9,696 11,110 11,110 11,110 16,610 21,761									13,000	[10,000]	[3,000]								14,000	[14,000]			22,000	[22,000]	40,400	[40,400]		12,800	
									20		[50]								200	[200]			78	[58]	112	[112]		455	
MOD OF IN-SVC EQUIPMENT (ENFIRE)  ELECT EQUIP—AUTOMATION  ARMY TRAINING MODERNIZATION  AUTOMATED DATA PROCESSING EQUIP  GENERAL FUND ENTERPRISE BUSINESS SYSTEMS FAM  HIGH PERF COMPUTING MOD PGM (HPCMP)  GENERAL FUND ENTERPRISE BUSINESS SYSTEMS FAM  HIGH PERF COMPUTING MOD PGM (HPCMP)  GONTRACT WRITING SYSTEM  RESERVE COMPONENT AUTOMATION SYS (RCAS)  ELECT EQUIP—AUDIO VISUAL SYS (RCAS)  TACTICAL DIGITAL MEDIA  ITEMS LESS THAN \$\$M (SURVEYING EQUIPMENT)  Unfunded requirement—global positioning system  ELECT EQUIP—SUPPORT  PRODUCTION BASE SUPPORT (C-E)  BOT EMERGING TECHNOLOGIES  CLASSIFIED PROGRAMS  CLASSIFIED PROGRAMS  CLASSIFIED PROGRAMS  CHEMICAL DEFENSIVE EQUIPMENT  ROTICAL BRIDGING  TACTICAL BRIDGING  TACTICAL BRIDGING  TACTICAL BRIDGING  TACTICAL BRIDGING TRANSPORTER (CBT) RECAP  Unfunded requirement  COMMON BRIDGE TRANSPORTER (CBT) RECAP  Unfunded requirement  ENRINERR (NON-CONSTRUCTION) EQUIPMENT  HANDHELD STANDOFF MINEFIELD DETECTION SYS-HST	1,134	11,575	4,465	66,363	1,001	26,183		4,441	3,414				499	25,050		4,819		1,613	9,696		11,110	16,610	21,761		21,046			5,000	
	MOD OF IN-SVC EQUIPMENT (ENFIRE)	ARMY TRAINING MODERNIZATION  ALITOMATED DATA PROCESSING FOUIP	GENERAL FUND ENTERPRISE BUSINESS SYSTEMS FAM		CONTRACT WRITING SYSTEM	RESERVE COMPONENT AUTOMATION SYS (RCAS)	_	MEDIA	\$5M (SURVEYING E		Unfunded requirement—global positioning system	ELECT EQUIP—SUPPORT	)RT (C-E)	BCT EMERGING TECHNOLOGIES	CLASSIFIED PROGRAMS		CHEMICAL DEFENSIVE EQUIPMENT		Family of Non-Lethal Equipment (fnle)	Unfunded Requirement	CBRN DEFENSE						ENGINEER (NON-CONSTRUCTION) EQUIPMENT	HANDHELD STANDOFF MINEFIELD DETECTION SYS-HST	

	SEC. 4101. PROCUREMENT (In Thousands of Dollars)	UREMENT Dollars)					
	lkam	FY 2018	FY 2018 Request	House	House Change	House Authorized	horized
		<b>O</b> ty	Cost	Oty	Cost	Qty	Cost
	Unfunded requirement—PSS-14Cs			[228]	[7,200]		
126			32,442				32,442
127	area mine detection system (amds)		10,571				10,571
128	HUSKY MOUNTED DETECTION SYSTEM (HMDS)		21,695				21,695
129	ROBOTIC COMBAT SUPPORT SYSTEM (RCSS)		4,516	2	15,100	2	19,616
	Unfunded requirement—M160s			[2]	[15,100]		
130	EOD ROBOTICS SYSTEMS RECAPITALIZATION		10,073		2,000		15,073
	Unfunded requiremet				[2,000]		
131	ROBOTICS AND APPLIQUE SYSTEMS		3,000				3,000
133	REMOTE DEMOLITION SYSTEMS		5,847	44	1,192	44	7,039
	Unfunded requirement—radio frequency remote activated munitions			[44]	[1,192]		
134	< \$5M, COUNTERMINE EQUIPMENT		1,530				1,530
135	FAMILY OF BOATS AND MOTORS		4,302		8,000		12,302
	Unfunded requirement				[8,000]		
	COMBAT SERVICE SUPPORT EQUIPMENT						
136	HEATERS AND ECU'S		7,405		9,056		16,461
	Unfunded requirement				[9,056]		
137	SOLDIER ENHANCEMENT		1,095				1,095
138	PERSONNEL RECOVERY SUPPORT SYSTEM (PRSS)		5,390				5,390
139	GROUND SOLDIER SYSTEM		38,219		4,589		42,808
	Unfunded requirement				[4.589]		
140	Mobile Soldier Power		10,456	419	1,562	419	12,018
	Unfunded requirement			[419]	[1,562]		
141	FORCE PROVIDER			9	13,850	9	13,850
	Unfunded requirement			[9]	[13,850]		
142	FIELD FEEDING EQUIPMENT		15,340		14,400		29,740

143	Unfunded requirement	30 607		[14,400]		30,607
144	FAMILY OF ENGR COMBAT AND CONSTRUCTION SETS	10,426		8,474 [8,474]		18,900
5	PETROLEUM EQUIPMENT	c c				C
146 147	QUALITY SURVEILLANCE EQUIPMENT	6,903 47,597				6,903 47,597
:	MEDICAL EQUIPMENT					
148	COMBAT SUPPORT MEDICAL	43,343	190	22,919	190	66,262
	Realign European Reassurance Initiative to Base			[21,122]		
	Unfunded requirement		[190]	[1,797]		
	MAINTENANCE EQUIPMENT					
149	Mobile Maintenance equipment systems	33,774		14,420		48,194
	Realign European Reassurance Initiative to Base			[1,124]		
	Unfunded requirement—metal working and machine shop sets			[13,296]		
150	ITEMS LESS THAN \$5.0M (MAINT EQ)	2,728		954		3,682
	Unfunded requirement			[954]		
	CONSTRUCTION EQUIPMENT					
151	GRADER, ROAD MTZD, HVY, 6X4 (CCE)	686	48	14,730	48	15,719
	Unfunded requirement		[48]	[14,730]		
152	SCRAPERS, EARTHMOVING	11,180				11,180
154	TRACTOR, FULL TRACKED			48,679		48,679
	Unfunded requirement—T9 Dozers			[48,679]		
155	ALL TERRAIN CRANES	8,935	2	3,000	2	11,935
	Unfunded requiremnt		[2]	[3,000]		
157	HIGH MOBILITY ENGINEER EXCAVATOR (HMEE)	64,339	40	20,560	40	84,899
	Unfunded requirement		[40]	[20,560]		
158	ENHANCED RAPID AIRFIELD CONSTRUCTION CAPAP	2,563				2,563
160	CONST EQUIP ESP	19,032	65	7,000	65	26,032
	Unfunded requirement—Engineer Mission Modules and Vibratory Rollers		[65]	[7,000]		
161	ITEMS LESS THAN \$5.0M (CONST EQUIP)	6,899		5,012		11,911
	Unfunded requirement—water well drill systems			[5,012]		

	SEC. 4101. PROCUREMENT (In Thousands of Dollars)	UREMENT f Dollars)					
   	lbom	FY 2018	FY 2018 Request	House	House Change	House Authorized	horized
	III	Qty	Cost	Oty	Cost	Oty	Cost
162	ARMY WALERCKAFI ESP		20,110				20,110
163	IIEMS LESS IHAN \$5.0M (FLUAL/KAIL)		7,8//				7,8/7
164	GENERATORS AND ASSOCIATED EQUIP		115,635		17,210		132,845
	Unfunded requirement				[17,210]		
165	TACTICAL ELECTRIC POWER RECAPITALIZATION		7,436				7,436
	MATERIAL HANDLING EQUIPMENT						
166	FAMILY OF FORKLIFTS		9,000	15	1,635	15	10,635
	Unfunded requirement			[15]	[1,635]		
167	COMBAT TRAINING CENTERS SUPPORT		88,888		37,750		126,638
	Unfunded requirement				[37,750]		
168	Training devices, nonsystem		285,989		2,700		288,689
					[2,700]		
169	CLOSE COMBAT TACTICAL TRAINER		45,718				45,718
170	AVIATION COMBINED ARMS TACTICAL TRAINER		30,568				30,568
171	GAMING TECHNOLOGY IN SUPPORT OF ARMY TRAINING		5,406		11,500		16,906
					[11,500]		
	TEST MEASURE AND DIG EQUIPMENT (TMD)						
172	CALIBRATION SETS EQUIPMENT		5,564				5,564
173	INTEGRATED FAMILY OF TEST EQUIPMENT (IFTE)		30,144		7,500		37,644
	Realign European Reassurance Initiative to Base				[7,500]		
174	TEST EQUIPMENT MODERNIZATION (TEMOD)		7,771				7,771
175	U HEK SUPPUK I EQUIPMEN I M25 STABILIZED BINOCULAR		3,956				3,956

5,000 60,047 13,239 99,432	2,271 5,319 5,935	38,269	8,463,222	14,442 1 <b>4,442</b>	1,791,346	1,102,324
238			19,732		22	∞
39,240 [29,240] [2,000]		26,000	[0,00,96] <b>1,993,891</b>		591,200 [591,200]	520,000 [260,000] [260,000]
538 [538]			17,622		8 [8]	4 [2] [2]
5,000 60,047 13,239 60,192	2,271 5,319 5,935	38,269	6,469,331	14,442 14,442	1,200,146	582,324
			2,110		14	4
RAPID EQUIPPING SOLDIER SUPPORT EQUIPMENT PHYSICAL SECURITY SYSTEMS (OPA3) BASE LEVEL COMMON EQUIPMENT MODIFICATION OF IN-SVC EQUIPMENT (OPA-3) Unfunded requirement—EOD Technician Tool Kits Unfunded requirement—Rapidly Emplaced Bridge System Arctic Kit Technical Manual (TM) update. Unfunded requirement—Service Life Extension Program for the VOLCANO	PRODUCTION BASE SUPPORT (OTH) SPECIAL EQUIPMENT FOR USER TESTING TRACTOR YARD 0042	INITAL SPARES—C&E  UNDISTRIBUTED  UNDISTRIBUTED		ACQUISITION AND THREAT RESPONSE  TOTAL JOINT IMPROVISED-THREAT DEFEAT FUND  ARCRAFT PROCUREMENT, NAVY  COMBAT ARCRAFT	F/A—18E/F (FIGHTER) HORNET  Unfunded Requirement ADVANSE PROFILEMENT (CY)	JOINT STRIKE FIGHTER CV Unfunded Requirement—Marine Corps Unfunded Requirement—Navy
176 177 178 179	180 181 182	184		T00	002	004

	SEC. 4101. PROCUREMENT (In Thousands of Dollars)	JREMENT Dollars)					
<u>ii</u>	lborn	FY 2018 Request	Request	House	House Change	House Authorized	thorized
		ûty	Cost	Oty.	Cost	Otty	Cost
005	ADVANCE PROCUREMENT (CY)		263,112				263,112
900	JSF STOVL	20	2,398,139	3	462,600	23	2,860,739
	Unfunded Requirement			[3]	[462,600]		
007	ADVANCE PROCUREMENT (CY)		413,450				413,450
800	CH-53K (HEAVY LIFT)	4	567,605			4	567,605
600	ADVANCE PROCUREMENT (CY)		147,046				147,046
010	V-22 (MEDIUM LIFT)	9	677,404	4	351,500	10	1,028,904
	Multiyear procurement contract savings				[-25,000]		
	Unfunded Requirement			[4]	[376,500]		
011	ADVANCE PROCUREMENT (CY)		27,422				27,422
012	H-1 UPGRADES (UH-1Y/AH-1Z)	22	678,429	2	151,000	27	829,429
	Unfunded requirement — additional AH–1Zs			[2]	[157,500]		
	Unit cost savings				[-6,500]		
013	ADVANCE PROCUREMENT (CY)		42,082				42,082
016	P-8A POSEIDON	7	1,245,251	က	506,500	10	1,751,751
	P–8A			[3]	[206,500]		
017	ADVANCE PROCUREMENT (CY)		140,333		-17,000		123,333
	Excess to need				[-17,000]		
018	E–2D ADV HAWKEYE	2	733,910	2	191,800	7	925,710
	E-20			[5]	[201,800]		
	Excessive growth				[-10,000]		
019	ADVANCE PROCUREMENT (CY)		102,026				102,026
	OTHER AIRCRAFT						
022	KC-130J	2	129,577	4	355,300	9	484,877
	KC-130J			[4]	[355,300]		
023	ADVANCE PROCUREMENT (CY)		25,497				25,497

024	MQ-4 TRITON	က	522,126		-2,000	က	517,126
	Excess cost growth				[-2,000]		
025	ADVANCE PROCUREMENT (CY)		57,266				57,266
026	MQ-8 UAV		49,472				49,472
027	STUASLO UAV		880				880
	MODIFICATION OF AIRCRAFT						
030	AEA SYSTEMS		52,960				52,960
031			43,555				43,555
032	ADVERSARY		2,565				2,565
033	F-18 SERIES		1,043,661	14	32,550	14	1,076,211
	Unfunded requirement—ALQ-214 Retrofits			[14]	[32,550]		
034	H-53 SERIES		38,712				38,712
035	SH-60 SERIES		95,333				95,333
036			101,886				101,886
037			7,231				7,231
038	P-3 SERIES		700				700
039	E-2 SERIES		97,563				97,563
040	Trainer a/c series		8,184				8,184
041	C-2A		18,673				18,673
042			83,541				83,541
043	FEWSG		630				630
044	Cargo/transport A/C Series		10,075				10,075
045	E-6 SERIES		223,508				223,508
046	EXECUTIVE HELICOPTERS SERIES		38,787				38,787
047	SPECIAL PROJECT AIRCRAFT		8,304				8,304
048	T-45 SERIES		148,071				148,071
049	Power Plant Changes		19,827				19,827
020	JPATS SERIES		27,007				27,007
051	COMMON ECM EQUIPMENT		146,642				146,642
052	COMMON AVIONICS CHANGES		123,507				123,507
053	COMMON DEFENSIVE WEAPON SYSTEM		2,317				2,317
054	ID SYSTEMS		49,524				49,524

	SEC. 4101. PROCUREMENT (In Thousands of Dollars)	JREMENT Dollars)					
ëi	Itam	FY 2018	2018 Request	House	House Change	House A	House Authorized
	- IIIaii	Oty	Cost	Qty	Cost	Qty	Cost
055	P-8 SERIES		18,665				18,665
056			10,111				10,111
057	MQ-8 SERIES		32,361				32,361
029	V-22 (TILT/ROTOR ACFT) OSPREY		228,321				228,321
090	F-35 STOVL SERIES		34,963				34,963
190	F-35 CV SERIES		31,689				31,689
062	QRC		24,766				24,766
063	MQ-4 SERIES		39,996				39,996
	AIRCRAFT SPARES AND REPAIR PARTS						
064	Spares and repair parts		1,681,914		200,600		1,882,514
	Additional F–35 Initial Spares				[32,600]		
	Unfunded requirement				[168,000]		
	AIRCRAFT SUPPORT EQUIP & FACILITIES						
900	COMMON GROUND EQUIPMENT		388,052	10	17,500	10	405,552
	Unfunded requirement—F-18C/D H12C Training Systems for USMC			[10]	[17,500]		
990	AIRCRAFT INDUSTRIAL FACILITIES		24,613				24,613
<b>290</b>	WAR CONSUMABLES		39,614				39,614
890	OTHER PRODUCTION CHARGES		1,463				1,463
690	SPECIAL SUPPORT EQUIPMENT		48,500				48,500
070	FIRST DESTINATION TRANSPORTATION		1,976				1,976
	TOTAL AIRCRAFT PROCUREMENT, NAVY	87	15,056,235	27	3,358,550	144	18,414,785
	WEAPONS PROCUREMENT, NAVY						
001	MUDIFICATION OF MISSILES TRIDENT II MODS		1 1/3 595				1 1/13 595
5	SUPPORT EQUIPMENT & FACILITIES		1,110,000				1,140,00

005	MISSILE INDUSTRIAL FACILITIES		7,086				7,086
003	TOMAHAWK	34	134,375			34	134,375
004	IACTICAL MISSILES AMRAAM	120	197.109			120	197.109
002	SIDEWINDER	185	79,692			185	79,692
900	)SOW		5,487				5,487
200	STANDARD MISSILE	117	510,875			117	510,875
800	SMALL DIAMETER BOMB II	06	20,968			06	20,968
600	RAM	09	58,587	09	48,000	120	106,587
	= = =			[09]	[48,000]		
010	≥		3,789				3,789
013	STAND OFF PRECISION GUIDED MUNITIONS (SOPGM)	19	3,122			19	3,122
014			124,757				124,757
015	OTHER MISSILE SUPPORT		3,420				3,420
016	LRASM	25	74,733			25	74,733
	MODIFICATION OF MISSILES						
017	ESSM	30	74,524			30	74,524
019			17,300				17,300
020	Harm Mods		183,368				183,368
021	$\sim$		11,729				11,729
	SUPPORT EQUIPMENT & FACILITIES						
022	WEAPONS INDUSTRIAL FACILITIES		4,021				4,021
023			46,357				46,357
	ORDNANCE SUPPORT EQUIPMENT						
025	ORDNANCE SUPPORT EQUIPMENT		47,159				47,159
	TORPEDOES AND RELATED EQUIP						
026	SSTD		5,240				5,240
027		17	44,771	10	26,200	27	70,971
	MK 48 HWT			[10]	[56,200]		
028	ASW TARGETS		12,399				12,399
	MOD OF TORPEDOES AND RELATED EQUIP						

	SEC. 4101. PROCUREMENT (In Thousands of Dollars)	JREMENT Dollars)					
<u> </u>	llan	FY 2018 Request	Request	House	House Change	House A	House Authorized
	- IIIAII	Oty	Cost	Oty	Cost	ûty	Cost
029	MK-54 TORPEDO MODS		104,044				104,044
030	MK-48 TORPEDO ADCAP MODS		38,954				38,954
031	QUICKSTRIKE MINE		10,337				10,337
	SUPPORT EQUIPMENT						
032	TORPEDO SUPPORT EQUIPMENT		70,383				70,383
033	ASW RANGE SUPPORT		3,864				3,864
	DESTINATION TRANSPORTATION						
034	FIRST DESTINATION TRANSPORTATION		3,961				3,961
	GUNS AND GUN MOUNTS						
035	SMALL ARMS AND WEAPONS		11,332				11,332
	MODIFICATION OF GUNS AND GUN MOUNTS						
036	CIWS MODS		72,698				72,698
037	COAST GUARD WEAPONS		38,931				38,931
038	GUN MOUNT MODS		76,025				76,025
039	LCS MODULE WEAPONS	110	13,110			110	13,110
040	CRUISER MODERNIZATION WEAPONS		34,825				34,825
041	AIRBORNE MINE NEUTRALIZATION SYSTEMS		16,925				16,925
	SPARES AND REPAIR PARTS						
043	SPARES AND REPAIR PARTS		110,255				110,255
	TOTAL WEAPONS PROCUREMENT, NAVY	807	3,420,107	70	74,200	877	3,494,307
	PROCUREMENT OF AMMO, NAVY & MC						
	NAVY AMMUNITION						
100	GENERAL PURPOSE BOMBS		34,882				34,882
005	JDAM	2,492	57,343			2,492	57,343
003	AIRBORNE ROCKETS, ALL TYPES		79,318				79,318

14,112 47,027 57,718 65,908 2,895 22,112 12,804 49,401 9,495 3,080 2,4118 64,045 91,456 11,788 17,862 79,427 5,960 2,492	842,853	1 3,741,772	2 3,305,315 2,863,596 1	1,181,590
		000,007—		[250,000] -423,300
14,112 47,027 47,027 55,718 65,908 2,895 22,112 12,804 49,401 9,495 3,080 24,118 64,045 91,456 11,788 17,862 79,427 79,345	842,853	4,441,772	3,305,315 1,920,596	1,604,890
			2	
MACHINE GUN AMMUNITION PRACTICE BOMBS CART ACTUATED DEVICES AIR EXPENDABLE COUNTERMEASURES JATOS JATOS INCH/34 GUN AMMUNITION INTERMEDIATE CALIBER GUN AMMUNITION OTHER SHIP GUN AMMUNITION SWALL ARMS & LANDING PARTY AMMO PYROTECHNIC AND DEMOLITION AMMUNITION LESS THAN \$5 MILLION MARINE CORPS AMMUNITIONS INFANTRY WEAPONS AMMUNITIONS OCOMBAT SUPPORT MUNITIONS INFANTRY WEAPONS AMMUNITIONS INFAN	SHIPBUILDING AND CONVERSION, NAVY FLEET BALLISTIC MISSILE SHIPS ADVANCE PROCUREMENT (CY)	OTHER WARSHIPS  CARRIER REPLACEMENT PROGRAM	VIRGINIA CLASS SUBMARINE ADVANCE PROCUREMENT (CY) VA Class AP	VA CIASS EOQ
004 005 006 007 008 011 012 013 014 020 023 023 033 033	001	005	004	900

	SEC. 4101. PROCUREMENT (In Thousands of Dollars)	JREMENT Dollars)					
<u>:</u>	lbom	FY 2018	FY 2018 Request	House	House Change	House Authorized	rthorized
		Otty	Cost	Oty	Cost	ûty	Cost
	CVN 73 MQ-25 integration				[26,700]		
000	Advance Procurement (CY)		75,897		[-4:00,000]		75,897
800	DDG 1000	6	223,968			6	223,968
010	ADVANCE PROCUREMENT (CY)	ı	90,336			1	90,336
011	LITTORAL COMBAT SHIP	1	636,146			1	636,146
015	AMPHIBIOUS SHIPS		7 2 1 7 1 0 0 2 7		600 000		1 910 097
CIO	LNA NETLACEWENI		1,/10,92/		_300,000 [_500,000]		1,210,327
	AUXILIARIES, CRAFT AND PRIOR YR PROGRAM COST				5000		
018	TAO FLEET OILER		465,988			_	465,988
019	ADVANCE PROCUREMENT (CY)		75,068				75,068
020	TOWING, SALVAGE, AND RESCUE SHIP (ATS)	-	76,204			П	76,204
023	LCU 1700	П	31,850			1	31,850
024	OUTFITTING		548,703				548,703
025	SHIP TO SHORE CONNECTOR	က	212,554			က	212,554
026	SERVICE CRAFT		23,994				23,994
670		12	19,903,682		-680,300	12	19,223,382
	OTHER PROCUREMENT, NAVY Ship propulsion equipment						
003 004	SURFACE POWER EQUIPMENT HYBRID ELECTRIC DRIVE (HED)		41,910 6,331				41,910 6,331
	GENERALURS						

900	SURFACE COMBATANT HM&E	27,392		27,392
900	OTHER TAVIGATION EQUIPMENT	65,943		65,943
200	SUB PERISCOPES & IMAGING EQUIP		76,000 [76,000]	76,000
800	OTHER SHIPBOARD EQUIPMENT SUB PERISCOPE, IMAGING AND SUPT EQUIP PROG	151,240		151,240
600	DUG MUD	603,355	99,000 [4,000]	/02,355
	Destroyer modernization		[65,000]	
010	FIREFIGHTING FOUIPMENT	15.887	[30,000]	15.887
011	COMMAND AND CONTROL SWITCHBOARD	2,240		2,240
012	LHA/LHD MIDLIFE	30,287		30,287
014	POLLUTION CONTROL EQUIPMENT	17,293		17,293
015	Submarine support equipment	27,990		27,990
016	Virginia class support equipment	46,610		46,610
017	LCS CLASS SUPPORT EQUIPMENT	47,955		47,955
018	Submarine batteries	17,594		17,594
019	LPD CLASS SUPPORT EQUIPMENT	61,908		61,908
021	STRATEGIC PLATFORM SUPPORT EQUIP	15,812		15,812
022	DSSP EQUIPMENT	4,178		4,178
023	CG MODERNIZATION	306,050		306,050
024	LCAC	5,507		5,507
025		55,922	4,016	59,938
;	Realign European Reassurance Initiative to Base		[4,016]	
026	ITEMS LESS THAN \$5 MILLION	96,909		96,909
027	CHEMICAL WARFARE DETECTORS	3,036		3,036
028	SUBMARINE LIFE SUPPORT SYSTEM	10,364		10,364
029	REACTOR POWER UNITS	324,925		324,925

	SEC. 4101. PROCUREMENT (In Thousands of Dollars)	JREMENT Dollars)					
<u> </u>	lbarm	FY 2018	FY 2018 Request	House	House Change	House Authorized	thorized
		Otty	Cost	Oty	Cost	Otty	Cost
030			534,468				534,468
031	OCEAN ENGINEERING DIVING AND SALVAGE EQUIPMENT		10,619				10,619
032	SMALL BOATS STANDARD BOATS		46,094				46,094
034	PRODUCTION FACILITIES EQUIPMENT  OPERATING FORCES IPE		191,541				191,541
980	OTHER SHIP SUPPORT LCS COMMON MISSION MODULES EQUIPMENT		34,666	2	34,000	2	999'89
037	MCM-USV MODULES		55,870	[2]	[34,000]		55,870
039	LCS SUW MISSION MODULES		52,960				52,960
040			74,426		84,000		158,426
	LCS Wodernization				[84,000]		
042	LSD MIDLIFE & MODERNIZATION		89,536				89,536
043	SPIC-9B RADAR.		30,086				30,086
044	AN/SQQ-89 SURF ASW COMBAT SYSTEM		102,222				102,222
046			287,553		43,500		331,053
	Realign European Reassurance Initiative to Base				[43,500]		
047	UNDERSEA WARFARE SUPPORT EQUIPMENT		13,653				13,653
049			21,449				21,449
051	FIXED SURVEILLANCE SYSTEM		300,102				300,102

052	SURTASS SURTASS Array ELECTRONIC WADDADE COMMONDENT	30,180	1 []	10,000 [10,000]	 40,180
054		240,433			240,433
055	SHIPBORARD WE EXULTINE TO SHIP SHIPPORT TO	187,007		40,000	227,007
950	Ship signal exportation equipment	510		[40,000]	510
058	COOPERATIVE ENGAGEMENT CAPABILITY	23,892 10,741			23,892 10,741
061	ATDLS	38,016			38,016
290	NAVY COMMAND AND CONTROL SYSTEM (NCCS)	4,512			4,512
064	SHALLOW WATER MCM	8.796			8,796
90	Navstar GPS Receivers (SPACE)	15,923			15,923
990	AMERICAN FORCES RADIO AND TV SERVICE	2,730			2,730
290		6,889			6,889
	AVIATION ELECTRONIC EQUIPMENT				
070	ASHORE ATC EQUIPMENT	71,882			71,882
0/1	AFLUAL AIC EQUIPMENT	44,611 21 229			44,611
078	NAVAL MISSION PLANNING SYSTEMS	11,976			11,976
	OTHER SHORE ELECTRONIC EQUIPMENT				
080	TACTICAL/MOBILE C4I SYSTEMS	32,425		7,900	40,325
100	Realign European Reassurance Initiative to Base	19 700		[7,900]	15 600
100	Realign Eurobean Reassurance Initiative to Base	10,130		[1,900]	10,000
082	CANES	322,754			322,754
083		10,718			10,718
084	CANES-INTELL	48,028			48,028
085	GPETE	6,861			6,861

	SEC. 4101. PROCUREMENT (In Thousands of Dollars)	UREMENT Dollars)					
	ldam	FY 2018	2018 Request	House	House Change	House A	House Authorized
	. Hall	Oty	Cost	Qty	Cost	Oty	Cost
980	MASF		8.081				8.081
087	INTEG COMBAT SYSTEM TEST FACILITY		5.019				5,019
088	EMI CONTROL INSTRUMENTATION		4,188				4.188
680			105,292				105,292
060	SHIPBOARD TACTICAL COMMUNICATIONS		23,695				23,695
160	SHIP COMMUNICATIONS AUTOMATION		103,990				103,990
092	COMMUNICATIONS ITEMS UNDER \$5M		18,577				18,577
	SUBMARINE COMMUNICATIONS						
093	SUBMARINE BROADCAST SUPPORT		29,669				29,669
094	IMUNICATION EQU		86,204				86,204
095	SATELLITE COMMUNICATIONS SYSTEMS		14,654				14,654
960	NAVY MULTIBAND TERMINAL (NMT)		69,764				69,764
	SHORE COMMUNICATIONS						
160			4,256				4,256
660	INFO SYSTEMS SECURITY PROGRAM (ISSP)		89,663				89,663
100	MIO INTEL EXPLOITATION TEAM		961				961
	CRYPTOLOGIC EQUIPMENT						
101	CRYPTOLOGIC COMMUNICATIONS EQUIP		11,287				11,287
	OTHER ELECTRONIC SUPPORT						
110	COAST GUARD EQUIPMENT		36,584				36,584
	SONOBUOYS						
112	SONOBUOYS—ALL TYPES		173,616		24,900		198,516
	Sonobuoys				[24,900]		

	SEC. 4101. PROCUREMENT (In Thousands of Dollars)	IREMENT Dollars)					
	lb.	FY 2018	2018 Request	House	House Change	House A	House Authorized
		<b>Qt</b> y	Cost	0ty	Cost	Oty	Cost
136	AMPHIBIOUS EQUIPMENT		12.162				12,162
137			2.748				2.748
138	ITEMS UNDER \$5 MILLION		18,084				18,084
139	PHYSICAL SECURITY VEHICLES		1,170				1,170
	SUPPLY SUPPORT EQUIPMENT						
141	SUPPLY EQUIPMENT		21,797		164		21,961
	Realign European Reassurance Initiative to Base				[164]		
143	FIRST DESTINATION TRANSPORTATION		5,572				5,572
144	SPECIAL PURPOSE SUPPLY SYSTEMS		482,916				482,916
	TRAINING DEVICES						
146	Training and education equipment		25,624				25,624
	COMMAND SUPPORT EQUIPMENT						
147	COMMAND SUPPORT EQUIPMENT		59,076				59,076
149	Medical support equipment		4,383				4,383
151	_		2,030				2,030
152	OPERATING FORCES SUPPORT EQUIPMENT		7,500				7,500
153			4,010				4,010
154	S		23,644		1,000		24,644
	Realign European Reassurance Initiative to Base				[1,000]		
155	PHYSICAL SECURITY EQUIPMENT		101,982				101,982
156	ENTERPRISE INFORMATION TECHNOLOGY		19,789				19,789
	OTHER .						
160	NEXT GENERATION ENTERPRISE SERVICE		104,584				104,584
	CLASSIFIED PROGRAMS						
161A	CLASSIFIED PROGRAMS		23,707				23,707
	SPARES AND REPAIR PARTS						

161	Spares and repair parts	278,565		12,000		290,565
	E-2D AHE Total other procurement, navy	8,277,789	က	[12,000] <b>445,986</b>	က	8,723,775
	PROCUREMENT, MARINE CORPS Tracked combat vehicles					
001		107,665				107,665
002	IBAT VEHICLE 1.1	161,511			26	161,511
003	LAV PIP	17,244				17,244
	ARTILLERY AND OTHER WEAPONS					
004	EXPEDITIONARY FIRE SUPPORT SYSTEM	626				979
900	155MM LIGHTWEIGHT TOWED HOWITZER	20,259				20,259
900	HIGH MOBILITY ARTILLERY ROCKET SYSTEM	59,943				59,943
200	WEAPONS AND COMBAT VEHICLES UNDER \$5 MILLION	19,616				19,616
	OTHER SUPPORT					
800	MODIFICATION KITS	17,778				17,778
010	Ground based air defense	9,432				9,432
011	JAVELIN 222	41,159			222	41,159
012		25,125				25,125
013	ANTI-ARMOR WEAPONS SYSTEM-HEAVY (AAWS-H)	51,553				51,553
	COMMAND AND CONTROL SYSTEMS					
016		44,928				44,928
	REPAIR AND TEST EQUIPMENT					
017	repair and test equipment	33,056				33,056
	COMMAND AND CONTROL SYSTEM (NON-TEL)					
020	ITEMS UNDER \$5 MILLION (COMM & ELEC)	17,644				17,644
021	AIR OPERATIONS C2 SYSTEMS	18,393				18,393
022	RADAR SYSTEMS	12,411				12,411
023	GROUND/AIR TASK ORIENTED RADAR (G/ATOR)	139,167			က	139,167
024	RQ-21 UAS	77,841			4	77,841

	SEC. 4101. PROCUREMENT (In Thousands of Dollars)	JREMENT Dollars)					
- i	lform	FY 2018	2018 Request	House	House Change	House A	House Authorized
	וומוו	Qty	Cost	Qty	Cost	Qty	Cost
	INTELL/COMM EQUIPMENT (NON-TEL)						
025	GCSS-MC		1,990				1,990
026	FIRE SUPPORT SYSTEM		22,260				22,260
027	INTELLIGENCE SUPPORT EQUIPMENT		55,759				55,759
029	UNMANNED AIR SYSTEMS (INTEL)		10,154				10,154
030	DCGS-MC		13,462				13,462
031	UAS PAYLOADS		14,193				14,193
	OTHER SUPPORT (NON-TEL)						
035	NEXT GENERATION ENTERPRISE NETWORK (NGEN)		98,511				98,511
036	COMMON COMPUTER RESOURCES		66,894				66,894
037	COMMAND POST SYSTEMS		186,912				186,912
038	RADIO SYSTEMS		34,361				34,361
039	COMM SWITCHING & CONTROL SYSTEMS		54,615				54,615
040			44,455				44,455
	CLASSIFIED PROGRAMS						
040A	CLASSIFIED PROGRAMS		4,214				4,214
	ADMINISTRATIVE VEHICLES						
042	COMMERCIAL CARGO VEHICLES		66,951				66,951
	TACTICAL VEHICLES						
043	MOTOR TRANSPORT MODIFICATIONS		21,824				21,824
044	JOINT LIGHT TACTICAL VEHICLE	527	233,639			527	233,639
045	Family of tactical trailers		1,938				1,938
046	TRAILERS		10,282				10,282
048	Environmental control equip assort		1,405				1,405
020	Tactical fuel systems		1,788				1,788

9,910 5,830 27,240	53,477	85,064	26,286 1,583	7,716	35,640 <b>2,073,704</b>		5,804,684	780,300	2,945,674	57,708 298,502	979,373	30,000
					782		56		17	က	11	
		8,879	[8,8/9]		8,879		1,260,000	[60,000] [1,200,000]	400,000 [400,000]	100,000	000,000	[000,000]
							10	[10]	2 [2]	5	9	[0]
9,910 5,830 27,240	53,477	76,185	26,286 1,583	7,716	35,640 <b>2,064,825</b>		4,544,684	780,300	2,545,674	57,708 198,502	379,373	30,000
					782		46		15	2	5	
POWER EQUIPMENT ASSORTED  AMPHIBIOUS SUPPORT EQUIPMENT  EOD SYSTEMS  MATERIALS HANNING FOILIPMENT	PHYSICAL SECURITY EQUIPMENT	TRAINING DEVICES	Untunded requirement FAMILY OF CONSTRUCTION EQUIPMENT FAMILY OF INTERNALLY TRANSPORTABLE VEH (ITV)	ITEMS LESS THAN \$5 MILLION	SPARES AND REPAIR PARTS SPARES AND REPAIR PARTS TOTAL PROCUREMENT, MARINE CORPS	AIRCRAFT PROCUREMENT, AIR FORCE Tactical forces	F-35	Additional Tooling in Support of Unfunded Priority Unfunded requirement ADVANCE PROCUREMENT (CY)	IAC JUSAL AIRLIFI KC-46A TANKER KC-46A	0THER AIRLIFT C-130J HC-130J	MC-130J MC-130J MC-130J	ADVANCE PROCUREMENT (CY)
051 052 053	054	920	058 059	090	062		001	002	003	004	800	600

	SEC. 4101. PROCUREMENT (In Thousands of Dollars)	JREMENT Dollars)					
<u>:</u>	Ibona	FY 2018	2018 Request	House	House Change	House Authorized	thorized
	- IIIIII	Qty	Cost	Oty	Cost	Qty	Cost
012	MISSION SUPPORT AIRCRAFT Civil air Patroi a/C	ع	2 695			ي	2 695
014	, <u> </u>	42	109.841			42	109.841
017			117,141				117,141
018	STATEBLE AIRCRAFT  B-2A		96,727	54	000'6	54	105,727
019	B-2 Rotary Launcher assemblyB-18		155.634	[54]	[9,000] -34,000		121.634
020	Duplicate funding of F101 engine kits		100 205		[-34,000]		100 205
020	LARGE AIRCRAFT INFRARED COUNTERMEASURES		4,046	20	118,945	20	122,991
	C-17 LAIRCM			[40]	[76,145] [76,145] [23,900]		
022	TACTICAL AIRCRAFT A-10		6,010	4	103,000	4	109,010
023	Unfunded RequirementF-15		417.193	[4]	[103,000]		417.193
024 025	F-16 F-22A		203,864 161,630				203,864 161,630
026			15,000				15,000 68,270
028	INCREMENT 3.2B KC-46a Tanker Airlit aircraft	72	105,756 6,213			72	105,756 6,213

36,592 6,817	125,522 13,253	79,449	15,423	10,727		136	35,706	21,477	51,641		36,406	4,243	70,846		52,107	31,119	264 213,310				171,230	69,428	23,091	166,541	495	201,559	189,772	30,493
													65,000	[62,000]			147,000	[18,000]	[55,000]	[74,000]								
																	264	[88]	[88]	[88]								
36,592 6,817	125,522 13,253	79,449	15,423	10,727		136	35,706	21,477	51,641		36,406	4,243	5,846		52,107	31,119	66,310				171,230	69,428	23,091	166,541	495	201,559	189,772	30,493
														MC-12W upgrades for Air National Guard														
																								SOC				
														ational Guard .				ystem							( <del>-</del>			
														ades for Air N				ht rebalance s	00 Prop	3.5				DS	SPECTION (CFII)			
C-5 C-5M	/A 1	C-32A	7A	C-130J	TRAINER AIRCRAFT	GLIDER MODS			8	OTHER AIRCRAFT	MODS	KC-10A (ATCA)	2	MC-12W upgr	25A MOD	0	30	C-130H Inflight rebalance system	C-130H NP20	C-130H T56 3	30J MODS	C-135	135B	PASS CALL MOI	COMBAT FLIGHT INSPECTION (CFIN)	RC-135		
C-5	C-17A C-21	C-32A	C-37A						041 T-38			043 KC-10A (AT					047 C-130		C-13(	0-130						053 RC-135		E-4

	SEC. 4101. PROCUREMENT (In Thousands of Dollars)	JREMENT Dollars)					
<u>:</u>	libam	FY 2018	FY 2018 Request	House	House Change	House A	House Authorized
		Oty	Cost	Oty	Cost	Qty	Cost
057	AIRBORNE WARNING AND CONTROL SYSTEM		164,786				164,786
058	FAMILY OF BEYOND LINE-OF-SIGHT TERMINALS		24,716				24,716
028			3,730				3,730
090	н–60		75,989		16,100		92,089
	Unfunded requirement				[16,100]		
061	RQ-4 MODS		43,968		18,300		62,268
	HA-ISR Payload Adapters				[18,300]		
062	HC/MC-130 MODIFICATIONS		67,674				67,674
690	OTHER AIRCRAFT		59,068				59,068
065			264,740		5,200		269,940
	FY17 10th Pod Set Procurement Shortfall				[5,200]		
990	CV-22 MODS		066'09				066'09
	AIRCRAFT SPARES AND REPAIR PARTS						
290	INITIAL SPARES/REPAIR PARTS		1,041,569		79,600		1,121,169
	Additional F–35 Initial Spares				[79,600]		
	COMMON SUPPORT EQUIPMENT						
890	AIRCRAFT REPLACEMENT SUPPORT EQUIP		75,846		25,417		101,263
	Realign European Reassurance Initiative to Base				[25,417]		
690	OTHER PRODUCTION CHARGES		8,524				8,524
071	T-53A TRAINER		501				501
	POST PRODUCTION SUPPORT						
072	В-2А		447				447
073	В–2А		38,509				38,509
074	B-52		199				199
075	C-17A		12,028				12,028
078	RC-135		29,700				29,700

079 080 081	F-15 F-15 F-16 F-16 F-16 F-16 F-16 F-16 F-16 F-16		20,000 2,524 18,051		-12,400		20,000 2,524 5,651
082	F-22A OTHER AIRCRAFT		119,566 85,000		[-12,400]		119,566 85,000
085 086	RQ-4 POST PRODUCTION CHARGES		86,695 4,500				86,695 4,500
087	INDUSTRIAL PREPAREDNESS INDUSTRIAL RESPONSIVENESS		14,739		16,000		30,739
880	C-130]		102,000		[16,000]		102,000
680	WAR CONSUMBLES WAR CONSUMBLES WAR CONSUMBLES		37,647				37,647
090	OTHER PRODUCTION CHARGES  OTHER AIRCRAFT		1,339,160 600				1,339,160 600
092A	CLASSIFIED PROGRAMS CLASSIFIED PROGRAMS TOTAL AIRCRAFT PROCUREMENT, AIR FORCE	188	53,212 <b>15,430,849</b>	391	2,917,162	579	53,212 <b>18,348,011</b>
001	MISSILE PROCUREMENT, AIR FORCE MISSILE REPLACEMENT EQUIPMENT—BALLISTIC MISSILE REPLACEMENT EQ-BALLISTIC		860'666				860'66
002	JOINT AIR-SURFACE STANDOFF MISSILE	360 15	441,367 44,728		17,000	360 15	441,367 61,728
004 005 006 007	SIDEWINDER (AIM—9X) AMRAAM PREDATOR HELLFIRE MISSILE SMALL DIAMETER BOMB	310 205 399 5,039	125,350 304,327 34,867 266,030		[000,11]	310 205 399 5,039	125,350 304,327 34,867 266,030

	SEC. 4101. PROCUREMENT (In Thousands of Dollars)	UREMENT Dollars)					
<u>:</u>	Horn	FY 2018	FY 2018 Request	House	House Change	House At	House Authorized
	III	Oty	Cost	Oty	Cost	Oty	Cost
	INDUSTRIAL FACILITIES						
800	INDUSTR'L PREPAREDNS/POL PREVENTION		976				976
Ċ	CLASS IV		7				
009	ICBIN FUZE MODI		6,334				6,334
010	MIN III MUDITICATIONS		00,109				00,109
011	AGIW—65D IMAVEKIUN		687				687
013			36,425				36,425
014	SMALL DIAMETER BOMB		14,086				14,086
	MISSILE SPARES AND REPAIR PARTS						
015	INITIAL SPARES/REPAIR PARTS		101,153				101,153
	SPECIAL PROGRAMS						
020	SPECIAL UPDATE PROGRAMS		32,917				32,917
	•						
020A	CLASSIFIED PROGRAMS		708,176				708,176
	TOTAL MISSILE PROCUREMENT, AIR FORCE	6,328	2,296,182		17,000	6,328	2,313,182
	SPACE PROCUREMENT, AIR FORCE						
	SPACE PROGRAMS						
001	ADVANCED EHF		56,974				56,974
005	AF SATELLITE COMM SYSTEM		57,516				57,516
003	COUNTERSPACE SYSTEMS		28,798				28,798
004	FAMILY OF BEYOND LINE-OF-SIGHT TERMINALS		146,972				146,972
002	WIDEBAND GAPFILLER SATELLITES(SPACE)		80,849		100,000		180,849
	Long-lead procurement for protecting supply chain and schedule for				[100,000]		
	WGS communications.						
900	GPS III SPACE SEGMENT		85,894				85,894

2,198 25,048 33,033 957,420 606,488 1,057,359	132,420 6,370 37,203 113,874	18,709 <b>3,547,125</b>	147,454	161,744	28,509 329,501 38,382 319,525 77,068 11,239 53,469 5,921
ო		ო			10,330 30
76,350 [44,900]	[16,000]	176,350			
2,198 25,048 33,033 957,420 606,488 981,009	132,420 6,370 37,203 113,874	18,709 <b>3,370,775</b>	147,454	161,744	28,509 329,501 38,382 319,525 77,068 11,239 53,469 5,921
ო		ო			30
GLOBAL POSTIONING (SPACE)  SPACEBORNE EQUIP (COMSEC)  MILSATCOM  EVOLVED EXPENDABLE LAUNCH CAPABILITY  EVOLVED EXPENDABLE LAUNCH VEH(SPACE)  SBIR HIGH (SPACE)  AF UPL—fully fund emerging cyber security requirement  AF UPL—concure commercially available antenna	AF UPL upgrades ground antenna ADVANCE PROCUREMENT (CY) NUDET DETECTION SYSTEM SPACE MODS SPACELIT RANGE SYSTEM SPACE	SAFAKES Initial Spares/Repair Parts	PROCUREMENT OF AMMUNITION, AIR FORCE ROCKETS ROCKETS ROCKETS	CARTRIDGES	PRACTICE BOMBS  GENERAL PURPOSE BOMBS  MASSIVE ORDNANCE PENETRATOR (MOP)  JOINT DIRECT ATTACK MUNITION  B61  ADVANCE PROCUREMENT (CY)  OTHER ITEMS  CAD/PAD  EXPLOSIVE ORDNANCE DISPOSAL (EOD)
007 008 010 011 012	014 015 016 017	018	001	005	003 004 005 006 007 008 010

	SEC. 4101. PROCUREMENT (In Thousands of Dollars)	UREMENT f Dollars)					
<u></u>	lform	FY 2018	2018 Request	House	House Change	House Authorized	thorized
	IIIIII	Oty	Cost	Qty	Cost	Qty	Cost
011	SPARES AND REPAIR PARTS		678				678
012 013	MUDIFICATIONS TEMS LESS THAN \$5 MILLION		1,409 5,047				1,409 5,047
015	FLARES FLARES		143,983				143,983
016	FUZES		24,062				24,062
017	ARMS		28.611				28.611
	OCUREMENT OF AMMUNITION, AIR F	10,360	1,376,602			10,360	1,376,602
	OTHER PROCUREMENT, AIR FORCE Passenger Carrying Vehicles						
001			15,651		1,350 [1,350]		17,001
	CARGO AND UTILITY VEHICLES						
002	MEDIUM TACTICAL VEHICLE		54,607				54,607
004	CARGO AND UTILITY VEHICLES		28,670				28,670
;	SPECIAL PURPOSE VEHICLES		;				
900	Security and Tactical Vehicles Special Purpose Vehicles		59,398 19,784		31,821		59,398 51,605
	Realign European Reassurance Initiative to Base				[31,821]		
200	FIRE FIGHTING/CRASH RESCUE VEHICLES		14,768		22,583 [22,583]		37,351

	MATERIALS HANDLING EQUIPMENT			
800	MATERIALS HANDLING VEHICLES	13,561	4,026	17,587
	Realign European Reassurance Initiative to Base		[4,026]	
ć	BASE MAINIENANCE SUFFUKI			6
600	KUNWAY SNOW KEMOV & CLEANING EQUIP	3,429	9,161	12,590
			[9,161]	
010	Base Maintenance Support Vehicles	60,075	39,692	99,767
	Realign European Reassurance Initiative to Base		[39,692]	
	COMM SECURITY EQUIPMENT(COMSEC)			
011	COMSEC EQUIPMENT	115,000	8,000	123,000
	Unfunded requirement		[8,000]	
	INTELLIGENCE PROGRAMS			
013	International intel tech & Architectures	22,335		22,335
014	Intelligence training equipment	5,892		5,892
015	Intelligence comm equipment	34,072		34,072
	ELECTRONICS PROGRAMS			
016	AIR TRAFFIC CONTROL & LANDING SYS	66,143		66,143
017	NATIONAL AIRSPACE SYSTEM	12,641		12,641
018	BATTLE CONTROL SYSTEM—FIXED	6,415		6,415
019	THEATER AIR CONTROL SYS IMPROVEMENTS	23,233		23,233
020	WEATHER OBSERVATION FORECAST	40,116		40,116
021	STRATEGIC COMMAND AND CONTROL	72,810		72,810
022	Cheyenne mountain complex	9,864		9,864
023	MISSION PLANNING SYSTEMS	15,486		15,486
025	INTEGRATED STRAT PLAN & ANALY NETWORK (ISPAN)	9,187		9,187
	SPCL COMM-ELECTRONICS PROJECTS			
026	GENERAL INFORMATION TECHNOLOGY	51,826		51,826
027	AF GLOBAL COMMAND & CONTROL SYS	3,634		3,634
028	MOBILITY COMMAND AND CONTROL	10,083		10,083
029		201,866		201,866
030	$\Rightarrow$	115,198		115,198
031	MINIMUM ESSENTIAL EMERGENCY COMM N	292		292

	SEC. 4101. PROCUREMENT (In Thousands of Dollars)	JREMENT Dollars)					
	lkenn	FY 2018	2018 Request	House	House Change	House A	House Authorized
		Oty	Cost	Qty	Cost	Oty	Cost
032	WIDE AREA SURVEILLANCE (WAS)		62,087				62,087
033	C3 COUNTERMEASURES		37,764				37,764
034	GCSS-AF FOS		2,826				2,826
035	DEFENSE ENTERPRISE ACCOUNTING AND MGMT SYSTEM		1.514				1.514
036	THEATER BATTLE MGT C2 SYSTEM		9,646				9,646
037	AIR & SPACE OPERATIONS CTR-WPN SYS		25,533				25,533
	AIR FORCE COMMUNICATIONS						
040	Base information transpt infrast (Biti) wired		28,159				28,159
041			160,820		26,000		186,820
	Unfunded requirement				[26,000]		
042	JOINT COMMUNICATIONS SUPPORT ELEMENT (JCSE)		5,135				5,135
043	USCENTCOM		18,719				18,719
	ORGANIZATION AND BASE						
044	Tactical C-e equipment		123,206				123,206
045	COMBAT SURVIVOR EVADER LOCATER		3,004				3,004
046	RADIO EQUIPMENT		15,736				15,736
047			5,480				5,480
048	Base comm infrastructure		130,539		55,000		185,539
	Realign European Reassurance Initiative to Base				[55,000]		
	MODIFICATIONS						
049	COMM ELECT MODS		70,798				70,798
	RESCUE EQUIP						
051	ITEMS LESS THAN \$5 MILLION		52,964		200		53,464
	Unfunded requirement—Instructor Training Parachutes				[200]		
	DEPOT PLANT+MTRLS HANDLING EQ						
052	MECHANIZED MATERIAL HANDLING EQUIP		10,381				10,381

	BASE SUPPORT EQUIPMENT					
053	Base procured equipment	15,	15,038	12,500		27,538
	Program increase—Civil Engineers Construction, Surveying, and Map-			[2,000]		
	ping Equipment.					
	Realign European Reassurance Initiative to Base			[7,500]		
054	ENGINEERING AND EOD EQUIPMENT	26,	287			26,287
055	MOBILITY EQUIPMENT	° ∞	470			8,470
056	ITEMS LESS THAN \$5 MILLION	28,	28,768	104,015		132,783
	Realign European Reassurance Initiative to Base			[104,015]		
	SPECIAL SUPPORT PROJECTS					
058	DARP RC135	25,	25,985			25,985
028	DCGS-AF	178,	423			178,423
190		840,980	086			840,980
	CLASSIFIED PROGRAMS					
062A	CLASSIFIED PROGRAMS	16,601,513	513			16,601,513
	PAIR PA					
064	Spares and repair parts	26,	26,675			26,675
	TOTAL OTHER PROCUREMENT, AIR FORCE	19,603,497	497	314,648		19,918,145
	PROCUREMENT, DEFENSE-WIDE					
	MAJOR EQUIPMENT, OSD					
042	MAJOR EQUIPMENT, OSD	20 36,	36,999		20	36,999
	MAJOR EQUIPMENT, NSA					
041	INFORMATION SYSTEMS SECURITY PROGRAM (ISSP)	5,	5,938			5,938
	MAJOR EQUIPMENT, WHS					
045	MAJOR EQUIPMENT, WHS	10,	10,529			10,529
	MAJOR EQUIPMENT, DISA					
007	INFORMATION SYSTEMS SECURITY	24,	805			24,805
800	TELEPORT PROGRAM	46,	638			46,638
600	ITEMS LESS THAN \$5 MILLION	15,	541			15,541
010	NET CENTRIC ENTERPRISE SERVICES (NCES)	1,	1,161			1,161
011	DEFENSE INFORMATION SYSTEM NETWORK	126,	345			126,345

	SEC. 4101. PROCUREMENT (In Thousands of Dollars)	JREMENT Dollars)					
<u> </u>	lbom	FY 2018	2018 Request	House	House Change	House A	House Authorized
2		Otty	Cost	Qty.	Cost	Otty	Cost
012	CYBER SECURITY INITIATIVE		1,817				1,817
013	WHITE HOUSE COMMUNICATION AGENCY		45,243				45,243
014	Senior Leadership enterprise		294,139				294,139
016	JOINT REGIONAL SECURITY STACKS (JRSS)		188,483				188,483
017	JOINT SERVICE PROVIDER		100,783				100,783
	MAJOR EQUIPMENT, DLA						
019	Major Equipment		2,951				2,951
	MAJOR EQUIPMENT, DSS						
023	Major equipment		1,073				1,073
	MAJOR EQUIPMENT, DCAA						
001	ITEMS LESS THAN \$5 MILLION		1,475				1,475
	MAJOR EQUIPMENT, TJS						
043	MAJOR EQUIPMENT, TJS		9,341				9,341
044	MAJOR EQUIPMENT, TJS—CE2T2		903				903
	MAJOR EQUIPMENT, MISSILE DEFENSE AGENCY						
027	THAAD	34	451,592	24	319,400	58	770,992
	tional TH			[24]	[319,400]		
028	AEGIS BMD	34	425,018	=	158,000	45	583,018
	M-3 Block 1B			[]	[158,000]		
029	ADVANCE PROCUREMENT (CY)		38,738				38,738
030	BMDS AN/TPY-2 RADARS		947				947
033			59,739				59,739
034	Iron dome	-	42,000			_	42,000
035		21	160,330			21	160,330
	MAJOR EQUIPMENT, DHRA						
003	Personnel administration		14,588				14,588

	MAJOR EQUIPMENT, DEFENSE THREAT REDUCTION AGENCY			
025	VEHICLES	204		204
026	OTHER MAJOR EQUIPMENT	12,363		12,363
	MAJOR EQUIPMENT, DODEA			
021	AUTOMATION/EDUCATIONAL SUPPORT & LOGISTICS	1,910		1,910
	MAJOR EQUIPMENT, DCMA			
002	major equipment	4,347		4,347
	MAJOR EQUIPMENT, DMACT			
020	MAJOR EQUIPMENT	13,464	3	13,464
	CLASSIFIED PROGRAMS			
045A	CLASSIFIED PROGRAMS	657,759		657,759
	AVIATION PROGRAMS			
049	ROTARY WING UPGRADES AND SUSTAINMENT	158,988	-7,500	151,488
	Per SOCOM requested realignment		[-7,500]	
020	Unmanned ISR	13,295		13,295
051	NON-STANDARD AVIATION	4,892		4,892
052	U-28	5,769		5,769
053		87,345		87,345
055	CV-22 MODIFICATION	42,178		42,178
057	MQ-9 UNMANNED AERIAL VEHICLE	21,660		21,660
059		229,728		229,728
090	AC/MC-130J	179,934		179,934
190	_	28,059		28,059
	SHIPBUILDING			
062	UNDERWATER SYSTEMS	92,606	-12,800	79,806
	Per SOCOM requested realignment		[-12,800]	
	AMMUNITION PROGRAMS			
90	Ordnance ITEMS <\$5M	112,331		112,331
	OTHER PROCUREMENT PROGRAMS			
064	Intelligence systems	82,538		82,538
90	DISTRIBUTED COMMON GROUND/SURFACE SYSTEMS	11,042		11,042
990	OTHER ITEMS <\$5M	54,592		54,592

	SEC. 4101. PROCUREMENT (In Thousands of Dollars)	UREMENT Dollars)					
<u> </u>	lbons	FY 2018	FY 2018 Request	House	House Change	House Authorized	ıthorized
		Otty	Cost	Qty	Cost	Otty	Cost
290	COMBATANT CRAFT SYSTEMS		23,272				23,272
890	SPECIAL PROGRAMS		16,053				16,053
690	Tactical Vehicles		63,304				63,304
070	WARRIOR SYSTEMS <\$5M		252,070				252,070
071	COMBAT MISSION REQUIREMENTS		19,570				19,570
072	GLOBAL VIDEO SURVEILLANCE ACTIVITIES		3,589				3,589
073	OPERATIONAL ENHANCEMENTS INTELLIGENCE		17,953				17,953
075	OPERATIONAL ENHANCEMENTS		241,429				241,429
	CBDP						
9/0	CHEMICAL BIOLOGICAL SITUATIONAL AWARENESS		135,031				135,031
1/0	CB PROTECTION & HAZARD MITIGATION		141,027				141,027
	TOTAL PROCUREMENT, DEFENSE-WIDE	113	4,835,418	32	457,100	148	5,292,518
	JOINT URGENT OPERATIONAL NEEDS FUND						
	JOINT URGENT OPERATIONAL NEEDS FUND						
100	JOINT URGENT OPERATIONAL NEEDS FUND		99,795		-99,795		0
	Program reduction				[-99,795]		
	TOTAL JOINT URGENT OPERATIONAL NEEDS FUND		99,795		-99,795		0
	TOTAL PROCUREMENT	35,463	113,983,713	34,330	13,877,588	69,793	127,861,301

SEC. 4102. PROCUREMENT FOR OVERSEAS CONTINGENCY OPERATIONS.

<u> </u>	FY 201	FY 2018 Request	Request	House Change	hange	House Authorized	norized
		<b>O</b> ty	Cost	Otty	Cost	Oty	Cost
	AIRGRAFT PROCUREMENT, ARMY FIXED WING						
004	MQ-1 UAV	6	87,300			6	87,300
900	AH-64 APACHE BLOCK IIIA REMAN	4	39,040		39,000	4	78,040
	Unfunded requirement				[39,000]		
015	MQ—1 PAYLOAD (MIP)		41,400		-8,000		33,400
	Realign European Reassurance Initiative to Base				[-8,000]		•
810	MULII SENSUK ABN KECUN (MIP)		33,475		-29,475 [-29,475]		4,000
023	EMARSS SEMA MODS (MIP)		36,000				36,000
025	UTILITY HELICOPTER MODS				34,809		34,809
027	COMING RAY SURVEILLANCE		4,289		[34,809]		4,289
033	GMWSCAMPS		139,742	24	61,800	24	201,542
034	Unfunded requirement—B kits		43,440	[24]	[61, 800]		43,440
037	AIRCRA SUFFUNI AIRCRATED SYSTEMS				12,100		12,100
	Untunded requirement	13	424,686	24	[12,100] <b>110,234</b>	37	534,920

MISSILE PROCUREMENT, ARMY Surface-to-air missile system

	SEC. 4102. PROCUREMENT FOR OVERSEAS CONTINGENCY OPERATIONS (In Thousands of Dollars)	(SEAS CONTING of Dollars)	GENCY OPERATIO	NS			
- <u> </u>	lfam	FY 2018 Request	Request	House Change	hange	House Authorized	horized
	- Italii	Oty	Cost	Otty	Cost	Oty	Cost
002	MSE MISSILE			147	633,570	147	633,570
				[147]	[633,570]		
005	AIR-IU-SURFACE MISSILE SISIEM Heilfire Sys Simmary	7 927	278 073	106	10 000	3 033	288 073
	Unfunded requirement	î Î	5	[106]	[10,000]	9	
	ANTI-TANK/ASSAULT MISSILE SYS						
800	JAVELIN (AAWS-M) SYSTEM SUMMARY	47	8,112	326	139,188	373	147,300
	Realign European Reassurance Initiative to Base			[-47]	[-8,112]		
	Unfunded requirement			[373]	[147,300]		
600	TOW 2 SYSTEM SUMMARY	49	3,907	-49	-3,907		0
	Realign European Reassurance Initiative to Base			[-49]	[-3,907]		
011	GUIDED MLRS ROCKET (GMLRS)	1,542	191,522		13,000	1,542	204,522
	Unfunded requirement				[13,000]		
012	MLRS REDUCED RANGE PRACTICE ROCKETS (RRPR)			576	6,330	929	6,330
	Unfunded requirement			[276]	[6,330]		
013	HIGH MOBILITY ARTILLERY ROCKET SYSTEM (HIMARS		41,000		-41,000		0
	Realign European Reassurance Initiative to Base				[-41,000]		
014	LETHAL MINIATURE AERIAL MISSILE SYSTEM (LMAMS	120	8,669		46,600	120	55,269
	Unfunded requirement				[46,600]		
	MODIFICATIONS						
016	ATACMS MODS			75	69,400	75	69,400
	Unfunded requirement			[72]	[69,400]		
018	STINGER MODS		28,000		-28,000		0
	Realign European Reassurance Initiative to Base				[-28,000]		
	TOTAL MISSILE PROCUREMENT, ARMY	4,685	559,283	1,181	845,181	2,866	1,404,464

	PROCUREMENT OF W&TCV, ARMY TRACKED COMBAT VEHICLES					
001		09	200,000	09-	-200,000	0
Š	Realign European Reassurance Initiative to Base	Ĺ	600	[09–]	[-200,000]	c
700	AKMURED MULII FURFUSE VEHICLE (AMPV)	60	203,903	-65 -651	-253,903 [-253.903]	D
	MODIFICATION OF TRACKED COMBAT VEHICLES					
004	STRYKER (MOD)				177,000	177,000
	Unfunded requirement — lethality upgrades		,		[177,000]	,
900	BRADLEY PROGRAM (MOD)		30,000		-30,000	0
	Realign European Reassurance Initiative to Base				[-30,000]	
800	Paladin integrated management (PIM)	12	125,736	-12	-125,736	0
	Realign European Reassurance Initiative to Base			[-12]	[-125,736]	
014	M1 ABRAMS TANK (MOD)		138,700		-138,700	0
	Realign European Reassurance Initiative to Base				[-138,700]	
015	ABRAMS UPGRADE PROGRAM	36	442,800	-36	-442,800	0
	Realign European Reassurance Initiative to Base			[-36]	[-442,800]	
	TOTAL PROCUREMENT OF W&TCV, ARMY	173	1,191,139	-173	-1,014,139	177,000
	PROCUREMENT OF AMMUNITION, ARMY					
	SMALL/MEDIUM CAL AMMUNITION					
100	CTG, 5.56MM, ALL TYPES				7,100	7,100
	Unfunded requirement				[7,100]	
005	CTG, 7.62MM, ALL TYPES				14,900	14,900
	Unfunded requirement				[14,900]	
003	CTG, HANDGUN, ALL TYPES		2		85	06
	Realign European Reassurance Initiative to Base				[-2]	
	Unfunded requirement				[06]	
004	CTG, .50 CAL, ALL TYPES		121		8,769	8,890
	Realign European Reassurance Initiative to Base				[-121]	
	Unfunded requirement				[8,890]	
900	CTG, 20MM, ALL TYPES		1,605			1,605

	SEC. 4102. PROCUREMENT FOR OVERSEAS CONTINGENCY OPERATIONS (In Thousands of Dollars)	RSEAS CONTII of Dollars)	IGENCY OPERATIO	NS			
<u> </u>	lfam	FY 2018	FY 2018 Request	House	House Change	House Authorized	thorized
	- Italii	Qty	Cost	Ofty	Cost	<b>O</b> ty	Cost
900					31,862		31,862
007	Unfunded requirement		35.000		[31,862] $-22.850$		12.150
			•		[-25,000]		•
800	CTG, 40MM, ALL TYPES				17,191		17,191
	Untunded requirement				[17,191]		
600	60MM MORTAR, ALL TYPES				2,500		2,500
010	Unfunded requirement				[2,500] 3,109		3,109
5	Unfunded requirement				[3,109]		10 100
110	120mm Wolfah, ALL ITES Ulfunded requirement TANK AMMINITION				10,192 [18,192]		10,132
012	CARTRIDGES, TANK, 105MM AND 120MM, ALL TYPES Unfunded requirement			3228	40,300	3,228	40,300
710	ARTILLERY AMMUNITION ARTILLERY PROJECTIE 155MM ALI TYPES				150 181		159 181
†	Unfunded requirement				[159,181]		100,101
015	PROJ 155MM EXTENDED RANGE M982	266	23,234		-19,045	266	4,189
016	ARTILLERY PROPELLANTS, FUZES AND PRIMERS, ALL		20,023		[4,044 64,044 [-16,678]		84,067
	Unfunded requirement				[80,722]		

017	MINES & CLEARING CHARGES, ALL TYPES	11,615		-8,615 [-11,615] [3,000]		3,000
019	SHOULDER LAUNCHED MUNITIONS, ALL TYPES	25,000		61,881		86,881
020	ROCKET, HYDRA 70.  Unfunded requirement—APKWS and M282 warheads	75,820	1245 [1,245]	88,000 [20,000] [68,000]	1,245	163,820
022	DEMOLITION MUNITIONS, ALL TYPES			2,261		2,261
023	GRENADES, ALL TYPES Unfunded requirement			25,361 [25,361]		25,361
024	SIGNALS, ALL TYPES Infinitement	1,013		829		1,842
025	SIMULATORS, ALL TYPES Unfunded requirement			450 [450]		450
027	MISCELLANEOUS  NON-LETHAL AMMUNITION, ALL TYPES			150		150
028	ITEMS LESS THAN 85 MILLION (AMMO)  Unfunded requirement PRODUCTION RASE SUPPORT			3,665 3,665 [3,665]		3,665
033	CONVENTIONAL MUNITIONS DEMILITARIZATION Unfunded requirement			53,000 [53,000]		53,000
	TOTAL PROCUREMENT OF AMMUNITION, ARMY 266	193,436	4,473	552,320	4,739	745,756
010	OTHER PROCUREMENT, ARMY TACTICAL VEHICLES FAMILY OF HEAVY TACTICAL VEHICLES (FHTV)	25,874		-25,874 [-25,874]		0

	SEC. 4102. PROCUREMENT FOR OVERSEAS CONTINGENCY OPERATIONS (In Thousands of Dollars)	RSEAS CONTIN of Dollars)	IGENCY OPERATIO	SN			
<u> </u>	likens	FY 2018	FY 2018 Request	House	House Change	House Authorized	thorized
2	- High	Otty	Cost	Otty	Cost	Oty	Cost
012	HVY EXPANDED MOBILE TACTICAL TRUCK EXT SERV		38,628		-38,628		0
014	Realign European Reassurance Initiative to Base		64,647		[–38,628] 71,253		135,900
	Realign European Reassurance Initiative to Base				[-2,599]		
015	MINE-RESISTANT AMBUSH-PROTECTED (MRAP) MODS		17,508		[70,075]		17,508
0.00	MMUNICATIONS ATION PROCRAM		V 900				000 1
070	COMM—COMBAT COMMUNICATIONS		4,900				4,300
041			1,000				1,000
	COMM—BASE COMMUNICATIONS						
062	INSTALLATION INFO INFRASTRUCTURE MOD PROGRAM		2,500		-2,500		0
	Realign European Reassurance Initiative to Base				[-2,500]		
	ELECT EQUIP—TACT INT REL ACT (TIARA)						
890	DCGS-A (MIP)		39,515	106	13,000	106	52,515
	Unfunded requirement			[106]	[13,000]		
070	TROJAN (MIP)		21,310		-6,000		15,310
	Realign European Reassurance Initiative to Base				[-6,000]		
071	Mod of In-SVC equip (Intel SPT) (MIP)		2,300				2,300
072	CI HUMINT AUTO REPRTING AND COLL(CHARCS)		14,460				14,460
075	BIOMETRIC TACTICAL COLLECTION DEVICES (MIP)		5,180				5,180
	ELECT EQUIP—ELECTRONIC WARFARE (EW)						
6/0	CREW			10	17,500	10	17,500
	Unfunded requirement—EOD DR SKOs			[10]	[17,500]		
080	FAMILY OF PERSISTENT SURVEILLANCE CAPABILITIE		16,935	က	2,000	က	21,935
	Unfunded requirement			[3]	[2,000]		

ER	COUNTERINTELLIGENCE/SECURITY COUNTERMEASURES	18,874		-5,900 [ $-5,900$ ]		12,974
ELECT EQUIP—TACTICAL SURV. (TAC SURV) Night vision devices	.V. (TAC SURV)	377				377
SMALL TACTICAL OPTICAL RIFLE MOUNTED MLRF	E MOUNTED MLRF	09	150	2,150	150	2,210
. Unfunded requirement	IITEMENT		[150]	[2,150]	62	20.062
Jnfunded requirement	irement		[53]	[29,462]	3	704,67
INDIRECT FIRE PROTECTION FAMILY OF SYSTEMS .	AMILY OF SYSTEMS	57,500	13	142,610	13	200,110
Infunded requirement—	Unfunded requirement—Air and Missile Defense (SHORAD)		[13]	[142,610]		
JOINT BATTLE COMMAND—PL	AAND—PLATFORM (JBC-P)			-2,300		-2,300
Kealign European Keass	Kealign European Keassurance Initiative to Base DE IN SVC FOLID (LIDD)	7 07 7		[—2,300] 3 97 <i>1</i>		c
ealign European Reass	Realign European Reassurance Initiative to Base	6		[-3.974]		>
MORTAR FIRE CONTROL SYSTE	ROL SYSTEM	2,947		-75		2,872
ealign European Reass	Realign European Reassurance Initiative to Base			[-75]		
ELECT EQUIP—TACTICAL C2 SYSTEMS	SYSTEMS					
air & MSL defense Plannin	PLANNING & CONTROL SYS	9,100		-9,100		0
Realign European Reass	ean Reassurance Initiative to Base			[-9,100]		
GHEIMIGAL DEFENSIVE EUUIPINENI	MEN					
BASE DEFENSE SYSTEMS (BDS)	(5)	3,726				3,726
	DN) EQUIPMENT					
GRND STANDOFF MINE DETECTN Unfunded requirement	NE DETECTN SYSM (GSTAMIDS)			10,800		10,800
MOUNTED DETECTION S	STEM (HMDS) .		4	2,400	4	2,400
Unfunded requirement			[4]	[2,400]		
COMBAT SERVICE SUPPORT EQUIPMENT	IUIPMENT					
RS AND ECU'S	HEATERS AND ECU'S	270				270
FIELD FEEDING EQUIPMENT		145				145
	& PERSONNEL PARACHUTE SYSTEM	1,980				1,980
MEDICAL EQUIPMENT		25 600		21 122		0 79 1/
		060,62		-21,122		4,300

	SEC. 4102. PROCUREMENT FOR OVERSEAS CONTINGENCY OPERATIONS (In Thousands of Dollars)	SEAS CONTIN of Dollars)	GENCY OPERATIC	SNC			
i	mo#I	FY 2018 Request	Request	House	House Change	House Authorized	thorized
	ונמווו	Qty	Cost	Otty	Cost	Oty	Cost
	Realign European Reassurance Initiative to Base				[-21,122]		
149	MOBILE MAINTENANCE EQUIPMENT SYSTEMS		1,124		-1,124 [ $-1,124$ ]		0
153 157	HYDRAULIC EXCAVATOR HIGH MOBILITY ENGINEER EXCAVATOR (HMEE)		3,850 1,932				3,850
164			269				269
168	TRAINING DEVICES, NONSYSTEM		2,700		-2,700 [-2,700]		0
173	INTEGRATED FAMILY OF TEST EQUIPMENT (IMBJ) INTEGRATED FAMILY OF TEST EQUIPMENT (IFTE)		7,500		-7,500 [-7,500]		0
176	RAPID EQUIPPING SOLDIER SUPPORT EQUIPMENT  Unfunded requirement  TOTAL ATTER DEPORT ADMY		8,500	č	5,000 [5,000]	900	13,500
001	JOINT IMPROVISED EXPLOSIVE DEVICE DEFEAT FUND NETWORK ATTACK RAPID ACQUISITION AND THREAT RESPONSE TOTAL JOINT IMPROVISED-THREAT DEFEAT FUND		483,058 483,058 483,058	2	0.7.7.7.7	P	483,058 <b>483,058</b>

AIRCRAFT PROCUREMENT, NAVY

027	OTHER AIRCRAFT STUASLO UAV		3,900				3,900
	님						
033	F-18 SERIES			34	16,000	34	16,000
	Unfunded requirement -ALR-67(V)3 Retrofit A and B Kits			[34]	[16,000]		
034	H–53 SERIES		950				920
035	SH-60 SERIES		15,382				15,382
037	EP-3 SERIES		7,220				7,220
047	SPECIAL PROJECT AIRCRAFT		19,855				19,855
051	COMMON ECM EQUIPMENT		75,530				75,530
062			15,150				15,150
	AIRCRAFT SPARES AND REPAIR PARTS						
064	SPARES AND REPAIR PARTS		18,850				18,850
	AIRCRAFT SUPPORT EQUIP & FACILITIES						
990	ARCRAFT INDUSTRIAL FACILITIES		463				463
	TOTAL AIRCRAFT PROCUREMENT, NAVY		157,300	34	16,000	34	173,300
	STRATEGIC MISSILES						
003	TOMAHAWK	99	100,086			99	100,086
	TACTICAL MISSILES						
004	AMRAAM				12,000		12,000
	Unfunded requirement—AIM—120 Captive Air Training Missiles Guid-				[12,000]		
	ance sections.						
200	STANDARD MISSILE	∞	35,208			∞	35,208
011	HELLFIRE	110	8,771			110	8,771
012	LASER MAVERICK		5,040				5,040
	MODIFICATION OF MISSILES						
017	ESSM	-	1,768				1,768
	GUNS AND GUN MOUNTS						
035	SMALL ARMS AND WEAPONS		1,500				1,500
	TOTAL WEAPONS PROCUREMENT, NAVY	185	152,373		12,000	185	164,373

	SEC. 4102. PROCUREMENT FOR OVERSEAS CONTINGENCY OPERATIONS (In Thousands of Dollars)	SEAS CONTING of Dollars)	SENCY OPERATION	হ			
<u>.</u>	Hom	FY 2018 Request	Request	House	House Change	House Authorized	orized
	- IIIIII	Oty	Cost	Otty	Cost	Qty	Cost
	PROCUREMENT OF AMMO, NAVY & MC						
001	NAVY AMMUNITION Generai Piirdose Rombs		74 021				74 021
002	JDAM	4,717	106,941			4,717	106,941
003	(ETS, ALL TY		1,184				1,184
200	AIR EXPENDABLE COUNTERMEASURES		15,700				15,700
800	JATOS		540				540
012	OTHER SHIP GUN AMMUNITION		13,789				13,789
013	SMALL ARMS & LANDING PARTY AMMO		1,963				1,963
014	PYROTECHNIC AND DEMOLITION		765				765
016	AMMUNITION LESS THAN \$5 MILLION		998				998
	MARINE CORPS AMMUNITION						
019	60MM, ALL TYPES				11,000		11,000
	Unfunded requirement—Full range practice rounds				[11,000]		
020	MORTARS		1,290				1,290
021	81MM, ALL TYPES				14,500		14,500
	Unfunded requirement—Full range practice rounds				[14,500]		
023	DIRECT SUPPORT MUNITIONS		1,355				1,355
024			1,854				1,854
027	ARTILLERY, ALL TYPES				17,000		17,000
	Unfunded requirement—HE Training Rounds				[17,000]		
033	ARTILLERY MUNITIONS	į	5,319			;	5,319
	IUIAL PRUGUKEMENI UF AMMU, NAVY & MC	4,/1/	725,587		42,500	4,/1/	768,087

OTHER PROCUREMENT, NAVY

025	OTHER SHIPBOARD EQUIPMENT UNDERWATER EOD PROGRAMS	12,348	-4,016	8,332
	Realign European Reassurance Initiative to Base		[-4,016]	
032	STANDARD BOATS	18,000		18,000
	SHIP SONARS			
046	SSN ACOUSTIC EQUIPMENT	43,500	-43,500	0
	Realign European Reassurance Initiative to Base		[-43,500]	
	AVIATION ELECTRONIC EQUIPMENT			
078	NAVAL MISSION PLANNING SYSTEMS	2,550		2,550
	OTHER SHORE ELECTRONIC EQUIPMENT			
080	TACTICAL/MOBILE C41 SYSTEMS	7,900	-7,900	0
	Realign European Reassurance Initiative to Base		[-7,900]	
081	DCGS-N	6,392	-1,900	4,492
			[-1,900]	
	CRYPTOLOGIC EQUIPMENT			
101	CRYPTOLOGIC COMMUNICATIONS EQUIP	2,280		2,280
	AIRCRAFT SUPPORT EQUIPMENT			
119	AVIATION SUPPORT EQUIPMENT	29,245		29,245
	SHIP MISSILE SYSTEMS EQUIPMENT			
121	Ship Missile support equipment	2,436		2,436
	OTHER ORDNANCE SUPPORT EQUIPMENT			
126	EXPLOSIVE ORDNANCE DISPOSAL EQUIP	31,970		31,970
	CIVIL ENGINEERING SUPPORT EQUIPMENT			
132	GENERAL PURPOSE TRUCKS	496	-106	390
	Realign European Reassurance Initiative to Base		[-106]	
134	Fire Fighting Equipment	2,304		2,304
135	TACTICAL VEHICLES	2,336		2,336
	SUPPLY SUPPORT EQUIPMENT			
141	Supply equipment	164	-164	0
143	Realign European Reassurance Initiative to Base	420	[-164]	420

	SEC. 4102. PROCUREMENT FOR OVERSEAS CONTINGENCY OPERATIONS (In Thousands of Dollars)	RSEAS CONTIN s of Dollars)	GENCY OPERATION	S			
<u>:</u>	Ibona	FY 2018 Request	Request	House Change	hange	House Authorized	horized
	Itelli	Qty	Cost	Oty	Cost	Qty	Cost
	COMMAND SUPPORT EQUIPMENT						
147	COMMAND SUPPORT EQUIPMENT		21,650				21,650
152	$\overline{}$		15,800				15,800
154	ENVIRONMENTAL SUPPORT EQUIPMENT		1,000		-1,000		0
15.5	Kealign European Keassurance Initiative to base		1 6 900		[-1,000]		15 900
133	CLASSIFIED PROGRAMS		13,630				13,030
161A	CLASSIFIED PROGRAMS		2,200				2,200
	SPARES AND REPAIR PARTS						
161	Spares and repair parts		1,178				1,178
	TOTAL OTHER PROCUREMENT, NAVY		220,059		-58,586		161,473
	PROCUREMENT, MARINE CORPS						
	ARTILLERY AND OTHER WEAPONS						
900	HIGH MOBILITY ARTILLERY ROCKET SYSTEM		5,360				5,360
011	GUIDEU MISSILES	Ξ	2 833			11	2 833
012	FOLLOW ON TO SMAW	:	49			:	49
013	ANTI-ARMOR WEAPONS SYSTEM-HEAVY (AAWS-H)		5,024				5,024
	REPAIR AND TEST EQUIPMENT						
017	REPAIR AND TEST EQUIPMENT		8,241				8,241
	OTHER SUPPORT (TEL)						
019	MODIFICATION KITS		750				750
	COMMAND AND CONTROL SYSTEM (NON-TEL)						
020	ITEMS UNDER \$5 MILLION (COMM & ELEC)		200	374	20,200	374	20,400
	Unfunded requirement—night optics for sniper rifles			[374]	[20,200]		

023	RADAR + EQUIPMENT (NON-TEL) GROUND/AIR TASK ORIENTED RADAR (G/ATOR)			-	39,200 [1,500]	П	39,200
024	Unfunded requirement—G/ATOR accelerationR0-21 UAS		8.400	Ξ	[37,700]		8.400
!	INTELL/COMM EQUIPMENT (NON-TEL)						6
026	FIRE SUPPORT SYSTEM		2 000				2 000
029 029	UNMANNED AIR SYSTEMS (INTEL)		3,000	10	16.600	10	3,000
				[10]	[16,600]		
	OTHER SUPPORT (NON-TEL)						
037	COMMAND POST SYSTEMS		5,777		70,000		75,777
	Additional NOTM-A Systems for emerging operational requirements		,		[70,000]		
038	RADIO SYSTEMS		4,590				4,590
i i	ENGINEER AND OTHER EQUIPMENT						
053	EOD SYSTEMS		21,000				21,000
	SPARES AND REPAIR PARTS						
062	SPARES AND REPAIR PARTS				3,129		3,129
		;		;	[3,129]	;	;
	TOTAL PROCUREMENT, MARINE CORPS	=	65,274	382	149,129	396	214,403
	AIRCRAFT PROCUREMENT, AIR FORCE						
	OTHER AIRCRAFT						
017		16	271,080			16	271,080
	AIRLIFT AIRCRAFT						
033	C-17A		26,850				26,850
	OTHER AIRCRAFT						
048	C-130J MODS		8,400				8,400
051	COMPASS CALL MODS		56,720				56,720
056	E–8		3,000				3,000
061	RQ-4 MODS			4	39,600	4	39,600
	Unfunded requirement—Tactical Field Terminal Antennaes			[4]	[39,600]		

	SEC. 4102. PROCUREMENT FOR OVERSEAS CONTINGENCY OPERATIONS (In Thousands of Dollars)	ERSEAS CONTING s of Dollars)	ENCY OPERATIO	SN			
<u> </u>	Hone	FY 2018 Request	tequest	House (	House Change	House Authorized	thorized
	ונפווו	Qty	Cost	Otty	Cost	Oty	Cost
062	HC/MC-130 MODIFICATIONS		153,080				153,080
063	OTHER AIRCRAFT		10,381 $56.400$				10,381 $56.400$
	AIRCRAFT SPARES AND REPAIR PARTS						
290			129,450				129,450
890	CUMMUN SUPPUKI EUUIPMENI AIRCRAFT REPLACEMENT SUPPORT EQUIP		25,417		-25,417		0
	Realign European Reassurance Initiative to Base	16	740,778	4	[-25,417] <b>14,183</b>	20	754,961
	MISSILE PROCUREMENT, AIR FORCE						
900	TACTICAL Predator heilere Missile	3 230	294 480			3 230	294 480
200	SMALL DIAMETER BOMB	2,273	90,920			2,273	90,920
011	CLASS IV AGM—65D MAVERICK		10.000				10.000
	SILE PROCUREMENT, AIR FC	5,503	395,400			5,503	395,400
	SPACE PROCUREMENT, AIR FORCE						
010	SPACE PROGRAMS MILOSATOM		2.256				2.256
010	TOTAL SPACE PROCUREMENT, AIR FORCE		2,236				2,236
	PROCUREMENT OF AMMUNITION, AIR FORCE						
001	ROCKETS  ROCKETS		49,050				49,050

	CARTRIDGES						
005	CARTRIDGES		11,384				11,384
	BOMBS						
900	JOINT DIRECT ATTACK MUNITION	16,990	390,577			16,990	390,577
	FLARES						
015	FLARES		3,498				3,498
	FUZES						
016	FUZES		47,000				47,000
	TOTAL PROCUREMENT OF AMMUNITION, AIR FORCE	16,990	501,509			16,990	501,509
	OTHER PROCUREMENT, AIR FORCE Passenger Carrying Vehicles						
001	PASSENGER CARRYING VEHICLES		3,855	101	4.522	101	8.377
	Realign European Reassurance Initiative to Base		•		[-1,350]		
	Unfunded requirement			[101]	[5,872]		
	CARGO AND UTILITY VEHICLES						
005	MEDIUM TACTICAL VEHICLE			113	13,300	113	13,300
	Unfunded requirement			[113]	[13,300]		
004	CARGO AND UTILITY VEHICLES		1,882	2447	98,796	2,447	100,678
	Unfunded requirement			[2,447]	[98,796]		
	SPECIAL PURPOSE VEHICLES						
900	SECURITY AND TACTICAL VEHICLES		1,100	09	9,964	09	11,064
	Unfunded requirement			[09]	[9,964]		
900	SPECIAL PURPOSE VEHICLES		32,479	09	-21,214	09	11,265
	Realign European Reassurance Initiative to Base				[-31,821]		
	Unfunded requirement			[09]	[10,607]		
	FIRE FIGHTING EQUIPMENT						
200	FIRE FIGHTING/CRASH RESCUE VEHICLES		22,583		-22,583		0
	Realign European Reassurance Initiative to Base				[-22,583]		
	MATERIALS HANDLING EQUIPMENT						
800	MATERIALS HANDLING VEHICLES		5,353	469	75,031	469	80,384
	Realign European Reassurance Initiative to Base				[-4,026]		

	SEC. 4102. PROCUREMENT FOR OVERSEAS CONTINGENCY OPERATIONS (In Thousands of Dollars)	RSEAS CONTI s of Dollars)	NGENCY OPERATIO	SNI			
=======================================	lkom	FY 2018	FY 2018 Request	House	House Change	House Authorized	horized
	Tigil	Otty	Cost	Ofty	Cost	Oty	Cost
	Unfunded requirement			[469]	[79,057]		
600			11,315	44	-1,040	44	10,275
	Realign European Reassurance Initiative to Base			[4.4]	[-9,161]		
010	Untunded requirement		40.451	[44] 68	[8,121] $-26.462$	89	13.989
	Realign European Reassurance Initiative to Base				[-39,692]		
	Unfunded requirement			[89]	[13,230]		
6			0 043				0 0 0 1 3
013 015	INTERNATIONAL INTEL IECH & ARCHITECTORES		8,8/3				8,873
	ELECTRONICS PROGRAMS		Î				
016	AIR TRAFFIC CONTROL & LANDING SYS		56,500	_	38,700	-	95,200
	Unfunded requirement—deployable RAPCON systems			Ξ	[16,500]		
	Untunded requirement—digital air traffic control radios				[6,000]		
018	BATTLE CONTROL SYSTEM—FIXED				1,400		1,400
	Unfunded requirement				[1,400]		
019	THEATER AIR CONTROL SYS IMPROVEMENTS		4,970				4,970
	SPCL COMM-ELECTRONICS PROJECTS						
029	AIR FORCE PHYSICAL SECURITY SYSTEM		3,000		34,500		37,500
	Unfunded requirement—Intrusion Detection Systems				[18,000]		
	Unfunded requirement—PL2 BPSS systems				[16,500]		
	ORGANIZATION AND BASE						
048	BASE COMM INFRASTRUCTURE		55,000		-55,000		0
	Realign European Reassurance Initiative to Base				[-22,000]		

	PERSONAL SAFETY & RESCUE EQUIP					
051	ITEMS LESS THAN \$5 MILLION	8,469		63,400		71,869
	Unfunded requirement—battlefield airman combat equipment			[59,400]		
	Unfunded requirements			[4,000]		
	EQUIPMENT					
053	Base procured equipment	7,500		-7,500		0
	Realign European Reassurance Initiative to Base			[-7,500]		
054	ENGINEERING AND EOD EQUIPMENT	80,427		32,550		112,977
	Unfunded requirement			[32,550]		
055	MOBILITY EQUIPMENT			37,000		37,000
	Unfunded requirement—Basic Expeditionary Airfield Resources			[37,000]		
056	ITEMS LESS THAN \$5 MILLION	110,405		-104,015		6,390
	Realign European Reassurance Initiative to Base			[-104,015]		
	SPECIAL SUPPORT PROJECTS					
058	DARP RC135	700				700
059	DCGS-AF	9 200		91 200		100 400
)	Infinded requirement	0		[91,200]		6
	CLACCIFIED DENGEDAMC			102,107		
V630	CLASSIED PROGRAMS	3 5/10 805				2 5/17 975
002A		3,344,023				3,342,023
	TOTAL OTHER PROCUREMENT, AIR FORCE	4,008,887	3,363	262,549	3,363	4,271,436
	PROCUREMENT, DEFENSE-WIDE					
	MAJOR EQUIPMENT, DISA					
800	TELEPORT PROGRAM	1.979				1.979
018	N SYSTEMS NETWORK	12,000				12,000
	MAJOR EQUIPMENT, MISSILE DEFENSE AGENCY					
034	IRON DOME			50,000		50,000
	Additional funds for Iron Dome Tamir interceptors			[50,000]		
	CLASSIFIED PROGRAMS					
045A	CLASSIFIED PROGRAMS	43,653				43,653
	AVIATION PROGRAMS					
046	MANNED ISR	15,900				15,900

	SEC. 4102. PROCUREMENT FOR OVERSEAS CONTINGENCY OPERATIONS (In Thousands of Dollars)	RSEAS CONTINO of Dollars)	IGENCY OPERATIC	SNI			
	láson	FY 2018	FY 2018 Request	House	House Change	House Au	House Authorized
	- Item	ûty	Cost	Oty	Cost	Oty	Cost
047	MC-12		20,000				20,000
020	UNMANNED ISR		38,933				38,933
051	NON-STANDARD AVIATION		009'6				009'6
052	U-28		8,100				8,100
053	MH-47 CHINOOK		10,270				10,270
057	MQ—9 UNMANNED AERIAL VEHICLE		19,780				19,780
061	C-130 MODIFICATIONS		3,750				3,750
	AMMUNITION PROGRAMS						
063	ORDNANCE ITEMS <\$5M		62,643				62,643
	OTHER PROCUREMENT PROGRAMS						
064	INTELLIGENCE SYSTEMS		12,000				12,000
690	TACTICAL VEHICLES		38,527				38,527
070	WARRIOR SYSTEMS <\$5M		20,215				20,215
073	OPERATIONAL ENHANCEMENTS INTELLIGENCE		7,134				7,134
075	OPERATIONAL ENHANCEMENTS		193,542		17,525		211,067
	Unfunded requirement- Joint Task Force Platform Expansion				[15,900]		
	Unfunded requirement- Publicly Available Information (PAI) Capa-				[1,625]		
	bility Acceleration.						
	TOTAL PROCUREMENT, DEFENSE-WIDE		518,026		67,525		585,551
	NATIONAL GUARD AND RESERVE EQUIPMENT						
	UNDISTRIBUTED						
200	UNDISTRIBUTED				500,000		500,000
	Program increase				[200,000]		
	TOTAL NATIONAL GUARD AND RESERVE EQUIPMENT				500,000		500,000

	TOTAL PROCUREMENT	32,559	10,244,626	9,630	1,671,274	42,189	11,915,900
SEC. 4100	SEC. 4103. PROCUREMENT FOR OVERSEAS CONTINGENCY OPERATIONS FOR BASE REQUIREMENTS.	BASE REC	UIREMENTS.				
	SEC. 4103. PROCUREMENT FOR OVERSEAS CONTINGENCY OPERATIONS FOR BASE REQUIREMENTS (In Thousands of Dollars)	GENCY OPER of Dollars)	ATIONS FOR BASE	REQUIREMEN	SI		
<u> </u>	lkom	FY 2018 Request	Request	House Change	hange	House Authorized	thorized
	ונפווו	Otty	Cost	<b>O</b> ty	Cost	Otty	Cost
	SHIPBUILDING AND CONVERSION, NAVY						
003	ADVANCE PROCUREMENT (CY)				200,000		200,000
	CVN 81 AP				[200,000]		
600	DDG51			П	1,896,800	-	1,896,800
	000			Ξ	[1,862,800]		
	Ship Signal Exploitation Equipment				[34,000]		
010	ADVANCE PROCUREMENT (CY)				45,000		45,000
	DDG AP				[45,000]		
011	LITTORAL COMBAT SHIP			2	1,033,000	2	1,033,000
	SOT			[5]	[1,033,000]		
	AMPHIBIOUS SHIPS						
012A	AMPHIBIOUS SHIP REPLACEMENT LX(R) ADVANCE PROCUREMENT (CY)				100,000		100,000
	Program increase				[100,000]		
013	LPD-17			-	1,786,000		1,786,000
	LPD-30			Ξ	[1,786,000]		
014	EXPEDITIONARY SEA BASE (ESB)				635,000	П	635,000
	ESB			[1]	[635,000]		
	AUXILIARIES, CRAFT AND PRIOR YR PROGRAM COST						
025	SHIP TO SHORE CONNECTOR			2	312,000	2	312,000
	388			[2]	[312,000]		
970	SERVICE CRAFT			1	39,000		39,000

	ized	Cost	6,046,800	6,046,800
	House Authorized	Qty	01	0
		Cost	[39,000] <b>6,046,800</b>	6,046,800
ISE REQUIREMENTS	House Change	Qty	10	10
RATIONS FOR BA	FY 2018 Request	Cost		
FRSEAS CONTINGENCY OPERATIONS FOR BAY (In Thousands of Dollars)	FY 2018	Otty		
SEC. 4103. PROCUREMENT FOR OVERSEAS CONTINGENCY OPERATIONS FOR BASE REQUIREMENTS (In Thousands of Dollars)	Ham	Itelli	Berthing Barge	TOTAL PROCUREMENT
	<u> </u>	ם ב		

## TITLE XLII—RESEARCH, DEVELOPMENT, TEST, AND EVALUATION

SEC. 4201. RESEARCH, DEVELOPMENT, TEST, AND EVALUATION.

	House Authorized		12,010	263,590	67,027	87,395	430.022
	House Change						
	FY 2018 Request		12,010	263,590	67,027	87,395	430.022
SEC. 4201. RESEARCH, DEVELOPMENT, TEST, AND EVALUATION (In Thousands of Dollars)	ltem	RESEARCH, DEVELOPMENT, TEST & EVAL, ARMY BASIC RESEARCH	IN-HOUSE LABORATORY INDEPENDENT RESEARCH	DEFENSE RESEARCH SCIENCES	University research initiatives	University and industry research centers	SUBTOTAL BASIC RESEARCH
	Program Element		0601101A	0601102A	0601103A	0601104A	
	Line		001	005	003	004	

29,640 35,730 8,627	66,086	27,144	43,742	22,785	28,650	67,232	85,309	4,004	5,615	41,455	58,352	34,723	26,190	24,127	21,678	33,123	14,041	67,720	20,216	44,559	N2 N2 N	404,00	894,182	44,863 67,780 160,746
																				5,000	[2,000]		5,000	
29,640 35,730 8,627														24,127						39,559	N2 N3 N	404,00	889,182	44,863 67,780 160,746
APPLIED RESEARCH  MATERIALS TECHNOLOGY  SENSORS AND ELECTRONIC SURVIVABILITY  TRACTOR HIP	AVATION TECHNOLOGY	ELECTRONIC WARFARE TECHNOLOGY	MISSILE TECHNOLOGY	ADVANCED WEAPONS TECHNOLOGY	ADVANCED CONCEPTS AND SIMULATION	COMBAT VEHICLE AND AUTOMOTIVE TECHNOLOGY	Ballistics Technology	CHEMICAL, SMOKE AND EQUIPMENT DEFEATING TECHNOLOGY	JOINT SERVICE SMALL ARMS PROGRAM	WEAPONS AND MUNITIONS TECHNOLOGY	ELECTRONICS AND ELECTRONIC DEVICES	MIGHT VISION TECHNOLOGY	COUNTERMINE SYSTEMS	HUMAN FACTORS ENGINEERING TECHNOLOGY	ENVIRONMENTAL QUALITY TECHNOLOGY	COMMAND, CONTROL, COMMUNICATIONS TECHNOLOGY	COMPUTER AND SOFTWARE TECHNOLOGY	MILITARY ENGINEERING TECHNOLOGY	MANPOWER/PERSONNEL/TRAINING TECHNOLOGY	Warfighter Technology	Program increase	WEDICAL LCUINGEOR	SUBTOTAL APPLIED RESEARCH	ADVANCED TECHNOLOGY DEVELOPMENT WARFIGHTER ADVANCED TECHNOLOGY MEDICAL ADVANCED TECHNOLOGY AVATION ADVANCED TECHNOLOGY
	0602211A																		0602785A	0602786A	A7876090	M /0 /7000		0603001A 0603002A 0603003A
005	800	600	010	011	012	013	014	015	016	017	018	019	020	021	022	023	024	025	026	027	000	070		029 030 031

	House Authorized	84,079	125,537	12,231	6,466	28,552	16,434	26,903	4,880	4,326	31,296	72,850		12,323	182,331	17,948	5,796	47,135	10,421	32,448	52,206	33,426	1,080,977	NC3 0	48,949
	House Change											10,000	[10,000]										10,000		15,000 [15,000]
	FY 2018 Request	84,079	125,537			.,					31,296			12,323	182,331	17,948	5,796	47,135	10,421	32,448	52,206	33,426	1,070,977	V 69 0	33,949
SEC. 4201. RESEARCH, DEVELOPMENT, TEST, AND EVALUATION (In Thousands of Dollars)	ltem	WEAPONS AND MUNITIONS ADVANCED TECHNOLOGY	COMBAT VEHICLE AND AUTOMOTIVE ADVANCED TECHNOLOGY	SPACE APPLICATION ADVANCED TECHNOLOGY	MANPOWER, PERSONNEL AND TRAINING ADVANCED TECHNOLOGY	TRACTOR HIKE	NEXT GENERATION TRAINING & SIMULATION SYSTEMS	COMBATING TERRORISM—TECHNOLOGY DEVELOPMENT	TRACTOR NAIL	TRACTOR EGGS	ELECTRONIC WARFARE TECHNOLOGY	MISSILE AND ROCKET ADVANCED TECHNOLOGY	Simulation upgrades for land based anti-ship missile development	TRACTOR CAGE	HIGH PERFORMANCE COMPUTING MODERNIZATION PROGRAM	LANDMINE WARFARE AND BARRIER ADVANCED TECHNOLOGY	JOINT SERVICE SMALL ARMS PROGRAM	NIGHT VISION ADVANCED TECHNOLOGY	ENVIRONMENTAL QUALITY TECHNOLOGY DEMONSTRATIONS	MILITARY ENGINEERING ADVANCED TECHNOLOGY	ADVANCED TACTICAL COMPUTER SCIENCE AND SENSOR TECHNOLOGY	C3 ADVANCED TECHNOLOGY	SUBTOTAL ADVANCED TECHNOLOGY DEVELOPMENT	ADVANCED COMPONENT DEVELOPMENT & PROTOTYPES ADMY MISSIE DESENSE SYSTEMS INTECEDATION	AIR AND MISSILE DEFENSE SYSTEMS ENGINEERING
	Program Element				0603007A									0603322A	0603461A	0603606A	0603607A	0603710A	0603728A	0603734A	0603772A	0603794A		06022051	0603327A
	Line	032	033	034	035	980	037	039	040	041	042	043		044	045	046	047	048	049	020	051	052		053	055

72,909 7,135 43,902	54,739	10,157 29,353	12,347 10,456 2,588	14,055 35,333	33,491 45,239	39,608	9,921 76,728 100,221	20,000 10,400 164 967	11,000 1,600 11,303 56,492 20,432 <b>941,959</b>
2,450	22,000	1,620	[070,1]		25,000	[25,000]	-15,000	[-15,000]	51,070
72,909 7,135 41,452	32,739	10,157 27,733	12,347 10,456 2,588	14,055 35,333	33,491 20,239	39,608	9,921 76,728 115,221	20,000 10,400 164 967	1,600 11,303 56,492 20,432 890,889
Landmine warfare and Barrier—adv dev	ARMORED SYSTEM MODERNIZATION—ADV DEV	SOLDIER SUPPORT AND SURVIVABILITY TACTICAL ELECTRONIC SURVEILLANCE SYSTEM—ADV DEV LIAFLINGAL requirement	NIGHT VISION SYSTEMS ADVANCED DEVELOPMENT  ENVIRONMENTAL QUALITY TECHNOLOGY—DEM/VAL  NATO RESEARCH AND DEVELOPMENT	AVIATION—ADV DEV	Medical Systems—adv dev	Enhanced lightweight body armor and combat helmets technology	ANALYSIS OF ALIERNATIVES  LOWER TIER AIR MISSILE DEFENSE (LTAMD) SENSOR  TECHNOLOGY MATURATION INITIATIVES	Program Reduction  MANEUVER—SHORT RANGE AIR DEFENSE (M-SHORAD)  TRACTOR BEAM  ASSURED POSITIONING NAVIGATION AND TIMING (PNT)	SYNTHETIC TRAINING ENVIRONMENT REFINEMENT & PROTOTYPING INDIRECT FIRE PROTECTION CAPABILITY INCREMENT 2—INTERCEPT (IFPC2) CYBERSPACE OPERATIONS FORCES AND FORCE SUPPORT ARMY SPACE SYSTEMS INTEGRATION SUBTOTAL ADVANCED COMPONENT DEVELOPMENT & PROTOTYPES
0603619A 0603627A 0603639A	0603645A	0603747A 0603766A	0603774A 0603779A 0603790A	0603801A 0603804A	0603807A 0603827A	0604017A	0604100A 0604114A 0604115A	0604117A 0604118A 0604120A	0604121A 0604319A 0305251A 1206308A
056 057 058	029	060 061	062 063 064	065	067 068	690	070 071 072	073 074 075	076 077 078 079

## SYSTEM DEVELOPMENT & DEMONSTRATION

	House Authorized	30,153 71,671 10,589 4,774 17,252 89,243 8,242 10,507 3,536 7,000 36,242 126,004 3,702 43,575 28,726 18,562 8,344 11,270 10,000 18,566 145,360 165,360 165,360 17,700 11,270 12,270 12,2	
	House Change	1,600 [3,000] [5,000] [3,600] 17,500 [17,500]	
	FY 2018 Request	30,153 71,671 10,589 4,774 17,252 87,643 21,095 10,507 3,536 7,000 36,242 108,504 3,702 43,575 28,726 18,562 8,344 11,270 10,000 18,566 145,360 145,360	
SEC. 4201. RESEARCH, DEVELOPMENT, TEST, AND EVALUATION (In Thousands of Dollars)	ltem	AIRCRAFT AVIONICS ELECTRONIC WARRERE DEVELOPMENT MID-TIER NETWORKING VEHICULAR RADIO (MNVR) ALL SOURCE ANALYSIS SYSTEM TRACTOR CAGE INFANTRY SUPPORT WEAPONS Program reduction- obligation delays Unfunded requirement—air soldier system MEDIUM TACTICAL VEHICLES JANELIN FAMILY OF HEAVY TACTICAL VEHICLES ARRINGO F HEAVY TACTICAL VEHICLES ARRING OF HEAVY TACTICAL WHELED VEHICLES ARRORED SYSTEMS MODERNIZATION (ASM)—ENG DEV Unfunded requirement COMBAT FEEDING, CLOTHING, AND EQUIPMENT NON-SYSTEM TRAINING DEVICES—ENG DEV Unfunded requirement COMBAT FEEDING, CLOTHING, AND EQUIPMENT ONSTRUCTIVE SIMULATION SYSTEMS DEVELOPMENT AUTOMATIC TEST EQUIPMENT DEVELOPMENT DISTRIBUTIVE INTERACTIVE SIMULATIONS (DIS)—ENG DEV BRILLIANT ANTI-ARRONS SUBMUNITIONS COMBINED ARMS TACTICAL TRAINER (CATT) CORE BRIGADE ANALYSIS, INTEGRATION AND EVALUATION WEAPONS AND MUNITIONS—ENG DEV	
	Program Element	0604201A 0604270A 0604221A 0604321A 0604501A 0604601A 0604611A 0604622A 0604642A 0604710A 0604710A 0604711A 0604711A 0604714A 0604714A 0604746A 0604746A 0604746A 0604746A	
	Line	080 081 083 084 085 086 080 090 090 091 095 096 097 097 098 099 100 100 100 100	

92,965	9,910	39,238	34,684	188,409			32,968	49,554	45,605	23,127		133,600		3,972		81,776	172,361	199,778	4,418	15,877	44,150	113,570		5,207	4,727	105,778	6,927	214
[8,000] [4,178] 2,000	[2,000]			24,000	[2,000]	[19,000]				7,000	[2,000]	35,000	[35,000]	2,000	[2,000]							78,900	[78,900]					
90,965	9,910	39,238	34,684	164,409			32,968	49,554	45,605	16,127		98,600		1,972		81,776	172,361	199,778	4,418	15,877	44,150	34,670		5,207	4,727	105,778	6,927	214
Unfunded requirement	Next Behefation vehicle caniounage lechinology	MEDICAL MATERIEL/MEDICAL BIOLOGICAL DEFENSE EQUIPMENT—ENG DEV	Landmine warfare/barrier—eng dev	ARMY TACTICAL COMMAND & CONTROL HARDWARE & SOFTWARE	Unfunded requirement	Unfunded requirement—Assured Communications	RADAR DEVELOPMENT	GENERAL FUND ENTERPRISE BUSINESS SYSTEM (GFEBS)	FIREFINDER	SOLDIER SYSTEMS—WARRIOR DEM/VAL	Program increase- soldier power development initiatives	SUITE OF SURVIVABILITY ENHANCEMENT SYSTEMS—EMD	Unfunded requirements	ARTILLERY SYSTEMS—EMD	Unfunded requirement—IT3 demonstrator	INFORMATION TECHNOLOGY DEVELOPMENT	Integrated Personnel and Pay System-army (IPPS-A)	ARMORED MULTI-PURPOSE VEHICLE (AMPV)	INTEGRATED GROUND SECURITY SURVEILLANCE RESPONSE CAPABILITY (IGSSR-C)	JOINT TACTICAL NETWORK CENTER (JTNC)	JOINT TACTICAL NETWORK (JTN)	TRACTOR TIRE	Unfunded requirement	GROUND-BASED OPERATIONAL SURVEILLANCE SYSTEM—EXPEDITIONARY (GBOSS-E)	TACTICAL SECURITY SYSTEM (TSS)	COMMON INFRARED COUNTERMEASURES (CIRCM)	COMBATING WEAPONS OF MASS DESTRUCTION (CWMD)	EVIDENCE CULLECTION AND DETAINEE PROCESSING
0604804A	0604805A	0604807A	0604808A	0604818A			0604820A	0604822A	0604823A	0604827A		0604852A		0604854A		0605013A	0605018A	0605028A	0605029A	0605030A	0605031A	0605032A		0605033A	0605034A	0605035A	0605036A	060503/A
105	106	107	108	109			110	111	112	113		114		115		116	117	118	119	120	121	122		123	124	125	126	17/

	House Authorized	16,125	55,165	20,076	20,322	55,810	30,879	175,069	70,760	8,965	34,626	252,320		9,382		23,467	6,930	6,112	4,431	14,616	17,928	3,111,418	22,862	13,902	102,901 20,140
	House Change											-84,100	[-84,100]	2,500	[2,500]							98,578			
	FY 2018 Request						30,879			8,965	•	m		6,882		23,467	6,930	6,112	4,431	14,616	17,928	3,012,840	22,862	13,902	102,901 20,140
SEC. 4201. RESEARCH, DEVELOPMENT, TEST, AND EVALUATION (In Thousands of Dollars)	ltem	NUCLEAR BIOLOGICAL CHEMICAL RECONNAISSANCE VEHICLE (NBCRV) SENSOR SUITE	DEFENSIVE CYBER TOOL DEVELOPMENT	TACTICAL NETWORK RADIO SYSTEMS (LOW-TIER)	CONTRACT WRITING SYSTEM	MISSILE WARNING SYSTEM MODERNIZATION (MWSM)	AIRCRAFT SURVIVABILITY DEVELOPMENT	INDIRECT FIRE PROTECTION CAPABILITY INC 2—BLOCK 1	GROUND ROBOTICS	AMF JOINT TACTICAL RADIO SYSTEM (JTRS)	JOINT AIR-TO-GROUND MISSILE (JAGM)	ARMY INTEGRATED AIR AND MISSILE DEFENSE (AIAMD)	Program Reduction	NATIONAL CAPABILITIES INTEGRATION (MIP)	Unfunded requirement	JOINT LIGHT TACTICAL VEHICLE (JLTV) ENGINEERING AND MANUFACTURING DEVELOPMENT PH	AVIATION GROUND SUPPORT EQUIPMENT	PALADIN INTEGRATED MANAGEMENT (PIM)	TR0JAN—RH12	ELECTRONIC WARFARE DEVELOPMENT	TRACTOR BEARS	SUBTOTAL SYSTEM DEVELOPMENT & DEMONSTRATION	rdt&e management support Threat simulator development	TARGET SYSTEMS DEVELOPMENT	MADIX INCENTIVESTIMENT
	Program Element										0605450A	0605457A		0605766A		0605812A	0605830A	0210609A	0303032A	0304270A	1205117A		0604256A	0604258A	0605103A
	Line	128	129	130	131	132	133	134	135	137	138	140		143		144	145	146	147	150	151		152	153	155

246 663	29.820	307,588	49,242	41,843	4,804	7,238	21,890	12,684	51,040	56,246	1,829	55,060	33,934	43,444	2,087	54,679	7,916	61,254	1,779	1,253,845		8.929	4.014	4.094	15,738	4,513	102,014	59,977		
																													9,300	[9,300]
246 663		307,588									1,829						7,916			1,2		8.929	4.014	4.094	15,738	4,513	102,014	59,977	34,416	
ARMY KWAIAI FIN ATOLI	CONCEPTS EXPERIMENTATION PROGRAM	ARMY TEST RANGES AND FACILITIES	ARMY TECHNICAL TEST INSTRUMENTATION AND TARGETS	SURVIVABILITY/LETHALITY ANALYSIS	AIRCRAFT CERTIFICATION	METEOROLOGICAL SUPPORT TO RDT&E ACTIVITIES	MATERIEL SYSTEMS ANALYSIS	EXPLOITATION OF FOREIGN ITEMS	SUPPORT OF OPERATIONAL TESTING	army evaluation center	ARMY MODELING & SIM X-CMD COLLABORATION & INTEG	Programwide activities	TECHNICAL INFORMATION ACTIVITIES	MUNITIONS STANDARDIZATION, EFFECTIVENESS AND SAFETY	ENVIRONMENTAL QUALITY TECHNOLOGY MGMT SUPPORT	ARMY DIRECT REPORT HEADQUARTERS—R&D - MHA	MILITARY GROUND-BASED CREW TECHNOLOGY	RONALD REAGAN BALLISTIC MISSILE DEFENSE TEST SITE	DEFENSE MILITARY DECEPTION INITIATIVE	SUBTOTAL RDT&E MANAGEMENT SUPPORT	OPERATIONAL SYSTEMS DEVELOPMENT	MLRS PRODUCT IMPROVEMENT PROGRAM	TRACTOR PULL	ANTI-TAMPER TECHNOLOGY SUPPORT	WEAPONS AND MUNITIONS PRODUCT IMPROVEMENT PROGRAMS	Tractor smoke	Long range precision fires (LRPF)	APACHE PRODUCT IMPROVEMENT PROGRAM	BLACKHAWK PRODUCT IMPROVEMENT PROGRAM	Unfunded requirement—UH-60V development
0605301A		0605601A				0605702A											0606001A					0603778A	0603813A	0605024A	0607131A	0607133A	0607134A	0607135A	0607136A	
156	157	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176			178	179	180	181	182	183	184	185	

	House Authorized	194,567	9,981	204,304	1,023	1,504	10,064	38,463	6,159	90,217	6,749	33,520	351,175		6,639	40,784	39,358	145	4,803	17,723		2,000	37,883	4,500		1,582	195	0.350
	House Change												8,000	[8,000]						15,000	[15,000]			4,500	[4,500]			
	FY 2018 Request	194,567	9,981		1,023							33,520	(.,		6,639	40,784	39,358	145	4,803	2,723		2,000	37,883			1,582	195	18,920
SEC. 4201. RESEARCH, DEVELOPMENT, TEST, AND EVALUATION (In Thousands of Dollars)	ltem	CHINOOK PRODUCT IMPROVEMENT PROGRAM	FIXED WING PRODUCT IMPROVEMENT PROGRAM	IMPROVED TURBINE ENGINE PROGRAM	Emerging Technologies from Nie	LOGISTICS AUTOMATION	AVIATION ROCKET SYSTEM PRODUCT IMPROVEMENT AND DEVELOPMENT	UNMANNED AIRCRAFT SYSTEM UNIVERSAL PRODUCTS	FAMILY OF BIOMETRICS	Patriot product improvement	AEROSTAT JOINT PROJECT—COCOM EXERCISE	JOINT AUTOMATED DEEP OPERATION COORDINATION SYSTEM (JADOCS)	COMBAT VEHICLE IMPROVEMENT PROGRAMS	Unfunded requirement—M88A2E1	Maneuver control system	155MM SELF-PROPELLED HOWITZER IMPROVEMENTS	AIRCRAFT MODIFICATIONS/PRODUCT IMPROVEMENT PROGRAMS	AIRCRAFT ENGINE COMPONENT IMPROVEMENT PROGRAM	DIGITIZATION	MISSILE/AIR DEFENSE PRODUCT IMPROVEMENT PROGRAM	Realign European Reassurance Initiative to Base	OTHER MISSILE PRODUCT IMPROVEMENT PROGRAMS	TRACTOR CARD	INTEGRATED BASE DEFENSE—OPERATIONAL SYSTEM DEV	Unfunded requirement—modal passive detection system	materials handling equipment	ENVIRONMENTAL QUALITY TECHNOLOGY—OPERATIONAL SYSTEM DEV	LOWER HER AIR AND MISSILE DEFENSE (AMD) STSTEIN
	Program Element				0607140A							0203728A			0203740A	0203743A	0203744A	0203752A	0203758A	0203801A		0203802A	0203808A	0205402A		0205410A	0205412A	UZU3430A
	Line	186	187	188	189	190	191	192	193	194	195	196	197		198	199	200	201	202	203		204	205	206		207	208	607

102,807 13,807 132,438 64,370 10,475 1,100 16,925	20,080 24,700 9,574 2,191 12,773	2,537 4,723 65,877	11,959 10,228 7,154 <b>1,941,977</b>	138,130
7,492	15,000 [15,000]	5,000	64,292	20,000 [20,000]
102,807 13,807 132,438 64,370 10,475 1,100 9,433	5,080 24,700 9,574 2,191 12,773	2,537 4,723 60,877	11,959 10,228 7,154 <b>1,877,685</b>	118,130
GUIDED MULTIPLE-LAUNCH ROCKET SYSTEM (GMLRS)  SECURITY AND INTELLIGENCE ACTIVITIES INFORMATION SYSTEMS SECURITY PROGRAM GLOBAL COMBAT SUPPORT SYSTEM WWMCCS/GLOBAL COMMAND AND CONTROL SYSTEM COMBINED ADVANCED APPLICATIONS TACTICAL UNMANNED AERIAL VEHICLES Realign European Reassurance Initiative to Base	AIRBORNE RECONNAISSANCE SYSTEMS Realign European Reassurance Initiative to Base DISTRIBUTED COMMON GROUND/SURFACE SYSTEMS MQ-1C GRAY EAGLE UAS RQ-11 UAV RQ-7 UAV	BIOMETRICS ENABLED INTELLIGENCE  WIN-T INCREMENT 2—INITIAL NETWORKING  END ITEM INDUSTRIAL PREPAREDNESS ACTIVITIES  Development of improved manufacturing technology for separation, extraction, smelter, sintering, leaching, processing, beneficiation, or production of specialty metals such as lanthanide elements, yttrium or scandium.	SATCOM GROUND ENVIRONMENT (SPACE) JOINT TACTICAL GROUND SYSTEM CLASSIFIED PROGRAMS SUBTOTAL OPERATIONAL SYSTEMS DEVELOPMENT	RESEARCH, DEVELOPMENT, TEST & EVAL, NAVY BASIC RESEARCH UNIVERSITY RESEARCH INITIATIVES  Defense University Research Instrumentation Program IN-HOUSE LABORATORY INDEPENDENT RESEARCH
0205778A 0303028A 0303140A 0303150A 0305172A 0305204A	0305206A 0305208A 0305219A 0305232A 0305233A	0307665A 0310349A 0708045A	1203142A 1208053A 9999999999	0601103N 0601152N
210 213 214 215 217 220 220	223 224 225 227	228 229 230	231 232 232A	001

		SEC. 4201. RESEARCH, DEVELOPMENT, TEST, AND EVALUATION (In Thousands of Dollars)			
Line	Program Element	ltem	FY 2018 Request	House Change	House Authorized
003	0601153N	DEFENSE RESEARCH SCIENCES  SUBTOTAL BASIC RESEARCH	458,333 <b>595,901</b>	20,000	458,333 <b>615,901</b>
004		APPLIED RESEARCH POWER PROJECTION APPLIED RESEARCH			13,553
900 900	0602123N 0602131M	FURCE PRUJECTION APPLIED RESEARCH MARINE CORPS LANDING FORCE TECHNOLOGY	125,557 53.936		125,557 53.936
007		COMMON PICTURE APPLIED RESEARCH			36,450
800		WARFIGHTER SUSTAINMENT APPLIED RESEARCH			48,649
010		ELECTRUMAGNETIC STSTEMS AFFLIED RESEARCH	79,398		79,398
011		JOINT NON-LETHAL WEAPONS APPLIED RESEARCH			6,425
012		UNDERSEA WARFARE APPLIED RESEARCH			56,094
013		FUTURE NAVAL CAPABILITIES APPLIED RESEARCH			156,805
014		MINE AND EXPEDITIONARY WARFARE APPLIED RESEARCH			32,733
015	0602792N	Innovative naval prototypes (INP) Applied research	_		171,146
016		SCIENCE AND TECHNOLOGY MANAGEMENT—ONR FIELD ACITIVITIES	62,722		62,722
		SUBTOTAL APPLIED RESEARCH	886,079		886,079
		ADVANCED TECHNOLOGY DEVELOPMENT			
019	0603123N	FORCE PROTECTION ADVANCED TECHNOLOGY	26,342		26,342
020	0603271N	ELECTROMAGNETIC SYSTEMS ADVANCED TECHNOLOGY	9,360		9,360
021	0603640M	USMC ADVANCED TECHNOLOGY DEMONSTRATION (ATD)	154,407		154,407
022	0603651M	JOINT NON-LETHAL WEAPONS TECHNOLOGY DEVELOPMENT	13,448		13,448
023	NEZ9E090	FUTURE NAVAL CAPABILITIES ADVANCED TECHNOLOGY DEVELOPMENT	231,772		231,772
024	N089E090	MANUFACTURING TECHNOLOGY PROGRAM	57,797	10,000	67,797
		Program increase for manufacturing capability industrial partnerships for undersea vehicles		[10,000]	

4,878 64,889 15,164 132,285 <b>720,342</b>	48,365 5,566 695 7,661 3,707 61,381	14,974 9,296 132,083 15,407 122,413 745 1,136 10,955 13,834 36,891 12,012 329,500 29,953 191,610 40,991 24,674
24,000 [24,000] <b>34,000</b>	23,000	[23,000]
4,878 64,889 15,164 108,285 <b>686,342</b>	48,365 5,566 695 7,661 3,707 61,381	14,974 9,296 132,083 15,407 122,413 745 1,136 100,955 13,834 36,891 12,012 329,500 29,953 191,610 40,991 24,674
WARFIGHTER PROTECTION ADVANCED TECHNOLOGY NAVY WARFIGHTING EXPERIMENTS AND DEMONSTRATIONS MINE AND EXPEDITIONARY WARFARE ADVANCED TECHNOLOGY INNOVATIVE NAVAL PROTOTYPES (INP) ADVANCED TECHNOLOGY DEVELOPMENT Program increase for raigun tactical demonstrator SUBTOTAL ADVANCED TECHNOLOGY DEVELOPMENT	ADVANCED COMPONENT DEVELOPMENT & PROTOTYPES AIR/OCEAN TACTICAL APPLICATIONS AVIATION SURVIVABILITY AIRCRAFT SYSTEMS ASW SYSTEMS DEVELOPMENT TACTICAL AIRBORNE RECONNAISSANCE ADVANCED COMBAT SYSTEMS TECHNOLOGY SURFACE AND SHALLOW WATER MINE COUNTERMEASURES	LDUUV SURFACE SHIP TORPEDO DEFENSE CARRIER SYSTEMS DEVELOPMENT PILOT FISH RETRACT LARCH RETRACT LARCH RADIOLOGICAL CONTROL SURFACE ASW ADVANCED SUBMARINE SYSTEM SYSTEMS SHIP CONCEPT ADVANCE DESIGN SHIP CONCEPT ADVANCE DESIGN SHIP RELIMINARY DESIGN & FEASIBILITY STUDIES ADVANCED NUCLEAR POWER SYSTEMS CHALK EAGLE LITTORAL COMBAT SHIP (LCS) COMBAT SYSTEM INTEGRATION
0603729N 0603788N 0603782N 0603801N	0603207N 0603216N 0603251N 0603254N 0603361N 0603382N	0603506N 0603512N 0603525N 0603525N 060353N 060353N 0603561N 0603561N 0603561N 0603561N 0603561N 0603561N 0603561N
025 027 028 029	030 031 033 034 035 036	038 039 040 041 042 043 044 046 040 050 050

9 1	Program	moll	FY 2018	House	House
	Element	IIOII	Request	Change	Authorized
054	0603595N	OHIO REPLACEMENT			776,158
055	0603596N	LCS MISSION MODULES	116,871		116,871
950		AUTOMATED TEST AND ANALYSIS			8,052
057		FRIGATE DEVELOPMENT	143,450		143,450
058		CONVENTIONAL MUNITIONS			8,909
090	_	MARINE CORPS GROUND COMBAT/SUPPORT SYSTEM			1,428
190		JOINT SERVICE EXPLOSIVE ORDNANCE DEVELOPMENT			53,367
690	0603713N	OCEAN ENGINEERING TECHNOLOGY DEVELOPMENT			8,212
064		ENVIRONMENTAL PROTECTION			20,214
90	0603724N	NAVY ENERGY PROGRAM			50,623
990		Facilities improvement			2,837
290	0603734N	CHALK CORAL			245,143
890		NAVY LOGISTIC PRODUCTIVITY			2,995
690		RETRACT MAPLE			306,101
070		LINK PLUMERIA	253,675		253,675
071	0603751N	RETRACT ELM			55,691
072	0603764N	LINK EVERGREEN			48,982
074	N0628090	NATO RESEARCH AND DEVELOPMENT			660'6
075	0603795N	Land attack technology	(.,		33,568
9/0	0603851M	JOINT NON-LETHAL WEAPONS TESTING			29,873
170		JOINT PRECISION APPROACH AND LANDING SYSTEMS—DEM/VAL			106,391
8/0	0603925N	DIRECTED ENERGY AND ELECTRIC WEAPON SYSTEMS		26,000	133,310
		Program increase for railgun tactical demonstrator		[56,000]	
6/0	0604112N	GERALD R. FORD CLASS NUCLEAR AIRCRAFT CARRIER (CVN 78—80)	83,935		83,935
081	0604272N	TACTICAL AIR DIRECTIONAL INFRARED COUNTERMEASURES (TADIRCM)	46,844		46,844
083	0604286M	MARINE CORPS ADDITIVE MANUFACTURING TECHNOLOGY DEVELOPMENT	6,200		6,200
680	0604320M	RAPID IECHNOLOGY CAPABILITY PROTOTYPE	4,055		7,055

	House Authorized	A51 038	624.136		4,310	989'99	390,238	689	112,846	158,578	15,734	25,445	92,233		130,981	75,186	177,926	8,062	32,090	120,087	50,850	87,166		4,817	72,861	25,635	58,078
	House Change	[20,500]	-8.800	[-8,800]									5,000	[2,000]								20,000	[20,000]				
	FY 2018 Request	451 038	632.936		4,310	989'99	390,238	689	112,846	158,578	15,734	25,445	87,233		130,981	75,186	177,926	8,062	32,090	120,087	50,850	67,166		4,817	72,861	25,635	28,0/6
SEC. 4201. RESEARCH, DEVELOPMENT, TEST, AND EVALUATION (In Thousands of Dollars)	ltem	Unfunded requirements—range improvements and upgrades	CALCOTIVE FILED BEYELD MEM. NEXT GENERATION JAMMER (NGJ)	Unjustified cost growth	JOINT TÁCTICAL RADIO SYSTEM—NAVY (JTRS-NAVY)	next generation Jammer (ngj) increment II	SURFACE COMBATANT COMBAT SYSTEM ENGINEERING	LPD-17 CLASS SYSTEMS INTEGRATION	SMALL DIAMETER BOMB (SDB)	STANDARD MISSILE IMPROVEMENTS	AIRBORNE MCM	NAVAL INTEGRATED FIRE CONTROL—COUNTER AIR SYSTEMS ENGINEERING	ADVANCED ABOVE WATER SENSORS	SPY-1 Solid State Advancement	SSN-688 AND TRIDENT MODERNIZATION	AIR CONTROL	SHIPBOARD AVIATION SYSTEMS	COMBAT INFORMATION CENTER CONVERSION	AIR AND MISSILE DEFENSE RADAR (AMDR) SYSTEM	NEW DESIGN SSN	SUBMARINE TACTICAL WARFARE SYSTEM	SHIP CONTRACT DESIGN/ LIVE FIRE T&E	CWN 80 DFA	NAVY TACTICAL COMPUTER RESOURCES	VIRGINIA PAYLOAD MODULE (VPM)	MINE DEVELOPMENT	LIGH IWEIGHI I ORPEDO DEVELOPMENI
	Program Element	0604273N	0604274N		0604280N	0604282N	0604307N	0604311N	0604329N	0604366N	0604373N	0604378N	0604501N		0604503N	0604504N	0604512N	0604518N	0604522N	0604558N	0604562N	0604567N		0604574N	0604580N	0604601N	0604610N
	Line	110	113		114	115	116	117	118	119	120	122	124		125	126	127	128	129	130	131	132		133	134	135	136

7,561 40,828 435 161,713 243,412 103,391 34,855 9,353	101,546 152,934 108,931 144,958 143,855	14,865 152,977 3,410 340,758 33,430 58,163 1,961 1,961	15,473 11,795 181,731 178,993 20,710 140,500 28,311 4,502
31,000 [31,000]	000'6]		
7,561 40,828 435 161,713 212,412 103,391 34,855 9,353	0 2222		15,473 11,795 181,731 178,993 20,710 140,500 28,311 4,502
Joint Service explosive ordnance development Personnel, training, simulation, and human factors Joint Standoff Weapon systems Ship Self Defense (detect & control) Ship Self Defense (engage: Hard Kill) Oth Weapon Development Ship Self Defense (engage: Nall/EW) Ship Self Defense (engage: Soff Kill/EW) Medical Development Medical Development	VGATION/ID SYSTEM Program increase IT STRIKE FIGHTER (JSF)—EMD IT STRIKE FIGHTER (JSF)—EMD IT STRIKE FIGHTER (JSF)—EMD IT STRIKE FIGHTER FOLLOW ON MODERNIZATION (FOM)—MARINE CORPS IT STRIKE FIGHTER FOLLOW ON MODERNIZATION (FOM)—NAVY	INFORMATION TECHNOLOGY DEVELOPMENT INFORMATION TECHNOLOGY SUPPORT ANTI-TAMPER TECHNOLOGY SUPPORT CH-53K RDTE MISSION PLANNING COMMON AVIONICS SHIP TO SHORE CONNECTOR (SSC) T-AO 205 CLASS UNMANNED CARRIER AVIATION (UCA)	NT AIR-TO-GROUND MISSILE (JAGM) TI-MISSION MARITIME AIRCRAFT (MMA) TI-MISSION MARITIME (MMA) INCREMENT III TI-MISSION MARITIME (MMA) INCREMENT III RICHE CORPS ASSAULT VEHICLES SYSTEM DEVELOPMENT & DEMONSTRATION 3-1000 TICAL CRYPTOLOGIC SYSTEMS SER OPERATIONS TECHNOLOGY DEVELOPMENT
0604654N JOII 0604727N PEI 0604755N SHI 0604756N SHI 0604756N SHI 0604751N SHI 0604751N ME	=_=_	_	0605450N JOINT 060550N MULTI 0605504N MULTI 0605611M MARII 0605813M JOINT 0204202N DDG— 0304785N TACTI
137 138 139 140 141 142 143		150 151 152 153 154 155 156 157	

		SEC. 4201. RESEARCH, DEVELOPMENT, TEST, AND EVALUATION (In Thousands of Dollars)			
Line	Program Element	ltem	FY 2018 Request	House Change	House Authorized
		SUBTOTAL SYSTEM DEVELOPMENT & DEMONSTRATION	6,362,102	110,200	6,472,302
į		MANAGEMENT SUPPORT	3		
1/1	0604256N 0604258N	IHREAI SIMULAIOK DEVELOPMENI TARGET SYSTEMS DEVELOPMENT	91,819		91,819
173	0604759N	Major t&e investment	52,634	7,000	59,634
		Program increase		[7,000]	
174	0605126N	JOINT THEATER AIR AND MISSILE DEFENSE ORGANIZATION	141		141
175	0605152N	STUDIES AND ANALYSIS SUPPORT—NAVY	3,917		3,917
176	0605154N	CENTER FOR NAVAL ANALYSES	50,432		50,432
179	0605804N	TECHNICAL INFORMATION SERVICES	782		782
180	0605853N	MANAGEMENT, TECHNICAL & INTERNATIONAL SUPPORT	94,562		94,562
181	0605856N	STRATEGIC TECHNICAL SUPPORT	4,313		4,313
182	0605861N	RDT&E SCIENCE AND TECHNOLOGY MANAGEMENT	1,104		1,104
183	0605863N	RDT&E SHIP AND AIRCRAFT SUPPORT	105,666		105,666
184	0605864N	TEST AND EVALUATION SUPPORT	373,667	40,000	413,667
		Program increase		[40,000]	
185	0605865N	OPERATIONAL TEST AND EVALUATION CAPABILITY	20,298		20,298
186	0605866N	NAVY SPACE AND ELECTRONIC WARFARE (SEW) SUPPORT	17,341		17,341
188	0605873M	Marine Corps program wide support	21,751		21,751
189	0605898N	MANAGEMENT HQ—R&D	44,279		44,279
190	0606355N	Warfare innovation management	28,841		28,841
191	0902498N	MANAGEMENT HEADQUARTERS (DEPARTMENTAL SUPPORT ACTIVITIES)	1,749		1,749
194	1206867N	SEW SURVEILLANCE/RECONNAISSANCE SUPPORT	9,408		9,408
		SUBTOTAL MANAGEMENT SUPPORT	945,757	47,000	992,757

OPERATIONAL SYSTEMS DEVELOPMENT

103,571	3,137 135,219	36,242	12,053	18,221	213,470		33,525	24,829	142,617		50,572		3,940	54,645	76,518		1,155	51,040	97,989		89,852	29,351	68,553	119,099	127,445	120,325		7,343 66,009	
11,000					-11,000	[-11,000]			9,000	[9,000]	11,600	[11,600]			10,000	[10,000]			10,000	[10,000]						-3,500	[-3,500]		
92,571	3,137 135,219	36,242	12,053	18,221	224,470		33,525	24,829	133,617		38,972		3,940	54,645	66,518		1,155	51,040	87,989		89,852	29,351	68,553	119,099	127,445	123,825		7,343 66,009	
COOPERATIVE ENGAGEMENT CAPABILITY (CEC)	DEPLOYABLE JOINT COMMAND AND CONTROL STRATEGIC SUB & WEAPONS SYSTEM SUPPORT	SSBN SECURITY TECHNOLOGY PROGRAM	SUBMARINE ACOUSTIC WARFARE DEVELOPMENT	NAVY STRATEGIC COMMUNICATIONS	F/A-18 SQUADRONS	Program reduction- delayed procurement rates	FLEET TELECOMMUNICATIONS (TACTICAL)	SURFACE SUPPORT	TOMAHAWK AND TOMAHAWK MISSION PLANNING CENTER (TMPC)	Tomahawk Modernization	INTEGRATED SURVEILLANCE SYSTEM	Realign European Reassurance Initiative to Base	AMPHIBIOUS TACTICAL SUPPORT UNITS (DISPLACEMENT CRAFT)	Ground/air task oriented radar (g/ator)	CONSOLIDATED TRAINING SYSTEMS DEVELOPMENT	Modernization of Barking Sands Tactical Underwater Range	CRYPTOLOGIC DIRECT SUPPORT	ELECTRONIC WARFARE (EW) READINESS SUPPORT	HARM IMPROVEMENT	Unfunded requirement—AARGM Derivative Program	TACTICAL DATA LINKS	Surface asw combat system integration	MK-48 ADCAP	AVIATION IMPROVEMENTS	OPERATIONAL NUCLEAR POWER SYSTEMS	MARINE CORPS COMMUNICATIONS SYSTEMS	Excess growth—tactical radio systems	COMMON AVIATION COMMAND AND CONTROL SYSTEM (CAC2S)	
0607658N	0607700N 0101221N	0101224N	0101226N	0101402N	0204136N		0204163N	0204228N	0204229N		0204311N		0204413N	0204460M	0204571N		0204574N	0204575N	0205601N		0205604N	0205620N	0205632N	0205633N	0205675N	0206313M		0206335M 0206623M	
196	197 198	199	200	201	203		204	205	506		207		208	509	210		211	212	213		214	215	216	217	218	219		220 221	

		SEC. 4201. RESEARCH, DEVELOPMENT, TEST, AND EVALUATION (In Thousands of Dollars)			
Ein	Program Element	ltem	FY 2018 Request	House Change	House Authorized
222	0206624M	MARINE CORPS COMBAT SERVICES SUPPORT	25,258		25,258
223	0206625M	USMC INTELLIGENCE/ELECTRONIC WARFARE SYSTEMS (MIP)	30,886		30,886
224	0206629M	AMPHIBIOUS ASSAULT VEHICLE	58,728		58,728
225	0207161N	Tactical aim missiles	42,884	9,000	51,884
		Unfunded requirement—AIM—9X Blk II Systems Improvement program		[6,000]	
226	0207163N	ADVANCED MEDIUM RANGE AIR-TO-AIR MISSILE (AMRAAM)	25,364		25,364
232	0303138N	CONSOLIDATED AFLOAT NETWORK ENTERPRISE SERVICES (CANES)	24,271		24,271
233	0303140N	INFORMATION SYSTEMS SECURITY PROGRAM	50,269		50,269
236	0305192N	MILITARY INTELLIGENCE PROGRAM (MIP) ACTIVITIES	6,352		6,352
237	0305204N	TACTICAL UNMANNED AERIAL VEHICLES	7,770		7,770
238	0305205N	uas integration and interoperability	39,736		39,736
239	0305208M	DISTRIBUTED COMMON GROUND/SURFACE SYSTEMS	12,867		12,867
240	0305208N	DISTRIBUTED COMMON GROUND/SURFACE SYSTEMS	46,150		46,150
241	0305220N	MQ-4C TRITON	84,115		84,115
242	0305231N	MQ-8 UAV	62,656		62,656
243	0305232M	RQ-11 UAV	2,022		2,022
245	0305234N	SMALL (LEVEL 0) TACTICAL UAS (STUASLO)	4,835		4,835
246	0305239M	RQ-21A	8,899		8,899
247	0305241N	MULTI-INTELLIGENCE SENSOR DEVELOPMENT	99,020		99,020
248	0305242M	UNMANNED AERIAL SYSTEMS (UAS) PAYLOADS (MIP)	18,578	-7,100	11,478
		Program reduction		[-7,100]	
249	0305421N	rq-4 modernization	229,404		229,404
250	0308601N	Modeling and Simulation Support	5,238		5,238
251	0702207N	DEPOT MAINTENANCE (NON-IF)	38,227		38,227
252	0708730N	MARITIME TECHNOLOGY (MARITECH)	4,808		4,808
253	1203109N	Satellite communications (space)	37,836		37,836
253A	666666666	CLASSIFED PROGRAMS	1,364,347		1,364,347

4,019,140	17,984,235	342,919 147,923 14,417 <b>505,259</b>	124,264 129,678	108,784 197,695	152,782 8,353 116,503 112,195	167,818 167,818 43,049 <b>1,294,114</b>	47,856 22,811 40,978
39,000	309,200		5,000	5,000] 5,000 15,000]	500(5)	10,000	10,000
3,980,140	17,675,035	342,919 147,923 14,417 <b>505,259</b>	124,264 124,678	108,784 192,695	152,782 8,353 116,503 112,195	167,818 43,049 <b>1,284,114</b>	37,856 22,811 40,978
SUBTOTAL OPERATIONAL SYSTEMS DEVELOPMENT	TOTAL RESEARCH, DEVELOPMENT, TEST & EVAL, NAVY	RESEARCH, DEVELOPMENT, TEST & EVAL, AF BASIC RESEARCH DEFENSE RESEARCH SCIENCES UNIVERSITY RESEARCH INITIATIVES HIGH ENERGY LASER RESEARCH SUBTOTAL BASIC RESEARCH	APPLIED RESEARCH MATERIALS AEROSPACE VEHICLE TECHNOLOGIES	Program increase  HUMAN EFFECTIVENESS APPLIED RESEARCH  AEROSPACE PROPULSION  Fducational Partnership Agreements	AEROSPACE SENSORS  SCIENCE AND TECHNOLOGY MANAGEMENT— MAJOR HEADQUARTERS ACTIVITIES  SPACE TECHNOLOGY CONVENTIONAL MUNITIONS  DIRECTED EMERGY TECHNOLOGY	DOMINANT INFORMATION SCIENCES AND METHODS HIGH ENERGY LASER RESEARCH SUBTOTAL APPLIED RESEARCH	ADVANCED TECHNOLOGY DEVELOPMENT ADVANCED MATERIALS FOR WEAPON SYSTEMS Metals affordability research SUSTAINMENT SCIENCE AND TECHNOLOGY (S&T) ADVANCED AEROSPACE SENSORS
		0601102F 0601103F 0601108F	0602102F 0602201F	0602202F 0602203F	0602204F 0602298F 0602601F 0602602F	0602788F 0602890F	0603112F 0603199F 0603203F
		001 002 003	004	000	008 009 010 011	013 013 014	015 016 017

	House Authorized	115,966 109,499 60,551 58,910 10,433 33,635 167,415 45,502 46,450 49,011	8,352 24,397 3,851 10,736 2,003,580 65,458 94,919 7,850
	House Change	5,000 [5,000]	2,700 [1,200] [1,500] [1,500] 26,200 [11,500]
	FY 2018 Request	115,966 104,499 60,551 58,910 10,433 33,635 167,415 45,502 46,450 49,011	5,652 24,397 3,851 10,736 2,003,580 65,458 68,719
SEC. 4201. RESEARCH, DEVELOPMENT, TEST, AND EVALUATION (In Thousands of Dollars)	Item	AEROSPACE TECHNOLOGY DEV/DEMO AEROSPACE PROPULSION AND POWER TECHNOLOGY Program increase for robust Electronical Power System ELECTRONIC COMBAT TECHNOLOGY ADVANCED SPACECRAFT TECHNOLOGY MAUI SPACE SURVEILLANCE SYSTEM (MSSS) HUMAN EFFECTIVENESS ADVANCED TECHNOLOGY DEVELOPMENT CONVENTIONAL WEAPONS TECHNOLOGY ADVANCED WEAPONS TECHNOLOGY MANUFACTURING TECHNOLOGY BATTLESPACE KNOWLEDGE DEVELOPMENT AND DEMONSTRATION SUBTURAL ADVANCED TECHNOLOGY DEVELOPMENT	ADVANCED COMPONENT DEVELOPMENT & PROTOTYPES  INTELLIGENCE ADVANCED DEVELOPMENT Unfunded requirement—OSINT exploitation and fusion Unfunded requirement—SIGINT Tactical Analysis Reporting Gateway Unfunded requirement—SIGINT Tactical Analysis Reporting Gateway COMBAT IDENTIFICATION TECHNOLOGY NATO RESEARCH AND DEVELOPMENT INTERCONTINENTAL BALLISTIC MISSILE—DEM/VAL LONG RANGE STRIKE—BOMBER LONG RANGE STRIKE—BOMBER Unfunded requirement—ASARS-2B Unfunded requirement—ASARS-2B Unfunded requirement—Hyperspectral Chip Development NATIONAL AIRBORNE OPS CENTER (NAOC) RECAP
	Program Element	0603211F 0603216F 0603210F 0603401F 060344F 0603601F 0603605F 0603688F	0603260F 0603742F 0603790F 0603851F 0603859F 0604015F 0604201F
	Line	018 019 020 021 023 024 025 026	028 030 031 033 035 036

3,295 17,365 32,253 26,222 935,650	215,721 421,746	10,645 41,509 226,287 16,687 4,500	15,867 263,939 10,000 112,088	34,704 63,092 7,842 41,385 18,150	16,000 117,577 <b>4,895,930</b>
95,000	[10,000] [70,000] [15,000] 127,000 [127,000]		10,000		30,000 [30,000] <b>290,900</b>
3,295 17,365 32,253 26,222 840,650	215,721 294,746	10,645 41,509 226,287 16,687 4,500	1	34,764 63,092 7,842 41,385 18,150	4,6
TECHNOLOGY TRANSFER	Program Increase Unfunded Requirement Unfunded requirement—Long-Endurance Aerial Platform(LEAP) Ahead Prototyping GROUND BASED STRATEGIC DETERRENT NEXT GENERATION AIR DOMINANCE Unfunded Requirement	THREE DIMENSIONAL LONG-RANGE RADAR (3DELRR) COMMON DATA LINK EXECUTIVE AGENT (CDL EA) CYBER OPERATIONS TECHNOLOGY DEVELOPMENT ENABLED CYBER ACTIVITIES SPECIAL TACTICS / COMBAT CONTROL	CONTRACTING INFORMATION TECHNOLOGY SYSTEM  NAVSTAR GLOBAL POSITIONING SYSTEM (USER EQUIPMENT) (SPACE)  Demonstration of Backup and Complementary PNT Capabilities of GPS  EO/IR WEATHER SYSTEMS  WEATHER SYSTEM FOLLOW-ON	SPACE SHOWING AWARTNESS STRIEMS  MIDTERM POLAR MILSATCOM SYSTEM  SPACE CONTROL TECHNOLOGY  SPACE SECURITY AND DEFENSE PROGRAM  PROTECTED TACTICAL ENTERPRISE SERVICE (PTES)  PROTECTED TACTICAL SERVICE (PTS)	PROTECTED SACTION SERVICES (PSCS)—AGGREGATED OPERATIONALLY RESPONSIVE SPACE Responsive Launch vehicles, infrastructure, and small sats SUBTOTAL ADVANCED COMPONENT DEVELOPMENT & PROTOTYPES
0604317F 0604327F 0604414F 0604776F	0605230F 0207110F	0207455F 0305236F 0306250F 0306415F 0408011F	0901410F 1203164F 1203710F 1206422F	12064237 1206434F 1206438F 1206730F 1206760F	1206855F 1206857F
039 040 041 044 046	047	050 052 053 054 055	056 057 058 059	061 062 063 064	290

	House Authorized		5,100	101,203	3,009	2,241	38,250	19,739	38,979	7,091	46,540	2,705	3,000 34,240		090'6	87,350	292,947	451,290	178,991	12,736	9,319	13,600	845	845]		354,485		[000]
	House Change												3,0	[3,0									-93,845	[-93,845]			-70,000	[-70,000]
	FY 2018 Request					2,241									9,060	87,350	292,947	451,290	178,991	12,736	9,319	13,600	93,845		105,999	354,485	119,745	
SEC. 4201. RESEARCH, DEVELOPMENT, TEST, AND EVALUATION (In Thousands of Dollars)	n t	SYSTEM DEVELOPMENT & DEMONSTRATION	FUTURE ADVANCED WEAPON ANALYSIS & PROGRAMS	INTEGRATED AVIONICS PLANNING AND DEVELOPMENT	NUCLEAR WEAPONS SUPPORT	ELECTRONIC WARFARE DEVELOPMENT	TACTICAL DATA NETWORKS ENTERPRISE	PHYSICAL SECURITY EQUIPMENT	SMALL DIAMETER BOMB (SDB)—EMD	AIRBORNE ELECTRONIC ATTACK	ARMAMENT/ORDNANCE DEVELOPMENT	SUBMUNITIONS	AGILE COMBAT SUPPORT	Joint Expeditionary Airfield Damage Repair	LIFE SUPPORT SYSTEMS	COMBAT TRAINING RANGES	F-35—EMD	Long range standoff weapon	ICBM FUZE MODERNIZATION	JOINT TACTICAL NETWORK CENTER (JTNC)	JOINT TACTICAL NETWORK (JTN)	F-22 modernization increment 3.2B	KC-46	Under execution	ADVANCED PILOT TRAINING	COMBAT RESCUE HELICOPTER	AIR & SPACE OPS CENTER 10.2 RDT&E	Program reduction
	Program Element		0604200F	0604201F	0604222F	0604270F	0604281F	0604287F	0604329F	0604429F	0604602F	0604604F	0604617F		0604706F	0604735F	0604800F	0604932F	0604933F	0605030F	0605031F	0605213F	0605221F		0605223F	0605229F	0605458F	
	Line		890	690	070	071	072	073	074	8/0	080	081	082		084	085	980	880	680	060	091	092	094		095	960	100	

194,570 91,237 209,847 3,400 16,727 417,201 6,017 434,069 18,528 24,967 10,029 66,370 48,448 35,937 145,610 33,644 145,610 33,644 145,610 33,644 145,610 33,644 145,610	35,405 87,874 34,346 15,523 739,089
-160,845	5,000 [5,000] [6,800 [32,400] [1,000]
194,570 91,237 209,847 3,400 16,727 417,201 6,017 434,069 18,528 24,967 10,029 66,370 66,370 145,610 33,644 14,283 31,844 71,018 297,572	35,405 82,874 34,346 15,523 678,289
B-2 DEFENSIVE MANAGEMENT SYSTEM NUCLEAR WEAPONS MODERNIZATION F-15 EPAWSS STAND IN ATTACK WEAPON FULL COMBAT MISSION TRAINING JISTARS RECAP C-32 EXECUTIVE TRANSPORT RECAPITALIZATION (PAR) PRESIDENTIAL AIRCRAFT RECAPITALIZATION (PAR) AUTOMATED TEST SYSTEMS COMBAT SURVIVOR EVADER LOCATOR SPACE SITUATION AWARENESS OPERATIONS COUNTERSPACE SYSTEMS SPACE SITUATION AWARENESS SYSTEMS SPACE SITUATION AWARENESS SYSTEMS SPACE BALE MILSATCOM (SPACE) WINDEBAND GLOBAL SATCOM (SPACE) WINDEBAND GLOBAL SATCOM (SPACE) SYPACE BASED INFRARED SYSTEM (SBIRS) HIGH EMD EVOLVED ESIRE LAUNCH VEHICLE PROGRAM (SPACE) EVOLVED EXPENDABLE LAUNCH VEHICLE PROGRAM (SPACE) EVOLVED EXPENDABLE LAUNCH VEHICLE PROGRAM (SPACE)	MANAGEMENT SUPPORT  THREAT SIMULATOR DEVELOPMENT  MAJOR TRE INVESTMENT  Unfunded requirement  RAND PROJECT AIR FORCE  INITIAL OPERATIONAL TEST & EVALUATION  TEST AND EVALUATION SUPPORT  Program Increase  Program Increase  Testing, evaluation, and certification of additional suppliers for arresting gear systems for fighter aircraft.
0605931F 0101125F 0207171F 0207328F 0207701F 0307581F 0401310F 0401319F 0701212F 120340F 1206421F 1206431F 120643F 120643F 1206441F 1206441F	0604256F 0604759F 0605101F 0605712F 0605807F
101 102 103 104 105 110 111 111 111 111 111 112 113 113 113 114 115 116 117 117 118 117 117 117 117 117 117 117	124 125 126 128 129

		SEC. 4201. RESEARCH, DEVELOPMENT, TEST, AND EVALUATION (In Thousands of Dollars)			
Line	Program Element	Item	FY 2018 Request	House Change	House Authorized
		Unfunded requirement		[27,400]	
130	0605826F	ACQ WORKFORCE- GLOBAL POWER	219,809		219,809
131		ACQ WORKFORCE- GLOBAL VIG & COMBAT SYS			223,179
132		ACQ WORKFORCE- GLOBAL REACH			138,556
133		ACQ WORKFORCE- CYBER, NETWORK, & BUS SYS			221,393
134		ACQ WORKFORCE- GLOBAL BATTLE MGMT			152,577
135		ACQ WORKFORCE- CAPABILITY INTEGRATION			196,561
136		ACQ WORKFORCE- ADVANCED PRGM TECHNOLOGY			28,322
137		acq workforce- nuclear systems	_		126,611
140		MANAGEMENT HQ—R&D			9,154
141		FACILITIES RESTORATION AND MODERNIZATION—TEST AND EVALUATION SUPPORT	_		135,507
142		FACILITIES SUSTAINMENT—TEST AND EVALUATION SUPPORT			28,720
143	0606017F	REQUIREMENTS ANALYSIS AND MATURATION		75,000	110,453
		Unfunded requirement		[20,000]	
		Unfunded requirement—Penetrating Counter air (PCA) Risk Reduction		[25,000]	
146	0308602F	ENTEPRISE INFORMATION SERVICES (EIS)	29,049		29,049
147	0702806F	acquisition and management support	14,980		14,980
148	0804731F	General Skill Training	1,434		1,434
150	1001004F	International activities	4,569		4,569
151	1206116F	SPACE TEST AND TRAINING RANGE DEVELOPMENT	25,773		25,773
152	1206392F	SPACE AND MISSILE CENTER (SMC) CIVILIAN WORKFORCE	169,887		169,887
153	1206398F	SPACE & MISSILE SYSTEMS CENTER—MHA	9,531		9,531
154	1206860F	ROCKET SYSTEMS LAUNCH PROGRAM (SPACE)	20,975		20,975
155	1206864F	SPACE TEST PROGRAM (STP)	25,398		25,398
		SUBTOTAL MANAGEMENT SUPPORT	2,663,875	140,800	2,804,675

OPERATIONAL SYSTEMS DEVELOPMENT

27,579 5,776 16,247 21,915 33,150 66,653 38,579 12,636 111,910 463 62,471 193,108 210,845 70,272 11,032 108,617 3,347 201,394	271,578 320,271 35,106 610,942 334,530 34,952
[20,000] [-10,000] [-10,000] [4,000 [64,000]	25,000 [25,000] 20,000 [20,000]
27,579 5,776 16,247 21,915 33,150 66,653 38,579 12,636 111,910 463 62,471 193,108 210,845 25,736 6,272 11,032 1108,617 3,347 201,394	246,578 320,271 15,106 610,942 334,530 34,952
NUCLEAR WEAPONS SUPPORT  SPECIALIZED UNDERGRADUATE FLIGHT TRAINING  WIDE AREA SURVEILLANCE  AF INTEGRATED PERSONNEL AND PAY SYSTEM (AF-IPPS)  ANTI-TAMPER TECHNOLOGY EXECUTIVE AGENCY FOREIGN MATERIEL ACQUISITION AND EXPLOITATION  HC/MC-130 RECAP RDT&E  NC3 INTEGRATION  B-52 SQUADRONS  AIR-LAUNCHED CRUISE MISSILE (ALCM)  B-52 SQUADRONS  AIR-LAUNCHED CRUISE MISSILE (ALCM)  B-18 SQUADRONS  Increase ICBM Cryptopgraphy Upgrade II  Reduce MM Support Equipment  Reduce MM Support Equipment  INTEGRATED STRATEGIC COMMUNICATIONS  Enances E-4B cyber security  WORLDWIDE JOINT STRATEGIC COMMUNICATIONS  Enances E-4B cyber security  UH-1N REPLACEMENT PROGRAM  MQ-9 UAV  A-10 SAILADARONS  A-10 SAILADARONS	F-16 SQUADRONS Unfunded requirement—MIDS-JTRS software changes Unfunded requirement—MIDS-JTRS software changes F-15E SQUADRONS MANNED DESTRUCTIVE SUPPRESSION F-22A SQUADRONS F-35 SQUADRONS TACTICAL AIM MISSILES
0604222F 0604435F 0604445F 0605018F 0605017F 0605117F 0101113F 0101122F 0101127F 0101127F 0101127F 0101137F 0101137F 0101314F 0101314F 0101324F 0102326F	0207133F 0207134F 0207136F 0207138F 0207142F
157 158 159 161 162 163 164 165 167 170 171 173 174 174 176 177	183 184 185 186 187 188

14,040 109,243 29,932 26,956 2,450 151,726 3,656 3,656 13,420 10,623 1,754 17,382 2,307 25,397 10,175 11,1839 4,190 85,531
COMPASS CALL AIRCRAFT ENGINE COMPONENT IMPROVEMENT PROGRAM JOINT AIR-TO-SURFACE STANDOFF MISSILE (JASSM) AIR & SPACE OPERATIONS CENTER (AOC) CONTROL AND REPORTING CENTER (CRC) AIRBORNE WARNING AND CONTROL SYSTEMS COMBAT AIR INTELLIGENCE SYSTEM ACTIVITIES TACTICAL AIRBORNE CONTROL PRITY-MOD CZISR TACTICAL DATA LINK DCAPES NATIONAL TECHNICAL NUCLEAR FORENSICS SEEK EAGLE USAF MODELING AND SIMULATION WARGAMING AND SIMULATION CENTERS DISTRIBUTED TRAINING AND EXERCISES MISSION PLANNING SYSTEMS
<u> </u>

230	0303131F	MINIMUM ESSENTIAL EMERGENCY COMMUNICATIONS NETWORK (MEECN)	48,841		48,841
231	0303140F	INFORMATION SYSTEMS SECURITY PROGRAM	42.973		42.973
232	0303141F	GLOBAL COMBAT SUPPORT SYSTEM	105		105
233	0303142F	GLOBAL FORCE MANAGEMENT—DATA INITIATIVE	2,147		2.147
236	0304260F	airborne sigint enterprise	121,948		121,948
237	0304310F	COMMERCIAL ECONOMIC ANALYSIS	3.544		3,544
240	0305020F	CCMD INTELLIGENCE INFORMATION TECHNOLOGY	1,542		1,542
241	0305099F	GLOBAL AIR TRAFFIC MANAGEMENT (GATM)	4,453		4,453
243	0305111F	Weather Service	26,654	5,000	31,654
		Commercial weather pilot program		[2,000]	
244	0305114F	AIR TRAFFIC CONTROL, APPROACH, AND LANDING SYSTEM (ATCALS)	908'9	1,500	7,806
		Unfunded requirement—ground based sense and avoid		[1,500]	
245	0305116F	aerial targets	21,295		21,295
248	0305128F	Security and investigative activities	415		415
250	0305146F	Defense joint counterintelligence activities	3,867		3,867
257	0305202F	DRAGON U-2	34,486		34,486
259	0305206F	AIRBORNE RECONNAISSANCE SYSTEMS	4,450	12,800	17,250
		WAMI Technology Upgrades		[12,800]	
260	0305207F	MANNED RECONNAISSANCE SYSTEMS	14,269		14,269
261	0305208F	DISTRIBUTED COMMON GROUND/SURFACE SYSTEMS	27,501	11,500	39,001
		Unfunded requierment		[11,500]	
262		RQ-4 UAV			214,849
263		NETWORK-CENTRIC COLLABORATIVE TARGETING	18,842		18,842
265		NATO AGS			44,729
566		SUPPORT TO DCGS ENTERPRISE			26,349
569		INTERNATIONAL INTELLIGENCE TECHNOLOGY AND ARCHITECTURES	3,491		3,491
271		RAPID CYBER ACQUISITION			4,899
275		PERSONNEL RECOVERY COMMAND & CTRL (PRC2)	2,445		2,445
276		INTELLIGENCE MISSION DATA (IMD)			8,684
278		C-130 AIRLIFT SQUADRON	10,219		10,219
279		C-5 AIRLIFT SQUADRONS (IF)			22,758
280	0401130F	C-17 AIRCRAFT (IF)			34,287

	House Authorized	26,821	5,283	9,942	7,933	6,681	22,519	3,510	8,090	1,528	31,677	33,344	9,362	2,074	107	2,006	3,780	7,472	1,563	91,211	14,255	31,914	32,426	21,308		10,029	25,051	11,390
	House Change																							2,500	[2,500]			
	FY 2018 Request	26,821				6,681																				10,029	25,051	11,390
SEC. 4201. RESEARCH, DEVELOPMENT, TEST, AND EVALUATION (In Thousands of Dollars)	ltem	C-130J PROGRAM	Large aircraft ir countermeasures (Laircm)	KC-135S	KC-10S	OPERATIONAL SUPPORT AIRLIFT	CV-22	AMC COMMAND AND CONTROL SYSTEM	SPECIAL TACTICS / COMBAT CONTROL	Depot Maintenance (non-1F)	MAINTENANCE, REPAIR & OVERHAUL SYSTEM	LOGISTICS INFORMATION TECHNOLOGY (LOGIT)	SUPPORT SYSTEMS DEVELOPMENT	Other Flight training	other personnel activities	JOINT PERSONNEL RECOVERY AGENCY	CIVILIAN COMPENSATION PROGRAM	Personnel administration	AIR FORCE STUDIES AND ANALYSIS AGENCY	FINANCIAL MANAGEMENT INFORMATION SYSTEMS DEVELOPMENT	SERVICE SUPPORT TO STRATCOM—SPACE ACTIVITIES	AF TENCAP	Family of Advanced Blos Terminals (FAB-T)	SATELLITE CONTROL NETWORK (SPACE)	Program increase	NAVSTAR GLOBAL POSITIONING SYSTEM (SPACE AND CONTROL SEGMENTS)	SPACE AND MISSILE TEST AND EVALUATION CENTER	SPACE INNOVATION, INTEGRATION AND RAPID TECHNOLOGY DEVELOPMENT
	Program Element	0401132F				0401314F								0804743F												1203165F	1203173F	1203174F
	Line	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303		305	306	307

8,747 10,549 243,435 12,691 99,455 18,052 1,373 5,000 31,508 99,984	14,974,002 <b>20,763,602</b>	-195,900 - <b>195,900</b>	35,192,614	37,201 432,347 40,612 43,126 74,298 35,865
	36,000 [36,000] <b>178,300</b>	-195,900 [-195,900] - <b>195,900</b>	278,255	10,000
8,747 10,549 243,435 12,691 99,455 18,052 1,373 5,000 31,508 99,984	14 <b>20</b>		34,914,359	37,201 432,347 40,612 43,126 74,298 25,865 43,898
INTEGRATED BROADCAST SERVICE (IBS) SPACELIFT RANGE SYSTEM (SPACE) GPS III SPACE SEGMENT SPACE SUPERIORITY INTELLIGENCE JSPOC MISSION SYSTEM NATIONAL SPACE DEFENSE CENTER SHARED EARLY WARNING (SEW) NCMC—TWAAS SYSTEM NUDET DETECTION SYSTEM (SPACE) SPACE SITUATION AWARENESS OPERATIONS GJ ORAJ POSTTONING SYSTEM III—OPERATIONAL CONTROL SEGMENT	CLASSIFIED PROGRAMS Program increase SUBTOTAL OPERATIONAL SYSTEMS DEVELOPMENT	UNDISTRIBUTED UNDISTRIBUTED Bomber Modernization—Excess to Need SUBTOTAL UNDISTRIBUTED	TOTAL RESEARCH, DEVELOPMENT, TEST & EVAL, AF	RESEARCH, DEVELOPMENT, TEST & EVAL, DW  BASIC RESEARCH  DEFENSE RESEARCH  DEFENSE RESEARCH SCIENCES  BASIC OPERATIONAL MEDICAL RESEARCH SCIENCE  NATIONAL DEFENSE EDUCATION PROGRAM  ISTORICALLY BLACK COLLEGES AND UNIVERSITIES/MINORITY INSTITUTIONS  Program Increase  CHEMICAL AND BIOLOGICAL DEFENSE PROGRAM
1203179F 1203182F 1203265F 1203400F 1203614F 1203620F 1203699F 1203906F 1203901F 1203913F 1203940F	66	0901560F		0601000BR 06011010 06011100BZ 0601117E 0601120BZ 060128BBZ
308 309 310 311 312 313 314 315 316 317	318A	319		001 002 003 004 005 006

	House Authorized	707,347	19,111	109,360 49,748	49,226	392,764 13,014	201,053	14,775 343 776	224,440	295,447	157,908	8,955	34,493	1,914,090	25,627 81,230 24,199 268,607 12,996 60,595
	House Change	10,000													5,000 [5,000] 55,100
	FY 2018 Request	697,347		109,360 49,748	,	392,764 13,014	2				157,908	8,955		1,914,090	25,627 76,230 24,199 268,607 12,996 5,495
SEC. 4201. RESEARCH, DEVELOPMENT, TEST, AND EVALUATION (In Thousands of Dollars)	ltem	SUBTOTAL BASIC RESEARCH	APPLIED RESEARCH JOINT MUNITIONS TECHNOLOGY	BIOMEDICAL TECHNOLOGY LINCOLN LABORATORY RESEARCH PROGRAM	APPLIED RESEARCH FOR THE ADVANCEMENT OF S&T PRIORITIES	INFORMATION & COMMUNICATIONS LECTIVOLUGI	CHEMICAL AND BIOLOGICAL DEFENSE PROGRAM	Cyber Security research	Materials and biological technology	ELECTRONICS TECHNOLOGY	COUNTER WEAPONS OF MASS DESTRUCTION APPLIED RESEARCH	SOFTWARE ENGINEERING INSTITUTE (SEI) APPLIED RESEARCH	SOF TECHNOLOGY DEVELOPMENT	SUBTOTAL APPLIED RESEARCH	ADVANCED TECHNOLOGY DEVELOPMENT JOINT MUNITIONS ADVANCED TECHNOLOGY COMBATING TERRORISM TECHNOLOGY SUPPORT Program increase—conventional EOD equipment FOREIGN COMPARATIVE TESTING COUNTER WEAPONS OF MASS DESTRUCTION ADVANCED TECHNOLOGY DEVELOPMENT ADVANCED CONCEPTS AND PERFORMANCE ASSESSMENT WEAPONS TECHNOLOGY
	Program Element		78		7							7	1160401BB		060312208Z 060312208Z 060313308Z 0603160BR 0603176C
	Line		800	009 011	012	013	015	016	018	019	020	021	022		023 024 025 026 027

20,184 18,662 155,406 247,435 13,154 30,674 15,000 252,879 29,594	24,863 145,359 171,120 14,389 105,871 136,159 40,511 49,876 10,611 81,832 219,803 6,349 79,173 106,787 439,386 210,123
[55,100] -7,000 [-7,000]	-35,000] -8,000] -8,000] 10,000 [110,000]
20,184 18,662 155,406 247,435 13,154 37,674 15,000 252,879 29,594	59,863 145,359 171,120 14,389 105,871 12,661 136,159 40,511 71,832 219,803 6,349 79,173 106,787 439,386 210,123
Restore funding for directed energy prioritization in DoD's BMD efforts  ADVANCED RESEARCH JOINT DOD-DOE MUNITIONS TECHNOLOGY DEVELOPMENT ADVANCED AEROSPAGE SYSTEMS SPACE PROGRAMS AND TECHNOLOGY ANALYTIC ASSESSMENTS Program decrease ADVANCED INNOVATIVE ANALYSIS AND CONCEPTS—MHA COMMON KILL VEHICLE TECHNOLOGY DEFENSE INNOVATION UNIT EXPERIMENTAL (DIUX)	TECHNOLOGY INNOVATION  Unjustified growth  Unjustified growth  CHEMICAL AND BIOLOGICAL DEFENSE PROGRAM—ADVANCED DEVELOPMENT  RETRACT LARCH  JOINT ELECTRONIC ADVANCED TECHNOLOGY  JOINT CAPABILITY TECHNOLOGY DEMONSTRATIONS  NETWORKED COMMUNICATIONING SCIENCE AND TECHNOLOGY PROGRAM  MANUFACTURING TECHNOLOGY PROGRAM  EMERGING CAPABILITIES TECHNOLOGY DEVELOPMENT  SOCOM ATL effort  GENERC LOGISTICS R&D TECHNOLOGY DEVELOPMENT  SIRATEGIC ENVIRONMENTAL RESEARCH PROGRAM  EINTORNICS TECHNOLOGY DEVELOPMENT AND SUPPORT  JOINT WARFIGHTING PROGRAM  ADVANCED ELECTRONICS TECHNOLOGIES  COMMAND, CONTROL AND COMMUNICATIONS SYSTEMS  NETWORK-CENTRIC WARFARE TECHNOLOGY  SENSOR TECHNOLOGY  SENSOR TECHNOLOGY  DISTRIBUTED LEARNING ADVANCED TECHNOLOGY DEVELOPMENT
0603180C 0603225D8Z 0603286E 0603287E 0603288D8Z 060328D8Z 0603291D8Z 0603342D8W	060337508Z 0603384BP 060352708Z 060361808Z 060368208Z 060368208Z 060368208Z 060368208Z 0603720S 060371608Z 0603720S 0603736E 060376E 060376E
031 035 035 036 037 039 040	042 043 044 045 049 051 051 052 056 059

			452		
	House Authorized	15,047 69,203 25,395 89,586 38,403 33,382 72,605 <b>3,465,947</b>	32,937 101,714 2,198 54,583 230,162	850,093 148,518 326,207	478,884 320,190 852,052
	House Change	20,100	5	21,996 [21,996] 78,862 [21,000]	[57,862] 29,442 [23,342] [6,100]
	FY 2018 Request	15,047 69,203 25,395 89,586 38,403 33,382 72,605 <b>3,445,847</b>	32,937 101,714 2,198 54,583 230,162	828,097 148,518 247,345	449,442 320,190 852,052
SEC. 4201. RESEARCH, DEVELOPMENT, TEST, AND EVALUATION (In Thousands of Dollars)	ltem	SOFTWARE ENGINEERING INSTITUTE  QUICK REACTION SPECIAL PROJECTS  ENGINEERING SCIENCE & TECHNOLOGY  TEST & EVALUATION SCIENCE & TECHNOLOGY  OPERATIONAL ENERGY CAPABILITY IMPROVEMENT  CWMD SYSTEMS  SOF ADVANCED TECHNOLOGY DEVELOPMENT  SUBTOTAL ADVANCED TECHNOLOGY DEVELOPMENT	ADVANCED COMPONENT DEVELOPMENT AND PROTOTYPES  NUCLEAR AND CONVENTIONAL PHYSICAL SECURITY EQUIPMENT RDT&E ADC&P  WALKOFF  ACQUISITION ENTERPRISE DATA & INFORMATION SERVICES  ENVIRONMENTAL SECURITY TECHNICAL CERTIFICATION PROGRAM  BALLISTIC MISSILE DEFENSE TERMINAL DEFENSE SEGMENT	BALLISTIC MISSILE DEFENSE WIDCOURSE DEFENSE SEGMENT  Improve Discrimination Capability for GMD  CHEMICAL AND BIOLOGICAL DEFENSE PROGRAM—DEM/VAL  BALLISTIC MISSILE DEFENSE SENSORS  Funding increase to accelerate development and deployment of interim and perm MD enhancements for HI.	Improve Discrimination Capability for GMD  BMD ENABLING PROGRAMS  GMD Discrimination  Improve High Fidelity Modeling and Simulation for GMD  SPECIAL PROGRAMS—MDA  AEGIS BMD
	Program Element	0603781D8Z 0603826D8Z 0603833D8Z 0603941D8Z 0604055D8Z 0303310D8Z 1160402BB	0603161D8Z 0603600D8Z 0603821D8Z 0603851D8Z 0603881C	0603884C	0603890C 0603891C 0603892C
	Line	062 063 064 065 065 067	069 070 072 073 074	075 076 077	078 079 080

430,115 48,954 53,265 9,113 130,695 105,354 305,791 410,425 10,787 10,787 258,406 75,300 1,153,832 83,626 100,000 3,967 3,833 23,638 357,659 545,530 36,239	160,819 84,239 97,761
130,000 [100,000] [30,000] [-22,000 [-22,000] 80,000	26,351 [26,351] 67,275 [67,275]
	134,468 84,239 30,486
BALLISTIC MISSILE DEFENSE COMMAND AND CONTROL, BATTLE MANAGEMENT AND COMMUNICATI BALLISTIC MISSILE DEFENSE LOINT WARFIGHTER SUPPORT MISSILE DEFENSE INTEGRATION & OPERATIONS CENTER (MDIOC)  REGARDING TRENCH SEA BASED X-BAND RADAR (SBX) SRAELI COOPERATIVE PROGRAMS BALLISTIC MISSILE DEFENSE TEST BALLISTIC MISSILE DEFENSE TEST BALLISTIC MISSILE DEFENSE TARGETS HUMANITARIAN DEMINING COALITION WARRARE DEPARTMENT OF DEFENSE CORROSION PROGRAM TECHNOLOGY MATURATION INITIATIVES Acceleration of kintetic and nonkinetic boost phase BMD Program increase MISSILE DEFENSE ADVANCED INVOLVITYE TECHNOLOGIES TRUSTED & ASSURED MICROELECTRONICS RAPID PROTOTYPING PROGRAM UNGRANING AND SUPPORT FOR STRATEGIC ANALYSIS (SSA) JOINT CS CAPABILITY DEVELOPMENT, INTEGRATION AND INTEROPERABILITY DEVELOPMENT UNG RANGE DISCRIMINATION RADAR (LRDR) MIPROVED HOMELAND DEFENSE INTERCEPTORS C3 BOOSTER DEVENDENT TERMINAL DEFENSE SEGMENT TEST	AEGIS BMD TEST  To provide AAW at Aegis Ashore sites, consistent w/ FY16 and FY17 NDAAs  BALLISTIC MISSILE DEFENSE SENSOR TEST  LAND-BASED SM-3 (LBSM3)  To provide AAW at Aegis Ashore sites, consistent w/ FY16 and FY17 NDAAs
222 2 222	0604878C 0604879C 0604880C
083 084 085 086 087 089 090 091 095 096 097 098 101 102 104 106	108 109 110

	House Authorized	9,739 76,757 6,500 2,902 986 34,907 16,994 <b>8,148,667</b>	12,536 201,749 406,789 15,358 6,241 12,322 4,893 3,162 21,353 6,266 2,810 2,4436 11,870 61,084 2,576 3,669
	House Change	411,926	
	FY 2018 Request	9,739 76,757 6,500 2,902 986 34,907 16,994 7,736,741	12,536 201,749 406,789 15,388 6,241 12,322 4,893 3,162 2,1353 6,266 6,266 2,810 2,436 11,870 61,084 2,576 3,669
SEC. 4201. RESEARCH, DEVELOPMENT, TEST, AND EVALUATION (In Thousands of Dollars)	ltem	AEGIS SM-3 BLOCK IIA CO-DEVELOPMENT BALLISTIC MISSILE DEFENSE MIDCOURSE SEGMENT TEST MULTI-OBJECT KILL VEHICLE JOINT ELECTROMAGNETIC TECHNOLOGY (JET) PROGRAM CYBER SECURITY INITIATIVE SPACE TRACKING & SURVEILLANCE SYSTEM BALLISTIC MISSILE DEFENSE SYSTEM SPACE PROGRAMS SUBTOTAL ADVANCED COMPONENT DEVELOPMENT AND PROTOTYPES	SYSTEM DEVELOPMENT AND DEMONSTRATION  NUCLEAR AND CONVENTIONAL PHYSICAL SECURITY EQUIPMENT RDT&E SDD  PROMPT GLOBAL STRIKE CAPABLITY DEVELOPMENT CHEMICAL AND BIOLOGICAL DEFENSE PROGRAM—EMD JOINT TACTICAL INFORMATION DISTRIBUTION SYSTEM (JTIDS) COUNTER WEAPONS OF MASS DESTRUCTION SYSTEMS DEVELOPMENT HOMELAND PERSONNEL SECURITY INITIATIVE DEFENSE EXPORTABILITY PROGRAM OUSD(C) IT DEVELOPMENT INITIATIVES DOD ENTERPRISE SYSTEMS DEVELOPMENT AND DEMONSTRATION DEFENSE AGENCY INITIATIVES (DAI)—FINANCIAL SYSTEM DEFENSE AGENCY INITIATIVES (DAI)—FINANCIAL SYSTEM DEFENSE LECTRONIC PROCUREMENT CAPABILITIES TRUSTED & ASSURED MICROELECTRONICS GLOBAL COMBAT SUPPORT SYSTEM DOD ENTERPRISE ENERGY INFORMATION MANAGEMENT (EEIM)
	Program Element	0604881C 0604887C 0604894C 0303191D8Z 0305103C 1206893C	060416108Z 060416508Z 0604384BP 060477108Z 0605013BL 0605021SE 06050210SZ 060502708Z 06050750SZ 0605076S 060509S 060509S 060509S 060529408Z 060529408Z
	Line	111 112 113 114 115 116	118 119 120 122 123 124 126 127 128 129 130 131

137	0305310D8Z	CWMD SYSTEMS: SYSTEM DEVELOPMENT AND DEMONSTRATION SUBTOTAL SYSTEM DEVELOPMENT AND DEMONSTRATION	8,230 <b>818,819</b>		8,230 <b>818,819</b>
138	0604774D8Z	MANAGEMENT SUPPORT Defense readiness reporting system (drrs)	6,941		6,941
139	0604875D8Z 0604940D87	JOINT SYSTEMS ARCHITECTURE DEVELOPMENT	4,851 211 325		4,851 211 325
141	0604942D8Z	ASSESSMENTS AND EVALUATIONS	30,144	20,000	50,144
		Program increase for cyber vulnerability assessments and hardening		[20,000]	
142 143		MISSION SUPPORT JOINT MISSION ENVIRONMENT TEST CAPABILITY (IMETC)	63,769 91.057		63,769 91.057
144		TECHNICAL STUDIES, SUPPORT AND ANALYSIS			22,386
145		JOINT INTEGRATED AIR AND MISSILE DEFENSE ORGANIZATION (JIAMDO)			36,581
147		SYSTEMS ENGINEERING			37,622
148		STUDIES AND ANALYSIS SUPPORT—OSD			5,200
149		NUCLEAR MATTERS-PHYSICAL SECURITY	5,232		5,232
150		Support to networks and information integration			12,583
151		GENERAL SUPPORT TO USD (INTELLIGENCE)			31,451
152		CHEMICAL AND BIOLOGICAL DEFENSE PROGRAM	104,348		104,348
161	Z800625090	SMALL BUSINESS INNOVATION RESEARCH (SBIR)/ SMALL BUSINESS TECHNOLOGY TRANSFER			2,372
162		DEFENSE TECHNOLOGY ANALYSIS			24,365
163		Defense Technical Information Center (DTIC)			54,145
164		R&D IN SUPPORT OF DOD ENLISTMENT, TESTING AND EVALUATION			30,356
165		DEVELOPMENT TEST AND EVALUATION	20,571		20,571
166		MANAGEMENT HQ—R&D			14,017
167		Management HQ—Defense Technical Information Center (DTIC)			4,187
168	7	Budget and program assessments			3,992
169	7	ODNA TECHNOLOGY AND RESOURCE ANALYSIS	1,000		1,000
170	~	DEFENSE OPERATIONS SECURITY INITIATIVE (DOSI)			2,551
171		JOINT STAFF ANALYTICAL SUPPORT			7,712
174		SUPPORT TO INFORMATION OPERATIONS (10) CAPABILITIES			673
0/1	0303260D82	DETENSE MILITAKY DECEPTION PROGRAM OFFICE (DMDPO)	1,006		1,006

	House Authorized	16,998	18,992	1,231	44,500	29,947	5,113	63,312	1,030,530		4,565	1,871	298	15,882		7,222	14,450	45,677	3,037	59,490	6,104	1,863	21,564	15,428	15,855	4,811	33,746
	House Change								20,000					5,000	[2,000]												
	FY 2018 Request	16,998	18,992	1,231	44,500	29,947	5,113	63,312	1,010,530		4,565	1,871	298	10,882		7,222	14,450	45,677	3,037	59,490	6,104	1,863	21,564	15,428	15,855	4,811	33,746
SEC. 4201. RESEARCH, DEVELOPMENT, TEST, AND EVALUATION (In Thousands of Dollars)	ltem	COMBINED ADVANCED APPLICATIONS	Intelligence Capabilities and Innovation Investments	CWMD SYSTEMS: RDT&E MANAGEMENT SUPPORT	COCOM EXERCISE ENGAGEMENT AND TRAINING TRANSFORMATION (CE2T2)—MHA	Management HQ—MDA	JOINT SERVICE PROVIDER (JSP)	CLASSIFIED PROGRAMS	SUBTOTAL MANAGEMENT SUPPORT	OPERATIONAL SYSTEM DEVELOPMENT	ENTERPRISE SECURITY SYSTEM (ESS)	regional international outreach (Rio) and Partnership for Peace information mana	OVERSEAS HUMANITARIAN ASSISTANCE SHARED INFORMATION SYSTEM (OHASIS)	INDUSTRIAL BASE ANALYSIS AND SUSTAINMENT SUPPORT	Program increase for increase analytical support	CWMD SYSTEMS: OPERATIONAL SYSTEMS DEVELOPMENT	LOBAL THEATER SECURITY COOPERATION MANAGEMENT	CHEMICAL AND BIOLOGICAL DEFENSE (OPERATIONAL SYSTEMS DEVELOPMENT)	PLANNING AND DECISION AID SYSTEM (PDAS)	C41 INTEROPERABILITY	JOINT/ALLIED COALITION INFORMATION SHARING	NATIONAL MILITARY COMMAND SYSTEM-WIDE SUPPORT	DEFENSE INFO INFRASTRUCTURE ENGINEERING AND INTEGRATION	LONG-HAUL COMMUNICATIONS—DCS	MINIMUM ESSENTIAL EMERGENCY COMMUNICATIONS NETWORK (MEECN)	Public Key Infrastructure (PKI)	KEY MANAGEMENT INFRASTRUCTURE (KMI)
	Program Element	0305172K	0305245D8Z	0306310D8Z	0804767J	0901598C	0903235K	666666666			0604130V	0605127T	0605147T	0607210D8Z		0607310D8Z	0607327T	0607384BP	0208043J	0208045K	0301144K	0302016K	0302019K	0303126K	0303131K	0303135G	0303136G
	Line	177	180	181	183	184	187	187A			188	189	190	191		192	193	194	195	196	198	202	203	204	205	506	207

19,415		235,652		42,687	8,750	4,689	20,000	1,686	6,526	18,455	5,496	3,049	5,365	2,071	13,111	1,770	2,924	37,863	267,386		8,245	79,455	45,935	1,978	31,766	2,578	55,115		4,661	12,049	642
10,000	[10,000]	8,000	[8,000]																7,500	[7,500]							12,800	[12,800]			
9,415		227,652																	259,886		8,245	79,455	45,935	1,978	31,766	2,578	42,315		4,661	12,049	6112
INFORMATION SYSTEMS SECURITY PROGRAM	Cyber Scholarship Program	INFORMATION SYSTEMS SECURITY PROGRAM	Program increase to support cyber defense education of reservists and the National Guard	GLOBAL COMMAND AND CONTROL SYSTEM	DEFENSE SPECTRUM ORGANIZATION	Joint Information Environment (JIE)	FEDERAL INVESTIGATIVE SERVICES INFORMATION TECHNOLOGY	Cyber Security initiative	POLICY R&D PROGRAMS	NET CENTRICITY	DISTRIBUTED COMMON GROUND/SURFACE SYSTEMS	DISTRIBUTED COMMON GROUND/SURFACE SYSTEMS	INSIDER THREAT	HOMELAND DEFENSE TECHNOLOGY TRANSFER PROGRAM	INTELLIGENCE MISSION DATA (IMD)	PACIFIC DISASTER CENTERS	DEFENSE PROPERTY ACCOUNTABILITY SYSTEM	MQ-9 UAV	AVIATION SYSTEMS	Per SOCOM requested realignment	INTELLIGENCE SYSTEMS DEVELOPMENT	OPERATIONAL ENHANCEMENTS	WARRIOR SYSTEMS	SPECIAL PROGRAMS	UNMANNED ISR	SOF TACTICAL VEHICLES	MARITIME SYSTEMS	Per SOCOM requested realignment	GLOBAL VIDEO SURVEILLANCE ACTIVITIES	OPERATIONAL ENHANCEMENTS INTELLIGENCE	TEI EBABT BBAABAM
0303140D8Z		0303140G			0303153K										0307577D8Z				1160403BB		1160405BB	1160408BB	1160431BB	1160432BB	1160434BB	1160480BB	1160483BB		1160489BB	1160490BB	12026101
208		209		210	211	214	216	222	227	228	230	233	236	237	243	245	246	248	251		252	253	254	255	256	257	258		259	260	26.1

		SEC. 4201. RESEARCH, DEVELOPMENT, TEST, AND EVALUATION (In Thousands of Dollars)			
Line	Program Element	ltem	FY 2018 Request	House Change	House Authorized
261A	6666666666	CLASSIFIED PROGRAMSSYSTEM DEVELOPMENT	3,689,646 <b>4,867,528</b>	43,300	3,689,646 <b>4,910,828</b>
		TOTAL RESEARCH, DEVELOPMENT, TEST & EVAL, DW	20,490,902	505,326	20,996,228
001 002 003	06051180TE 06051310TE 06058140TE	OPERATIONAL TEST & EVAL, DEFENSE MANAGEMENT SUPPORT OPERATIONAL TEST AND EVALUATION LIVE FIRE TEST AND EVALUATION OPERATIONAL TEST ACTIVITIES AND ANALYSES SUBTOTAL MANAGEMENT SUPPORT	83,503 59,500 67,897 <b>210,900</b>		83,503 59,500 67,897 <b>210,900</b>
		TOTAL OPERATIONAL TEST & EVAL, DEFENSE	210,900		210,900
		TOTAL RDT&E	82,716,636	1,321,721	84,038,357
SEC.	SEC. 4202. RESEARCH, DEV	H, DEVELOPMENT, TEST, AND EVALUATION FOR OVERSEAS CONTINGENCY OPERATIONS.			
		SEC. 4202. RESEARCH, DEVELOPMENT, TEST, AND EVALUATION FOR OVERSEAS CONTINGENCY OPERATIONS (In Thousands of Dollars)	PERATIONS		
Line	Program Element	ltem	FY 2018 Request	House Change	House Authorized
900	0602120A	SENSORS AND ELECTRONIC SURVIVABILITY			>

ADVANCED COMPONENT DEVELOPMENT & PROTOTYPES

4,000	<b>7,000</b>	5,000 21,540 155,000	30,100 1,200 <b>224,840</b>	56,731	8,000 8,		6,036 <b>70,767</b>
-15,000 [-15,000] 4,000 [4,000]	<b>-11,000</b>	[12,000] 155,000 [155,000]	167,000	56,731 [42,731] [14,000]	8,000 [8,000] -15,000 [-15,000]	-7,492 [-7,492] -15,000	27,239
15,000	18,000	5,000 21,540	30,100 1,200 <b>57,840</b>		15,000	7,492	6,036 <b>43,528</b>
AIR AND MISSILE DEFENSE SYSTEMS ENGINEERING  Realign European Reassurance Initiative to Base  TANK AND MEDIUM CALIBER AMMUNITION  Unfunded requirement—LITV lethality 30mm upgrade  SOLDIER SUPPORT AND SURVIVABILITY	SUBTOTAL ADVANCED COMPONENT DEVELOPMENT & PROTOTYPES  SYSTEM DEVELOPMENT & DEMONSTRATION  AIRCRAFT AVIONICS	Unfunded requirement—A-PNT measures	AIRCRAFT SURVIVABILITY DEVELOPMENT	OPERATIONAL SYSTEMS DEVELOPMENT  LONG RANGE PRECISION FIRES (LRPF)  Unfunded requirement	AVIATION ROCKET SYSTEM PRODUCT IMPROVEMENT AND DEVELOPMENT  Unfunded requirement—M282 warhead qualification  MISSILE/AIR DEFENSE PRODUCT IMPROVEMENT PROGRAM  Realign European Reassurance Initiative to Base	TACTICAL UNMANNED AERIAL VEHICLES  Realign European Reassurance Initiative to Base  ARBORNE RECONNAISSANCE SYSTEMS  Realign Filmonan Reassurance Initiative to Rase	BIOMETRICS ENABLED INTELLIGENCE SUBTOTAL OPERATIONAL SYSTEMS DEVELOPMENT
0603327A 0603639A 0603747A	0604201A	0605032A 0605035A 0605049A	0605051A 0303032A	0607134A	0607142A 0203801A	0305204A 0305206A	0307665A
055	080	122 125 132	133	183	191	222	228

		SEC. 4202. KESEAKCH, DEVELUPMENI, IESI, AND EVALUATION FUK UVEKSEAS CUNTINGENCY UPEKATIONS (In Thousands of Dollars)	LIVE		
Line	Program Element	ltem	FY 2018 Request	House Change	House Authorized
		TOTAL RESEARCH, DEVELOPMENT, TEST & EVAL, ARMY	119,368	183,239	302,607
041	0603527N 0604272N	ADVANCED COMPONENT DEVELOPMENT & PROTOTYPES RETRACT LARCH TACTICAL AIR DIRECTIONAL INFRARED COUNTERMEASURES (TADIRCM) SUBTOTAL ADVANCED COMPONENT DEVELOPMENT & PROTOTYPES	22,000 5,710 <b>27,710</b>		22,000 5,710 <b>27,710</b>
207 211 253A	0204311N 0204574N 999999999	OPERATIONAL SYSTEMS DEVELOPMENT INTEGRATED SURVEILLANCE SYSTEM Realign European Reassurance Initiative to Base CRYPOLOGIC DIRECT SUPPORT CLASSIFIED PROGRAMS SUBTOTAL OPERATIONAL SYSTEMS DEVELOPMENT	11,600 1,200 89,855 <b>102,655</b>	-11,600 [-11,600] - <b>11,600</b>	1,200 89,855 <b>91,055</b>
		TOTAL RESEARCH, DEVELOPMENT, TEST & EVAL, NAVY	130,365	-11,600	118,765
029	0603438F 0306250F	ADVANCED COMPONENT DEVELOPMENT & PROTOTYPES SPACE CONTROL TECHNOLOGY CYBER OPERATIONS TECHNOLOGY DEVELOPMENT SUBTOTAL ADVANCED COMPONENT DEVELOPMENT & PROTOTYPES	7,800 5,400 <b>13,200</b>		7,800 5,400 <b>13,200</b>
196 214 286	0207277F 0208087F 0401318F	OPERATIONAL SYSTEMS DEVELOPMENT ISR INNOVATIONS AF OFFENSIVE CYBERSPACE OPERATIONS CV-22 Unfunded requirement—common eletrical interface	5,750 4,000	14,000	5,750 4,000 14,000

112,408 <b>136,158</b>	149,358	25,000 <b>25,000</b>	507,646 <b>507,646</b>	3,920	196,176 <b>203,096</b>	735,742	1,306,472
[7,000]	14,000		507,646 [507,646] <b>507,646</b>	2,000 [2,000]	2,000	509,646	695,285
112,408 <b>122,158</b>	135,358	25,000 <b>25,000</b>		1,920	196,176 <b>201,096</b>	226,096	611,187
Unfunded requirement—intelligence broadcast system	TOTAL RESEARCH, DEVELOPMENT, TEST & EVAL, AF	ADVANCED TECHNOLOGY DEVELOPMENT COMBATING TERRORISM TECHNOLOGY SUPPORT SUBTOTAL ADVANCED TECHNOLOGY DEVELOPMENT	ADVANCED COMPONENT DEVELOPMENT AND PROTOTYPES  ISRAELI COOPERATIVE PROGRAMS  Additional Cooperative funds, consistent with Title XVI authorizations  Subtotal advanced component development and prototypes	OPERATIONAL SYSTEM DEVELOPMENT OPERATIONAL ENHANCEMENTS Unfunded Requirement- Publicly Available Information (PAI) Capability Acceleration	CLASSIFIED PROGRAMS SUBTOTAL OPERATIONAL SYSTEM DEVELOPMENT	TOTAL RESEARCH, DEVELOPMENT, TEST & EVAL, DW	TOTAL RDT&E
6666666666		0603122D8Z	0603913C	1160408BB	6666666666		
318A		024	880	253	261A		

SEC. 4203. RESEARCH, DEVELOPMENT, TEST, AND EVALUATION FOR OVERSEAS CONTINGENCY OPERATIONS FOR BASE REQUIREMENTS.

		SEC. 4203. RESEARCH, DEVELOPMENT, TEST, AND EVALUATION FOR OVERSEAS CONTINGENCY OPERATIONS FOR BASE REQUIREMENTS (In Thousand's Of Dollars)	OR BASE REQUIRE	MENTS	
Line	Program Element	ltem	FY 2018 Request	House Change	House Authorized
042	0603270A	RESEARCH, DEVELOPMENT, TEST & EVAL, ARMY ADVANCED TECHNOLOGY DEVELOPMENT ELECTRONIC WARFARE TECHNOLOGY Multi-Domain Battle Exercise Capability Subtotal Advanced Technology Development		3,000 [3,000] <b>3,000</b>	3,000
085	0604328A 0605018A	SYSTEM DEVELOPMENT & DEMONSTRATION  TRACTOR CAGE Unfunded Requirement Untegrated Personnel and Pay System-army (IPPS-A) Unfunded Requirement Unfunded Requirement Subtotal System Development & Demonstration		13,000 [13,000] 15,000 [15,000]	13,000 15,000 <b>28,000</b>
203 213 214	0203801A 0303028A 0303140A	MISSILE/AIR DEFENSE PRODUCT IMPROVEMENT PROGRAM  MISSILE/AIR DEFENSE PRODUCT IMPROVEMENT PROGRAM  Unfunded requirement—Stinger PIP  SECURITY AND INTELLIGENCE ACTIVITIES  Unfunded Requirement  Unfunded Requirement  SUBTOTAL OPERATIONAL SYSTEMS DEVELOPMENT		26,000 [26,000] 21,845 [21,845] 7,021 [7,021]	26,000 21,845 7,021 <b>54,866</b>
010	0602435N	TOTAL RESEARCH, DEVELOPMENT, TEST & EVAL, ARMY		<b>85,866</b> 15,000	<b>85,866</b> 15,000

23,500 <b>38,500</b>	38,500	2,500 8,300 <b>10,800</b>	5,700 13,500 <b>19,200</b>	10,200 56,900 <b>67,100</b>	11,000
[15,000] 23,500 [23,500] <b>38,500</b>	38,500	2,500 [2,500] 8,300 [8,300]	5,700 [5,700] 13,500 [13,500]	10,200 [10,200] 56,900 [56,900] <b>67,100</b>	11,000 [11,000]
AGOR SLEP MINE AND EXPEDITIONARY WARFARE APPLIED RESEARCH MS-177A Maritime Senson SUBTOTAL APPLIED RESEARCH	TOTAL RESEARCH, DEVELOPMENT, TEST & EVAL, NAVY	APPLIED RESEARCH, DEVELOPMENT, TEST & EVAL, AF APPLIED RESEARCH AEROSPACE PROPULSION Unfunded Requirement Unfunded Requirement Unfunded Requirement SUBTOTAL APPLIED RESEARCH	ADVANCED TECHNOLOGY DEV/DEMO  AEROSPACE TECHNOLOGY DEV/DEMO Unfunded requirement  Aerospace propulsion and power technology Unfunded requirement  Subtotal advanced technology development	ADVANCED COMPONENT DEVELOPMENT & PROTOTYPES  CYBER RESILIENCY OF WEAPON SYSTEMS-ACS Unfunding requirement SPACE CONTROL TECHNOLOGY AF UPL SUBTOTAL ADVANCED COMPONENT DEVELOPMENT & PROTOTYPES	Operational Systems Development Minimum Essential Emergency Communications Network (Meecn)
0602782N		0602203F 0602605F	0603211F 0603216F	0604414F 1206438F	0303131F
014		007	018	041	230

		SEC. 4203. RESEARCH, DEVELOPMENT, TEST, AND EVALUATION FOR OVERSEAS CONTINGENCY OPERATIONS FOR BASE REQUIREMENTS (In Thousands of Dollars)	OR BASE REQUIRE	MENTS	
Line	Program Element	Item	FY 2018 Request	House Change	House Authorized
302	1203001F	FAMILY OF ADVANCED BLOS TERMINALS (FAB-T)  AF UPL—FAB-T testing activities  AF UPL—POTUS voice conference configuration  AF UPL—spares for testing		58,400 [7,400] [31,900] [6,600]	58,400
312	1203614F	AF UPL_spares for testing JSPOC MISSION SYSTEM AF UPL—BMC2 software SUBTOTAL OPERATIONAL SYSTEMS DEVELOPMENT		[12,500] 24,250 [24,250] <b>93,650</b>	24,250 <b>93,650</b>
		TOTAL RESEARCH, DEVELOPMENT, TEST & EVAL, AF		190,750	190,750
075	0603882C	RESEARCH, DEVELOPMENT, TEST & EVAL, DW  ADVANCED COMPONENT DEVELOPMENT AND PROTOTYPES  BALLISTIC MISSILE DEFENSE MIDCOURSE DEFENSE SEGMENT  Increase GBI magazine capacity at Fort Greely  Procure 3 additional EKVs		351,000 [208,000] [45,000]	351,000
117	1206895C	Procure 7 additional boosters  BALLISTIC MISSILE DEFENSE SYSTEM SPACE PROGRAMS  Initiates BMDS Global Sensors AdA reccommendations for space sensor architecture  SUBTOTAL ADVANCED COMPONENT DEVELOPMENT AND PROTOTYPES		[98,000] 27,500 [27,500] <b>378,50</b> 0	27,500 <b>378,500</b>
137A	0604XXX	SYSTEM DEVELOPMENT AND DEMONSTRATION RESEARCH AND DEVELOPMENT OF MILITARY RESPONSE OPTIONS FOR RUSSIAN INF TREATY VIOLATION Program increase SUBTOTAL SYSTEM DEVELOPMENT AND DEMONSTRATION		50,000 [50,000] <b>50,000</b>	50,000 <b>50,000</b>

MANAGEMENT SUPPORT

30,000	5,000	2,000	463,500	778,616
30,000 [30,000] <b>30,000</b>	5,000	[000,6]	463,500	778,616
General support to usd (intelligence)  Project Mayon  Subtotal management support	OPERATIONAL SYSTEM DEVELOPMENT INSIDER THREAT	Defense insider inteat management and Analysis Center	TOTAL RESEARCH, DEVELOPMENT, TEST & EVAL, DW	TOTAL ROT&E
151 0605200D8Z	0305327V			
151	236			

## TITLE XLIII—OPERATION AND MAINTENANCE

SEC. 4301. OPERATION AND MAINTENANCE.

	SEC. 4301. OPERATION AND MAINTENANGE (In Thousands of Dollars)			
Line	ltem	FY 2018 Request	House Change	House Authorized
	OPERATION & MAINTENANCE, ARMY OPERATING FORCES			
010	Maneuver units	1,455,366	738,291	2,193,657
	Improve unit training and maintenance readiness		[54,700]	
	Realign European Reassurance Initiative to Base		[683,591]	
020	MODULAR SUPPORT BRIGADES	105,147	7,700	112,847
	Execute the National Military Strategy		[7,700]	
030	ECHELONS ABOVE BRIGADE	604,117	88,300	692,417
	Improve training readiness		[88,300]	

	SEC. 4301. OPERATION AND MAINTENANGE (In Thousands of Dollars)			
Line	ltem	FY 2018 Request	House Change	House Authorized
040	THEATER LEVEL ASSETS	793,217	27,300	820,517
	Decisive Action training and operations		[27,300]	•
020	Land forces operations support	1,169,478	37,700	1,207,178
	Combat Training Center Operations and Maintenance		[37,700]	
090	AVIATION ASSETS	1,496,503	178,300	1,674,803
	4		[28,200]	
	Realign European Reassurance Initiative to Base		[150,100]	
070	FORCE READINESS OPERATIONS SUPPORT	3,675,901	91,969	3,767,870
	Maintenance of organizational clothing and equipment		[26,500]	
	Realign European Reassurance Initiative to Base		[8,969]	
	SOUTHCOM—Maritime Patrol Aircraft Expansion		[38,500]	
	SOUTHCOM—Mission and Other Ship Operations		[18,000]	
080	Land forces systems readiness	466,720		466,720
060	Land forces depot maintenance	1,443,516	150,749	1,594,265
	Depot maintenance of hardware and munitions		[46,600]	
	Realign European Reassurance Initiative to Base		[104,149]	
100	BASE OPERATIONS SUPPORT	8,080,357	61,907	8,142,264
	C4I / Cyber capabilities enabling support		[13,200]	
	Realign European Reassurance Initiative to Base		[48,707]	
110	FACILITIES SUSTAINMENT, RESTORATION & MODERNIZATION	3,401,155	32,000	3,433,155
	Realign European Reassurance Initiative to Base		[32,000]	
120	MANAGEMENT AND OPERATIONAL HEADQUARTERS	443,790		443,790
140	ADDITIONAL ACTIVITIES		135,150	135,150
	Realign European Reassurance Initiative to Base		[126,250]	
	Training, supplies, spares, and repair site support		[8,900]	
180	US AFRICA COMMAND	225,382		225,382
190	$\geq$	141,352	44,250	185,602

194,311 59,578 <b>25,349,506</b>	347,791 483,846 7,750 <b>839,387</b>	137,556 58,872 58,035 505,089 1,018,685 1,124,115 220,688 621,690 613,586 171,223	214,738 195,099 176,116 <b>5,115,492</b>
[44,250] 3,500 [3,500] <b>1,597,116</b>	1,124 [1,124] 61,738 [56,500] [5,238]	3,144 [3,144] 3,526 [3,526]	6,670
190,811 59,578 <b>23,752,390</b>	346,667 422,108 7,750 <b>776,525</b>	137,556 58,872 58,035 505,089 1,015,541 1,124,115 220,688 618,164 613,586	214,/38 195,099 176,116 <b>5,108,822</b>
Realign European Reassurance Initiative to Base US SOUTHERN COMMAND Mission and Other Ship Operations US FORCES KOREA SUBTOTAL OPERATING FORCES	MOBILIZATION         STRATEGIC MOBILITY         SUSTAINMENT of strategically positioned assets enabling force projection         ARMY PREPOSITIONED STOCKS         Realign European Reassurance Initiative to Base         Sustain Army War Reserve Secondary Items for deployed forces         INDUSTRIAL PREPAREDNESS	TRAINING AND RECR OFFICER ACQUISITION RECRUIT TRAINING ONE STATION UNIT TI SENIOR RESERVE OF SPECIALIZED SKILL T Leadership dev FLIGHT TRAINING PROFESSIONAL DEVE TRAINING SUPPORT . Department of Department of RECRUITING AND ADVE EXAMINING	OFF-DUTY AND VOLUNTARY EDUCATION CIVILIAN EDUCATION AND TRAINING JUNIOR RESERVE OFFICER TRAINING CORPS SUBTOTAL TRAINING AND RECRUITING
200	220 230 240	250 260 270 280 290 390 310 320 340	350 360 370

	SEC. 4301. OPERATION AND MAINTENANCE (In Thousands of Dollars)			
Line	ltem	FY 2018 Request	House Change	House Authorized
390	admin & Srvwide activities Servicewide transportation	555,502	154,050	709,552
	Logistics associated with increased end strength		[57,900]	
400	CENTRAL SUPPLY ACTIVITIES	894,208	11,449	905,657
	Realign European Reassurance Initiative to Base		[11,449]	
410	LOGISTIC SUPPORT ACTIVITIES	715,462		715,462
420	AMMUNITION MANAGEMENT	446,931		446,931
430		493,616		493,616
440	>	2,084,922	17,900	2,102,822
	Annual maintenance of Enterprise License Agreements		[17,900]	
450	MANPOWER MANAGEMENT	259,588		259,588
460	OTHER PERSONNEL SUPPORT	326,387		326,387
470	OTHER SERVICE SUPPORT	1,087,602	-9,000	1,078,602
			[-9,000]	
480	ARMY CLAIMS ACTIVITIES	210,514		210,514
490	real estate management	243,584		243,584
200	FINANCIAL MANAGEMENT AND AUDIT READINESS	284,592	8,400	292,992
	DISA migration cost and system support		[8,400]	
510	International military headquarters	415.694		415,694
520	MISC. SUPPORT OF OTHER NATIONS	46,856		46,856
565		1,242,222	70,825	1,313,047
	Army Analytics Group		[2,000]	
	Realign European Reassurance Initiative to Base		[65,825]	
	SUBTOTAL ADMIN & SRVWIDE ACTIVITIES	9,307,680	253,624	9,561,304

570	UNDISTRIBUTED Undistributed		-426,100	-426,100
	Excessive standard price for fuel		[-20,600] $[-146,400]$	
	Historical unobligated balances		[-259,100] - <b>426,100</b>	-426,100
	TOTAL OPERATION & MAINTENANCE, ARMY	38,945,417	1,494,172	40,439,589
	OPERATION & MAINTENANCE, ARMY RES OPERATING FORCES			
010	MODULAR SUPPORT BRIGADES	11,461		11,461
020	ECHELONS ABOVE BRIGADE	577,410		577,410
030	THEATER LEVEL ASSETS	117,298		117,298
040	Land forces operations support	552,016		552,016
020	AVATION ASSETS	80,302	1,159	81,461
	Increase aviation readiness		[1,159]	
090	Force readiness operations support	399,035	223	399,258
	Pay and allowances for career development training		[223]	
070	Land Forces systems readiness	102,687		102,687
080	Land forces depot maintenance	56,016		56,016
060	BASE OPERATIONS SUPPORT	599,947		599,947
100	FACILITIES SUSTAINMENT, RESTORATION & MODERNIZATION	273,940		273,940
110	Management and operational headquarters	22,909		22,909
	SUBTOTAL OPERATING FORCES	2,793,021	1,382	2,794,403
	ADMIN & SRVWD ACTIVITIES			
120	SERVICEWIDE TRANSPORTATION	11,116		11,116
130	ADMINSTRATION	17,962		17,962
140	Servicewide communications	18,550	2,400	20,950
i I	Annual maintenance of Enterprise License Agreements		[2,400]	
150	MANPOWER MANAGEMENT	6,166		6,166

100 110 120	BASE OPERATIONS SUPPORT FACILITIES SUSTAINMENT, RESTORATION & MODERNIZATION MANAGEMENT AND OPERATIONAL HEADQUARTERS SUBTOTAL OPERATING FORCES	1,144,726 781,895 999,052 <b>6,854,485</b>	73,510	1,144,726 781,895 999,052 <b>6,927,995</b>
130	ADMIN & SRVWD ACTIVITIES SERVICEWIDE TRANSPORTATION ADMINISTRATION Department of Defense State Partnership Program	7,703 79,236	2,000	7,703
150 160 170 180	SEKVICEWIDE COMMUNICATIONS  Annual maintenance of Enterprise License Agreements  MANPOWER MANAGEMENT  OTHER PERSONNEL SUPPORT  REAL ESTATE MANAGEMENT  SUBTOTAL ADMIN & SRVWD ACTIVITIES	8,160 8,654 268,839 3,093 <b>452,685</b>	3,500 [9,600] <b>11,600</b>	94,760 8,654 268,839 3,093 <b>464,285</b>
190	UNDISTRIBUTED UNDSTRIBUTED Excessive standard price for fuel Subtotal undistributed		-10,700 [-10,700] - <b>10,700</b>	-10,700 -1 <b>0,700</b>
	TOTAL OPERATION & MAINTENANCE, ARNG	7,307,170	74,410	7,381,580
010	OPERATION & MAINTENANCE, NAVY OPERATING FORCES MISSION AND OTHER FLIGHT OPERATIONS OF THE PRODUCTION O	5,544,165	26,750 [22,000]	5,570,915
020 030 040 050	Reaugn European Keassurance Initiative to base FLEET AIR TRAINING AVIATION TECHNICAL DATA & ENGINEERING SERVICES AIR OPERATIONS AND SAFETY SUPPORT AIR SYSTEMS SUPPORT	2,075,000 46,801 119,624 552,536	[4,750] 42,000	2,075,000 46,801 119,624 594,536

	SEC. 4301. OPERATION AND MAINTENANCE (In Thousands of Dollars)			
Line	ltem	FY 2018 Request	House Change	House Authorized
	Fund aviation spt to max executable		[42,000]	
090	AIRCRAFT DEPOT MAINTENANCE	1,088,482		1,088,482
070	AIRCRAFT DEPOT OPERATIONS SUPPORT	40,584		40,584
080	AVATION LOGISTICS	723,786	120,000	843,786
	Fund aviation logistics to max executable		[120,000]	
060	MISSION AND OTHER SHIP OPERATIONS	4,067,334	3,677	4,071,011
	Realign European Reassurance Initiative to Base		[3,677]	
100	SHIP OPERATIONS SUPPORT & TRAINING	977,701		977,701
110		7,165,858	9,500	7,175,358
			[9,200]	
120	SHIP DEPOT OPERATIONS SUPPORT	2,193,851		2,193,851
130	COMBAT COMMUNICATIONS AND ELECTRONIC WARFARE	1,288,094	11,400	1,299,494
	Logistics support for legacy C41 systems		[6,000]	
	Realign European Reassurance Initiative to Base		[5,400]	
150	SPACE SYSTEMS AND SURVEILLANCE	206,678	4,400	211,078
	Realign European Reassurance Initiative to Base		[4,400]	
160	Warfare Tactics	621,581	1,000	622,581
	Operational Range and Environmental Compliance		[1,000]	
170	OPERATIONAL METEOROLOGY AND OCEANOGRAPHY	370,681		370,681
180	COMBAT SUPPORT FORCES	1,437,966	22,984	1,460,950
	Coastal Riverine Force meet operational requirements		[7,000]	
	COMPACFLT C41 Upgrade		[10,000]	
	Realign European Reassurance Initiative to Base		[5,984]	
190	EQUIPMENT MAINTENANCE AND DEPOT OPERATIONS SUPPORT	162,705		162,705
210	COMBATANT COMMANDERS CORE OPERATIONS	65,108		65,108
220	COMBATANT COMMANDERS DIRECT MISSION SUPPORT	86,892	69,100	155,992
	Joint Training Capability and Exercise Programs		[64,100]	

8,427 385,212 1,278,456 751,980	380,016 914,428 1,905,679 4,356,688	39,127,124	427,450	198,341 66,849 21,870 <b>714,510</b>	143,924 8,975 144,708 812,708 182,448 234,596 177,517
[5,000] 6,300 [5,000]	[1,300]	[11,000] [12,000] <b>340,111</b>	10,000	10,000	2,000
8,427 385,212 1,278,456 745,680	380,016 914,428 1,905,679 4,333,688	38,787,013	417,450	198,341 66,849 21,870 <b>704,510</b>	143,924 8,975 144,708 812,708 180,448 234,596 177,517
No-Notice Agile Logistics Exercise  MILITARY INFORMATION SUPPORT OPERATIONS  CYBERSPACE ACTIVITIES  FLEET BALLISTIC MISSILE  WEAPONS MAINTENANCE  Munitions wholeness	Realign European Reassurance Initiative to Base OTHER WEAPON SYSTEMS SUPPORT ENTERPRISE INFORMATION SUSTAINMENT, RESTORATION AND MODERNIZATION BASE OPERATING SUPPORT	Uperational range clearance Port Operations Service Craft Maintenance SUBTOTAL OPERATING FORCES	MOBILIZATION SHIP PREPOSITIONING AND SURGE Strategic sealiff management	SHIP ACTIVATIONS/INACTIVATIONS  EXPEDITIONARY HEALTH SERVICES SYSTEMS  COAST GUARD SUPPORT  SUBTOTAL MOBILIZATION	TRAINING AND RECRUITING OFFICER ACQUISITION RECRUIT TRAINING RESERVE OFFICERS TRAINING CORPS SPECIALIZED SKILL TRAINING PROFESSIONAL DEVELOPMENT EDUCATION Naval Sea Cadets TRAINING SUPPORT RECRUITING AND ADVERTISING
230 240 260 280	290 300 310 320		330	360 370 390	400 410 420 430 450 460

	SEC. 4301. OPERATION AND MAINTENANCE (In Thousands of Dollars)			
Line	ltem	FY 2018 Request	House Change	House Authorized
480 490 500	OFF-DUTY AND VOLUNTARY EDUCATION  CIVILIAN EDUCATION AND TRAINING  JUNIOR ROTC  SUBTOTAL TRAINING AND RECRUITING	103,154 72,216 53,262 <b>1,931,508</b>	2,000	103,154 72,216 53,262 1,933,508
510	ADMIN & SRVWD ACTIVITIES ADMINISTRATION Program decrease	1,135,429	—9,000 —9,000]	1,126,429
530 540 590	Civilian manpower and Personnel management Military manpower and Personnel management Servicewide transportation	149,365 386,749 165,301		149,365 386,749 165,301
610 620 660 775	Planning, Engineering, and Program Support	311,616 665,580 659,143 543,193	10,000	311,616 665,580 659,143 553,193
	Research and Technology Protection SUBTOTAL ADMIN & SRVWD ACTIVITIES	4,016,376	[10,000] <b>1,000</b>	4,017,376
780	UNDISTRIBUTED UNDISTRIBUTED Excessive standard price for fuel Foreign Currency adjustments Historical unobligated balances SUBTOTAL UNDISTRIBUTED		-356,800 [-143,600] [-35,300] [-177,900]	-356,800 -356,800
	TOTAL OPERATION & MAINTENANCE, NAVY	45,439,407	-3,689	45,435,718

	OPERATION & MAINTENANCE, MARINE CORPS OPERATING FORCES			
010	OPERATIONAL FORCES	967,949	164,733 [164 733]	1,132,682
020	FIELD LOGISTICS	1,065,090		1,065,090
030		286,635		286,635
040	Maritime prepositioning	85,577		85,577
020	CYBERSPACE ACTIVITIES	181,518		181,518
090	SUSTAINMENT, RESTORATION & MODERNIZATION	785,264		785,264
070	Base operating support	2,196,252		2,196,252
	SUBTOTAL OPERATING FORCES	5,568,285	164,733	5,733,018
	TRAINING AND RECRUITING			
080	regruit training	16,163		16,163
060	OFFICER ACQUISITION	1,154		1,154
100	$\mathbb{R}$	100,398		100,398
110	/ELOPMENT	46,474		46,474
120	TRAINING SUPPORT	405,039		405,039
130	recruiting and advertising	201,601		201,601
140	OFF-DUTY AND VOLUNTARY EDUCATION	32,045		32,045
150		24,394		24,394
	₹	827,268		827,268
	ADMIN & SRVWD ACTIVITIES			
160	SERVICEWIDE TRANSPORTATION	28,827		28,827
170	ADMINISTRATION Program decrease	378,683	-3,000	375,683
190	ACQUISITION AND PROGRAM MANAGEMENT	77,684	[	77,684
215	CLASSIFIED PROGRAMS	52,661		52,661
	SUBTOTAL ADMIN & SRVWD ACTIVITIES	537,855	-3,000	534,855

#### UNDISTRIBUTED

	SEC. 4301. OPERATION AND MAINTENANCE (In Thousands of Dollars)			
Line	ltem	FY 2018 Request	House Change	House Authorized
220	UNDISTRIBUTED  Excessive standard price for fuel Foreign Currency adjustments Historical unobligated balances  SUBTOTAL UNDISTRIBUTED		-38,000 [-1,800] [-11,400] [-24,800] -38,000	-38,000 - <b>38,000</b>
	TOTAL OPERATION & MAINTENANCE, MARINE CORPS	6,933,408	123,733	7,057,141
010 020	OPERATION & MAINTENANCE, NAVY RES OPERATING FORCES MISSION AND OTHER FLIGHT OPERATIONS INTERMEDIATE MAINTENANCE	596,876		596,876 5.902
030	AIRCRAFT DEPOT MAINTENANCE	94,861		94,861
	AVATION LOGISTICS	361 13,822		361 13,822
	Ship operations support & training Combat communications	571 16,718		571 16,718
-	COMBAT SUPPORT FORCES	118,079		118,079
	ENTERPRISE INFORMATION	28,650		28,650
110	SUSTAINMENT, RESTORATION AND MODERNIZATION	86,354 103 596		86,354 103 596
	SUBTOTAL OPERATING FORCES	1,066,118		1,066,118
_	ADMIN & SRVWD ACTIVITIES ADMINISTRATION	1 371		-
140	MILITARY MANPOWER AND PERSONNEL MANAGEMENT	13,289		13,289

160	ACQUISITION AND PROGRAM MANAGEMENT	3,229 <b>17,889</b>		3,229 <b>17,889</b>
180	UNDISTRIBUTED UNDISTRIBUTED Excessive standard price for fuel SUBTOTAL UNDISTRIBUTED		<b>.</b> 9,800] -9,800]	-9,800 - <b>9,800</b>
	TOTAL OPERATION & MAINTENANCE, NAVY RES	1,084,007	-9,800	1,074,207
010 020 030 040	OPERATION & MAINTENANCE, MC RESERVE OPERATING FORCES OPERATING FORCES DEPOT MAINTENANCE SUSTAINMENT, RESTORATION AND MODERNIZATION BASE OPERATING SUPPORT SUBTOTAL OPERATING FORCES	103,468 18,794 32,777 111,213		103,468 18,794 32,777 111,213 <b>266,252</b>
090	ADMIN & SRVWD ACTIVITIES ADMINISTRATION SUBTOTAL ADMIN & SRVWD ACTIVITIES	12,585 <b>12,585</b>		12,585 <b>12,585</b>
080	UNDISTRIBUTED UNDISTRIBUTED Excessive standard price for fuel SUBTOTAL UNDISTRIBUTED		-300 [-300]	-300 -300
	TOTAL OPERATION & MAINTENANCE, MC RESERVE	278,837	-300	278,537
010	OPERATION & MAINTENANCE, AIR FORCE Operating forces Primary combat forces	694,702	33,100	727,802

	SEC. 4301. OPERATION AND MAINTENANCE (In Thousands of Dollars)			
Line	ltem	FY 2018 Request	House Change	House Authorized
	Adversarial Air Training- mission qualification		[10,200]	
			[0006]	
	PACAF Contingency response group		[4,200]	
	Rocket system launch program		[8,000]	
	Training equipment shortfalls		[1,700]	
020	COMBAT ENHANCEMENT FORCES	1,392,326	154,722	1,547,048
	Battlefield airman equipment assembly		[8,300]	
	Personnel recovery requirements		[200]	
	Realign European Reassurance Initiative to Base		[96,522]	
	TARP contractor specialist		[800]	
	Training equipment shortfalls		[6,000]	
	Training specialist contract		[400]	
	Unified capabilities		[42,200]	
030	AIR OPERATIONS TRAINING (0JT, MAINTAIN SKILLS)	1,128,640	51,300	1,179,940
	F-35 maintenance instructors		[49,700]	
	Readiness decision support enterprise		[1,600]	
040	DEPOT PURCHASE EQUIPMENT MAINTENANCE	2,755,367	117,721	2,873,088
	Aircraft depot level reparables		[92,100]	
	Battlefield airman equipment		[7,100]	
	Realign European Reassurance Initiative to Base		[18,521]	
020	FACILITIES SUSTAINMENT, RESTORATION & MODERNIZATION	3,292,553	22,700	3,315,253
	Realign European Reassurance Initiative to Base		[22,700]	
090	CONTRACTOR LOGISTICS SUPPORT AND SYSTEM SUPPORT	6,555,186	201,779	6,756,965
	Aircraft depot level repairables		[177,700]	
	E4B maintenance personnel		[1,000]	
	EC-130H service life extension		[12,000]	
	Realign European Reassurance Initiative to Base		[4,279]	

070	Sustain C-37B	4,135,330	[6,800]	4,201,997
080	Realign European Reassurance Initiative to Base	5.985.232	[66,667] $105.305$	6.090.537
	Application hosting/MSO		[27,000]	
	Cloud mgration		[25,600]	
	Realign European Reassurance Initiative to Base		[33,705]	
060	GLOBAL C31 AND EARLY WARNING	847,516	129,700	977,216
	Aviation readiness shortfalls		[2,000]	
	Cyber readiness shortfalls		[35,300]	
	Cyber security readiness shortfalls		[57,500]	
	Realign European Reassurance Initiative to Base		[2,000]	
	Space based readiness shortfalls		[32,900]	
100	OTHER COMBAT OPS SPT PROGRAMS	1,131,817	121,562	1,253,379
	Anti-terrorism force protection		[10,000]	
	Cyber readiness shortfalls		[4,000]	
	Cyber training readiness shortfalls		[11,000]	
	E00 training and readiness shortfalls		[5,400]	
	Installation processing nodes		[51,400]	
	ISR sustainment and readiness		[008'6]	
	PACAF- restore contingency response group		[10,100]	
	Realign European Reassurance Initiative to Base		[19,562]	
	Tailored OPIR intel products		[300]	
120	LAUNCH FACILITIES	175,457		175,457
130	STEMS	353,458	188,300	541,758
	Command and Control sustainment and readiness		[47,100]	
			[15,000]	
	Space based sustainment and readiness shortfalls		[126,200]	
160	US NORTHCOM/NORAD	189,891		189,891
170	US STRATCOM	534,236		534,236
180	US CYBERCOM	357,830		357,830

	House House Change Authorized	168,208 2,280 533 1,091,655 1,192,856 31,985,073	6,400 1,577,097 [1.800]	[4,600] 158,070 288,311 [22,600]	[22,600] [2,900] [10,100] [99,870] <b>164,470</b> 1,865,408	113,722 24,804 95,733 395,476 501,599 287,500 91,384 166,795
	FY 2018 H Request C	168,208 2,280 533 1,091,655 <b>30,792,217</b>	1,570,697	130,241	1,700,938	113,722 24,804 95,733 395,476 501,599 287,500 91,384 166,795
SEC. 4301. OPERATION AND MAINTENANCE (In Thousands of Dollars)	ltem	US CENTCOM US SOCOM US TRANSCOM CLASSIHED PROGRAMS SUBTOTAL OPERATING FORCES	MOBILIZATION AIRLIFT OPERATIONS		BEAR PACOM BEAR PACOM spares BEAR PACOM spares PACAF Contingency response group Realign European Reassurance Initiative to Base SUBTOTAL MOBILIZATION	Training and recruiting  OFFICER ACQUISITION  RECRUIT TRAINING  RESERVE OFFICERS TRAINING  SPECIALIZED SKILL TRAINING  FLIGHT TRAINING  PROFESSIONAL DEVELOPMENT EDUCATION  TRAINING SUPPORT  TRAINING AND ADVERTISING
	Line	190 200 210 215	220	230		270 280 290 320 330 340 350

380 390 400 410	EXAMINING OFF-DUTY AND VOLUNTARY EDUCATION CIVILIAN EDUCATION AND TRAINING JUNIOR ROTC SUBTOTAL TRAINING AND RECRUITING	4,134 222,691 171,974 60,070 <b>2,135,882</b>		4,134 222,691 171,974 60,070 <b>2,135,882</b>
420	ADMIN & SRVWD ACTIVITIES LOGISTICS OPERATIONS	805,453	3,000	808,453
430	Realign European Reassurance Initiative to Base	127,379	[3,000]	127,379
480	SERVICEWIDE COMMUNICATIONS Program decrease	432,172	-10,000	422,172
490	OTHER SERVICEWIDE ACTIVITIES	1,175,658	000'6-	1,166,658
200	CIVIL AIR PATROL Civil dir Patrol	26,719	3,100	29,819
530 535	INTERNATIONER SUPPORT CLASSIFIED PROGRAMS SUBTOTAL ADMIN & SRVWD ACTIVITIES	76,878 1,244,653 <b>4,800,195</b>	[3,100] -12,900	76,878 1,244,653 <b>4,787,295</b>
540	UNDISTRIBUTED UNDISTRIBUTED Excessive standard price for fuel		-389,600 [-135,400] [-84,300]	-389,600
	Historical unobligated balances		[—169,900] — <b>389,600</b>	-389,600
	TOTAL OPERATION & MAINTENANCE, AIR FORCE	39,429,232	954,826	40,384,058

OPERATION & MAINTENANCE, AF RESERVE OPERATING FORCES

	SEC. 4301. OPERATION AND MAINTENANCE (In Thousands of Dollars)			
Line	ltem	FY 2018 Request	House Change	House Authorized
010 020 030 040 050	PRIMARY COMBAT FORCES MISSION SUPPORT OPERATIONS DEPOT PURCHASE EQUIPMENT MAINTENANCE FACILITIES SUSTAINMENT, RESTORATION & MODERNIZATION CONTRACTOR LOGISTICS SUPPORT AND SYSTEM SUPPORT C—17 CLS workload C—17 CLS workload C—17 depat-level repairable BASE SUPPORT SUBTOTAL OPERATING FORCES	1,801,007 210,642 403,867 124,951 240,835 371,878 3,153,180	17,800 [5,700] [12,100]	1,801,007 210,642 403,867 124,951 258,635 371,878 3,170,980
070 080 090 100	ADMINISTRATION AND SERVICEWIDE ACTIVITIES ADMINISTRATION RECRUITING AND ADVERTISING MILITARY MANPOWER AND PERS MGMT (ARPC) OTHER PERS SUPPORT (DISABILITY COMP) AUDIOVISUAL SUBTOTAL ADMINISTRATION AND SERVICEWIDE ACTIVITIES	74,153 19,522 12,765 7,495 392		74,153 19,522 12,765 7,495 392 <b>114,327</b>
120	UNDISTRIBUTED UNDISTRIBUTED Excessive standard price for fuel  Subtotal undistributed  Total operation & Maintenance, af reserve	3,267,507	-21,900 [-21,900] - <b>21,900</b>	-21,900 - <b>21,900</b> 3,263,407

OPERATION & MAINTENANCE, ANG OPERATING FORCES

010	ARCRAFT OPERATIONS Additional training man days	3,175,055	90,900	3,265,955
020	Two C–130 simulators	746,082	[36,000] 55,600 [37,100]	801,682
030 040 050	Restore support operations  DEPOT PURCHASE EQUIPMENT MAINTENANCE FACILITIES SUSTAINMENT, RESTORATION & MODERNIZATION CONTRACTOR LOGISTICS SUPPORT AND SYSTEM SUPPORT  C-130 propulsion improvements Maintenance for RC-26 a/c	867,063 325,090 1,100,829	[18,500] 51,300 [16,100] [28,700]	867,063 325,090 1,152,129
090	Sustain DCGS BASE SUPPORT Additional training man days SUBTOTAL OPERATING FORCES	583,664 <b>6,797,783</b>	[6,500] 9,800 [9,800] <b>207,600</b>	593,464 <b>7,005,383</b>
070	ADMINISTRATION AND SERVICE-WIDE ACTIVITIES ADMINISTRATION RECRUITING AND ADVERTISING SUBTOTAL ADMINISTRATION AND SERVICE-WIDE ACTIVITIES	44,955 97,230 <b>142,185</b>		44,955 97,230 <b>142,185</b>
060	UNDISTRIBUTED UNDISTRIBUTED Excessive standard price for fuel SUBTOTAL UNDISTRIBUTED		-43,300 [-43,300] - <b>43,300</b>	-43,300 - <b>43,300</b>
	TOTAL OPERATION & MAINTENANCE, ANG	6,939,968	164,300	7,104,268
010	OPERATION AND MAINTENANCE, DEFENSE-WIDE OPERATING FORCES JOINT CHIEFS OF STAFF JOINT CHIEFS OF STAFF—CE2T2	440,853 551,511		440,853 551,511

	SEC. 4301. OPERATION AND MAINTENANCE (In Thousands of Dollars)			
Line	ltem	FY 2018 Request	House Change	House Authorized
040	SPECIAL OPERATIONS COMMAND/OPERATING FORCES	5,008,274	95,970	5,104,244
	Realign European Reassurance Initiative to base Substorate Substorate Operating Forces	6,000,638	[92,970] <b>95,970</b>	6,096,608
020	TRAINING AND RECRUITING Defense acquisition university	144,970		144,970
090	JOINT CHIEFS OF STAFF	84,402		84,402
080	SPECIAL OPERATIONS COMMAND/TRAINING AND RECRUITING	379,462 <b>608,834</b>		379,462 <b>608,834</b>
	ADMIN & SRVWIDE ACTIVITIES			
060	CIVIL MILITARY PROGRAMS	183,000	26,500	209,500
	National Guard Youth Challenge		[1,500]	
	STANDAGE		[20,000]	
110		597,836	50060	597,836
120	DEFENSE CONTRACT MANAGEMENT AGENCY	1,439,010		1,439,010
130		807,754		807,754
140		2,009,702		2,009,702
160		24,207		24,207
170	DEFENSE LOGISTICS AGENCY	400,422	14,500	414,922
	Procurement Technical Assistance Program (PTAP)		[14,500]	
180	DEFENSE MEDIA ACTIVITY	217,585	-2,131	215,454
	Program decrease		[-2,500]	
	Realign European Reassurance Initiative to Base		[369]	
190	DEFENSE PERSONNEL ACCOUNTING AGENCY	131,268		131,268
200	DEFENSE SECURITY COOPERATION AGENCY	722,496	150,000	872,496

703,665 34,712 517,604 2,844,389 504,058 57,840 1,515,110	94,273 436,776 14,861,724 <b>28,292,300</b>	-204,900 - <b>204,900</b>	<b>34,792,842</b> 14,538
[150,000] 20,000 [20,000] -25,000 [-25,000] 50,000 [50,000] [56,000] [25,000]	[-17,234] [3,000] [55,320 [55,320] 315,955	-204,900 [-6,500] [-19,400] [-179,000]	207,025
683,665 34,712 542,604 2,794,389 504,058 57,840 1,488,344	94,273 436,776 14,806,404 <b>27,976,345</b>		<b>34,585,817</b> 14,538
Realign European Reassurance Initiative to Base  DEFENSE SECURITY SERVICE  Joint Acquisition Protection and Exploitation Cell (JAPEC)  DEFENSE TECHNOLOGY SECURITY ADMINISTRATION  DEFENSE THEAT REDUCTION AGENCY  Efficiencies from DTRA/IDO integration  DEPARTMENT OF DEFENSE EDUCATION ACTIVITY  Impact Aid  MISSILE DEFENSE AGENCY  OFFICE OF ECONOMIC ADJUSTMENT  OFFICE OF THE SECRETARY OF DEFENSE  Implementation of Military Housing Fall Prevention  Implementation of transparency of Defense Business System Data	nmission to Assess the Threat from Electromagnetic COMMAND/ADMIN & SVC-WIDE ACTIVITIES JARIERS SERVICES AS AN Reassurance Initiative to Base IN & SRVWIDE ACTIVITIES	UNDISTRIBUTED UNDISTRIBUTED UNDISTRIBUTED  Excessive standard price for fuel  Foreign Currency adjustments  Historical unobligated balances  SUBTOTAL UNDISTRIBUTED	TOTAL OPERATION AND MAINTENANCE, DEFENSE-WIDE
210 230 240 260 270 270 290 300	310 320 325	330	010

	SEC. 4301. OPERATION AND MAINTENANCE (In Thousands of Dollars)			
Line	ltem	FY 2018 Request	House Change	House Authorized
020 030 050	OVERSEAS HUMANITARIAN, DISASTER AND CIVIC AID COOPERATIVE THREAT REDUCTION ENVIRONMENTAL RESTORATION, ARMY Department of Defense Cleanup and Removal of Petroleum, Oil, and Lubricant associated with the Prinz	104,900 324,600 215,809		104,900 324,600 215,809
090	Eugen Program decrease ENVIRONMENTAL RESTORATION, NAVY PFOA/PFOS Remediation	281,415	[6,000] [-6,000] 42,234 [30,000]	323,649
070	Program increase  ENVIRONMENTAL RESTORATION, AIR FORCE  DEAN JOECH DECANORIOS Demociations	293,749	30,000	323,749
080	ENVIRONMENTAL RESTORATION, DEFENSE ENVIRONMENTAL RESTORATION FORMERLY USED SITES TOTAL MISCELLANEOUS APPROPRIATIONS	9,002 208,673 <b>1,452,686</b>	[30,000] 72,234	9,002 208,673 <b>1,524,920</b>
	TOTAL OPERATION & MAINTENANCE	188,570,298	3,074,093	192,294,497
SEC. 430;	SEC. 4302. OPERATION AND MAINTENANCE FOR OVERSEAS CONTINGENCY OPERATIONS.			
	SEC. 4302. OPERATION AND MAINTENANCE FOR OVERSEAS CONTINGENCY OPERATIONS (In Thousands of Dollars)	NS		

OPERATION & MAINTENANCE, ARMY OPERATING FORCES

House Authorized

House Change

FY 2018 Request

ltem

Line

010		828,225	-683,591	144,634
030	Kealign European Reassurance Initiative to Base	25,474	[-683,591]	25,474
040	THEATER LEVEL ASSETS	1,778,644		1,778,644
020	Land forces operations support	260,575		260,575
090	AVIATION ASSETS	284,422	-150,100	134,322
	Realign European Reassurance Initiative to Base		[-150,100]	
070	FORCE READINESS OPERATIONS SUPPORT	2,784,525	-8,969	2,775,556
	Realign European Reassurance Initiative to Base		[-8,969]	
080		502,330		502,330
060	LAND FORCES DEPOT MAINTENANCE	104,149	-104,149	0
	Realign European Reassurance Initiative to Base		[-104,149]	
100	BASE OPERATIONS SUPPORT	80,249	-48,707	31,542
	Realign European Reassurance Initiative to Base		[-48,707]	
110	FACILITIES SUSTAINMENT, RESTORATION & MODERNIZATION	32,000	-32,000	0
	Realign European Reassurance Initiative to Base		[-32,000]	
140	ADDITIONAL ACTIVITIES	6,151,378	-126,250	6,025,128
	Realign European Reassurance Initiative to Base		[-126,250]	
150	COMMANDERS EMERGENCY RESPONSE PROGRAM	5,000		2,000
160	RESET	864,926		864,926
180	US AFRICA COMMAND	186,567		186,567
190	US EUROPEAN COMMAND	44,250	-44,250	0
	Realign European Reassurance Initiative to Base		[-44,250]	
		13,932,714	-1,198,016	12,734,698
	MOBILIZATION			
230	٠,	26,500	-56,500	0
	Nearigh European Reassurance initiative to base	56,500	[-26,500] - <b>56,500</b>	0
390	ADMIN & SRVWIDE ACTIVITIES SERVICEWIDE TRANSPORTATION	755,029	-96,150	658,879

	SEC. 4302. OPERATION AND MAINTENANCE FOR OVERSEAS CONTINGENCY OPERATIONS (In Thousands of Dollars)	SNC		
Line	ltem	FY 2018 Request	House Change	House Authorized
400	Realign European Reassurance Initiative to Base	16,567	[-96,150]	5,118
410	Kealign European Keassurance Initiative to Base	6,000	[-11,449]	6,000
460	OTHER PERSONNEL SUPPORT REAL ESTATE MANAGEMENT	107,091 165,280		107,091 165,280
265	CLASSIFIED PROGRAMS	1,082,015	-65,825 [-65,825]	1,016,190
	SUBTOTAL ADMIN & SRVWIDE ACTIVITIES	2,137,189	-173,424	1,963,765
	TOTAL OPERATION & MAINTENANCE, ARMY	16,126,403	-1,427,940	14,698,463
	OPERATION & MAINTENANCE, ARMY RES Operating forces			
020	ECHELONS ABOVE BRIGADE	4,179	15,643	19,822
030	THEATER LEVEL ASSETS		4,718	4,718
040	Training and operations of USAR early deploying units	2,132	[4,718] 12,918	15,050
090	Training and operations of USAR early deploying units	779	[12,918]	779
060	BASE OPERATIONS SUPPORT	17,609	22 270	17,609
		24,699	33,279	57,978

	OPERATION & MAINTENANCE, ARNG		
	OPERATING FORCES		
010	Maneuver units	41,731	41,731
020	T BR	762	762
030	ECHELONS ABOVE BRIGADE	11.855	11,855
040		204	204
090	AVIATION ASSETS	27,583	27,583
070	(1)	5,792	5,792
100		18,507	18,507
120	$\overline{}$	937	937
	SUBTOTAL OPERATING FORCES	107,371	107,371
150	ADMIN & SRVWD ACTIVITIES SERVICEWIDE COMMUNICATIONS SUBTOTAL ADMIN & SRVWD ACTIVITIES	740 <b>740</b>	740 <b>740</b>
	TOTAL OPERATION & MAINTENANCE, ARNG	108,111	108,111
6	AFGHANISTAN SECURITY FORCES FUND MINISTRY OF DEFENSE		
010	SUSTAINMENT	2,660,855	2,660,855
020	INTRADITUTE AND TRANCHURE.	21,000	21,000
070	EQUI MELLI MATO ENDATIONS	405 117	004,760 ADE 117
2	SUBTOTAL MINISTRY OF DEFENSE	3,771,758	3,771,758
0,00	MINISTRY OF INTERIOR	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	066 674
060	:	39.595	39.595
070	EQUIPMENT AND TRANSPORTATION	75,976	75,976
080	Training and operations	94,612	94,612
	SUBTOTAL MINISTRY OF INTERIOR	1,165,757	1,165,757

Line   TOTAL AFGHANISTAN SECURITY FORCES FUND	SEC. 4302. OFFICIAL AND MAINTENANCE FOR OVERSEAS CONTINGENCY OFFICIALS (In Thousands of Dollars)	CNOIN		
COUNTER-ISIS TRAIN & EQUIP FUND COUNTER-ISIS TRAIN AND EQUIP FUND COUNTER-ISIS TRAIN AND EQUIP FUND SYRIA SUBTOTAL COUNTER-ISIS TRAIN AND EQUIP FUND TOTAL COUNTER-ISIS TRAIN & EQUIP FUND OPERATION & MAINTENANCE, NAVY OPERATION & MAINTENANCE, NAVY OPERATION TECHNICAL DATA & ENGINEERING SERVICES AND OPERATIONS AND SAFETY SUPPORT ARCRAFT DEPOT MAINTENANCE ARCRAFT DEPOT MAINTENANCE ARCRAFT DEPOT OPERATIONS SUPPORT ARCRAFT DEPOT OPERATIONS SUPPORT AND OTHER SHIP OPERATIONS REABING EUROPEAN REASSULANCE SHIP OPERATIONS SUPPORT & REALISTIVE to Base SHIP OPERATIONS SUPPORT & REALISTIVE TO BASE SHIP OPERATIONS SUPPORT & TRAINING SHIP DEPOT MAINTENANCE SHIP DEPOT MAINTENANCE REPAIRS SUPPORT & TRAINING SHIP DEPOT MAINTENANCE	ltem	FY 2018 Request	House Change	House Authorized
COUNTER-ISIS TRAIN GOUNTER-ISIS TRAIN IRAQ SYRIA SUBTOTAL COUNT TOTAL TO	FUND	4,937,515		4,937,515
SYRIA  SUBTOTAL COUNT  TOTAL COUNT  TOTAL COUNT  OPERATION & MAINTI  OPERATION & MAINTI  RABIGE LUNDES  AIR SYSTEMS SUPPOF  AIR SYSTEMS OFFOT OPE  AIR SYSTEMS OFFOT OPE  AIR SYSTEMS OFFOT OPE  AIR SYSTEMS SUPPOF  AIR SYSTEMS OFFOT OPE  AIR SYSTEMS SUPPOF  AIR SYSTEMS SUPPOF  AIR SYSTEMS SUPPOF  AIR SYSTEMS SUPPOF  AIR STATION LOGISTICS  SHIP OPERATIONS SU  SHIP OPERATIONS SU  SHIP DEPOT MAINTEN  Repairs related		1.269.000		1.269.000
DPERATION & MAINTI OPERATION & MAINTI OPERATING FORCES MISSION AND OTHER REALIGN ELUOPER AVIATION TECHNICAL AIR OPERATIONS SUPPOR AIRCRAFT DEPOT WAIL AIRCRAFT DEPOT OPE AVIATION LOGISTICS . MISSION AND OTHER REALIGN ELUOPER SHIP OPERATIONS SUI SHIP OPERATIONS SUI SHIP DEPOT MAINTEN REALIGN ELUOPER SHIP OPERATIONS SUI SHIP DEPOT MAINTEN	P FUND (CTEF)	· <del>-</del>		500,000 <b>1,769,000</b>
OPERATION & MAINTI OPERATING FORCES MISSION AND OTHER REALIGN ELUOPEA AND AIR SYSTEMS SUPPOR AIR DEPOT MAINTEN REPAIRS PEPORT MAINTEN REPAIRS SUPPORT	ONI	1,769,000		1,769,000
MISSION AND OTHER MISSION AND OTHER Realign Europea AN OPERATIONS AND AIR SYSTEMS SUPPOR AIRCRAFT DEPOT MAIL AIRCRAFT DEPOT MAIL AIRCRAFT DEPOT OPE AVIATION LOGISTICS. MISSION AND OTHER Realign Europea SHIP OPERATIONS SUI SHIP DEPOT MAINTEN Repairs related				
Nearight Luidpea AVIATION TECHNICAL AIR OPERATIONS AND AIR SYSTEMS SUPPOR AIRCRAFT DEPOT ONE AVIATION LOGISTICS - MISSION AND OTHER Realign Europea SHIP OPERATIONS SUI SHIP DEPOT MAINTEN Repairs related	Doca	. 412,710	4,750	407,960
AR SYSTEMS SUPPORAIR SYSTEMS SUPPORAIR ARCRAFT DEPOT MAIL ANATION LOGISTICS.  MISSION AND OTHER Realign Europea SHIP OPERATIONS SUISHIP DEPOT MAINTEN	III Neassulaide IIIIIdaive to base DATA & ENGINEERING SERVICES SAFFY SIIDPORT	1,750	[-4,700]	1,750
AIRCRAFT DEPOT MAI AIRCRAFT DEPOT OPE AVIATION LOGISTICS . MISSION AND OTHER Realign Europea SHIP OPERATIONS SUI SHIP DEPOT MAINTEIN Repairs related				144,030
AVIATION LOGISTICS . MISSION AND OTHER Realign Europea SHIP OPERATIONS SUI SHIP DEPOT MAINTEN Repairs related		211,196		211,196 1.921
Realign Europea Realign Europea SHIP OPERATIONS SUI SHIP DEPOT MAINTEN Repairs related		102,834	7736	102,834
SHIP OPERATIONS SUI SHIP DEPOT MAINTEN Repairs related	Base	000,400	-3,07 [ $-3,677$ ]	071,10
SHIP DEPOI MAINIEN Repairs related	PPORT & TRAINING		i L	19,627
		2,483,1/9	65,000 [65,000]	2,548,179
130 COMBAT COMMUNICATIONS AND ELECTRONIC WARFARE	TIONS AND ELECTRONIC WARFARE	58,886	-5,400	53,486

ANGREAGE TACTICS  WARFARE TACTICS  WARFARE TACTICS  WARFARE TACTICS  WARFARE TACTICS  WARFARE TACTICS  OPERATIONAL METEOROLOGY AND OCEANOGRAPHY  COMBAIT SUPPORT FORCES  Realign European Reassurance Initiative to Base  EQUIPMENT MAINTENANCE AND DEPOT OPERATIONS SUPPORT  Realign European Reassurance Initiative to Base  EQUIPMENT MAINTENANCE AND DEPOT OPERATIONS SUPPORT  RRAINING SUPPORT  SUSTAINMENT, RESTORATION AND MODERNIZATION  SUBTOTAL OPERATING SUPPORT  SUBTOTAL OPERATING SUPPORT  SUBTOTAL MEDILIZATION  SHP ACTIVATIONS/INACTIVATIONS  REVEDITIONARY HEALIT SRAVICES SYSTEMS  CAST GUARD SUPPORT  SUBTOTAL MEDILIZATION  TRAINING AND RECRUTING  SPECIALIZED SKILL TRAINING  SPECIALIZED SKILL TRAINING  SPECIALIZED SKILL TRAINING  ADMIN & SRAWD ACTIVITIES  ADMIN & SERVICE MODE TRAINING SAVICES  ADMIN SERVICE AND OVERSIGHT  RESPONSITION AND VERSIGHT  RESERVICEMENT SERVICES  ACQUISITION, LOGISTICS, AND OVERSIGHT  INVESTIGATIVE AND SECURITY SERVICES  CLASSIFED PROGRAMS	C		000	[-5,400]	c
Page		SPACE SYSTEMS AND SURVEILLANCE	4,400	-4,400	0
21,550				[-4,400]	
OROLOGY AND OCEANOGRAPHY     21,104       OROLOGY AND OCEANOGRAPHY     -5,984       OROCES     -5,984       FEATING END OF CRATIONS SUPPORT     -5,984       NANDE AND DEPOT OPERATIONS SUPPORT     -1,300       STEMS SUPPORT     -1,300       ORATION AND MODERNIZATION     1,898       PIPORT     1,869       NACTIVATIONS     1,869       NACTIVATIONS     11,905       SILIZATION     11,905       SURTING     43,369       STAINING     43,369       STAINING     43,369       STAINING     43,369       STAINING     43,369       STAINING     175,659       STAINING     43,369       STAINING     7,356       SPORTATION     2,446       SPORTATION     1,528       STAINING     1,528       SECURITY SERVICES     1,528       SECURITY SERVICES     1,275			21,550		21,550
Correst         605,936         -5,984           Bean Reassurance Initiative to Base         -5,984           NAVICE AND DEPOT OPERATIONS SUPPORT         11,433           TIL ASSURANCE AND DEPOT OPERATIONS SUPPORT         1,300           STEMS SUPPORT         1,300           PERTINES SUPPORT         1,869           NACTIVATIONS         1,1905           NACTIVATIONS         11,565           SILIZATION         43,369           AND PERSONNEL MANAGEMENT         43,369           AND PERSONNEL MANAGEMENT         7,356           SPORTATION         175,659           AND PERSONNEL MANAGEMENT         7,356           SPORTATION         1,528           AND PERSONNEL MANAGEMENT         1,528           AND MINISTER         1,528           AND MINISTER         1,528		OPERATIONAL METEOROLOGY AND OCEANOGRAPHY	21,104		21,104
Page		COMBAT SUPPORT FORCES	605,936	-5,984	599,952
NAMICE AND DEPOT OPERATIONS SUPPORT 11,433 11,433 1489  SINGE		Realign European Reassurance Initiative to Base		[-5,984]	
NUCE BEAT STATE  WINCE BEAT STATE  WINCE BEAT WAS SUPPORT  WACTIVATION  WACTIVATION  RAND PERSONNEL MANAGEMENT  TICS, AND OVERSIGHT  RESERVICES  WACTIVATION  WATHANING  WACTIVATION  WACTIVATION  WACTIVATION  WATHANING  WACTIVATION  WATHANING  WACTIVATION  WACTIVATION  WATHANING  WACTIVATION  WACTIVATION  WACTIVATION  WATHANING  WACTIVATION  WACTIVATION  WATHANING  WATHANING  WATHANING  WATHANING  WATHANING  WATHANING  WATHANING  WACTIVATION  WATHANING  WATHANING  WATHA		EQUIPMENT MAINTENANCE AND DEPOT OPERATIONS SUPPORT	11,433		11,433
Realign European Reassurance Initiative to Base   F-1,300     OTHER WEAPON YSTEMS SUPPORT   31,898   31,898   31,898   31,898   31,898   31,898   31,898   31,898   31,898   32,8246   3		WEAPONS MAINTENANCE	325,011	-1,300	323,711
STEMS SUPPORT       9,598         ORATION AND MODERNIZATION       31,898         PPORT       228,246         ERATING FORCES       1,869         NLTH SERVICES SYSTEMS       11,905         ORT       11,869         INTING       43,369         RAUTING       43,369         ININING AND PERSONNEL MANAGEMENT       32,17         RAND PERSONNEL MANAGEMENT       7,356         SPORTATION       3,317         TICS, AND OVERSIGHT       9,446         SECURITY SERVICES       12,751         MAS       12,751		Realign European Reassurance Initiative to Base		[-1,300]	
ORATION AND MODERNIZATION   31,898   228,246			9,598		9,598
BASE OPERATING SUPPORT         228,246           SUBTOTAL OPERATING FORCES         5,553,751         39,489           MOBILIZATION         1,869         11,905           SHIP ACTIVATIONS/INACTIVATIONS         1,1905         11,905           COAST GUARD SUPPORT         11,905         161,885           SUBTOTAL MOBILIZATION         43,369         43,369           TRAINING AND RECRUITING         43,369         43,369           SUBTOTAL TRAINING AND RECRUITING         43,369         43,369           ADMINISTRATION         7,366         57,388           ADMINISTRATION         7,366         57,388           ACQUISITION, LOGISTICS, AND OVERSIGHT         1,578         1,578           INVESTIGATION PROGRAMS         1,575         1,2751		SUSTAINMENT, RESTORATION AND MODERNIZATION	31,898		31,898
SUBTOTAL OPERATING FORCES         5,553,751         39,489           MOBILIZATION         1,869         11,905           SHIP ACTIVATIONS/INACTIVATIONS         11,905         11,905           EXPEDITIONARY HEALTH SERVICES SYSTEMS         161,885         161,885           COAST GUARD SUPPORT         175,659         175,659           TRAINING AND RECRUITING         43,369         43,369           SUBTOTAL TRAINING AND RECRUITING         43,369         43,369           ADMIN & SRVWD ACTIVITES         43,369         43,369           ADMINISTRATION         3,217         7,356           MILITARY MANDOWER AND PERSONNEL MANAGEMENT         2,369           ACQUISITION, LOGISTICS, AND OVERSIGHT         9,446           INVESTIGATIVE AND SCURITY SERVICES         1,228           CLASSIFIED PROGRAMS         1,2751		BASE OPERATING SUPPORT	228,246		228,246
1,869   1,905   1,90		RATING	5,553,751	39,489	5,593,240
ALTH SERVICES SYSTEMS 11,905 PORT 161,885 PORT 161,885 INCLURATION 43,369 INCLURATION 3,217 INCLURATION 3,217 INCLURATION 1,228 INCLURATION 1,228 INCLURATION 1,278 INCLURATIO		MOBILIZATION SHIP ACTIVATIONS/INACTIVATIONS	1,869		1,869
TOTAL   TOTA		EXPEDITIONARY HEALTH SERVICES SYSTEMS	11,905		11,905
TRAINING		CUAS) GUARD SUPPURI SUBTOTAL MOBILIZATION	175.659		175.659
TRAINING AND RECRUITING 43,369  43,369  43,369  43,369  43,369  43,369  43,369  43,369  43,369  43,369  43,369  43,369  3,217  7,356  SPORTATION 67,938  SITCS, AND OVERSIGHT 67,938  SITCS, AND OVERSIGHT 9,446  1,528  AMS 12,751		TRAINING AND RECRUITING			
43,369 3,217 7,356 67,938 9,446 1,528 12,751		SPECIALIZED SKILL TRAINING	43,369		43,369
3,217 7,356 67,938 9,446 1,528 12,751		SUBTOTAL TRAINING AND RECRUITING	43,369		43,369
7,217 7,356 67,938 9,446 1,528 12,751		ADMIN & SRVWD ACTIVITIES	710.6		7100
67,938 67,938 9,446 1,528 12,751		ADMINISTRATION	3,21, 7.356		7,217
TICS, AND OVERSIGHT 9,446 SECURITY SERVICES 1,528 MS 12,751		SERVICEWIDE TRANSPORTATION	67.938		67.938
1,528		ACQUISITION, LOGISTICS, AND OVERSIGHT	9,446		9,446
MS		Investigative and security services	1,528		1,528
		CLASSIFIED PROGRAMS	12,751		12,751

	SEC. 4302. OPERATION AND MAINTENANCE FOR OVERSEAS CONTINGENCY OPERATIONS (In Thousands of Dollars)	SNO		
Line	ltem	FY 2018 Request	House Change	House Authorized
	SUBTOTAL ADMIN & SRVWD ACTIVITIES	102,236		102,236
	TOTAL OPERATION & MAINTENANCE, NAVY	5,875,015	39,489	5,914,504
010	OPERATION & MAINTENANCE, MARINE CORPS OPERATING FORCES OPERATIONAL FORCES	710,790	-164,733	546,057
020 030 070	Realign European Reassurance Initiative to base FIELD LOGISTICS DEPOT MAINTENANCE BASE OPERATING SUPPORT SUBTOTAL OPERATING FORCES	242,150 52,000 17,529 <b>1,022,469</b>	[-164,/33] - <b>164,733</b>	242,150 52,000 17,529 <b>857,736</b>
120	TRAINING AND RECRUITING TRAINING SUPPORT SUBTOTAL TRAINING AND RECRUITING	29,421 <b>29,421</b>		29,421 <b>29,421</b>
160 215	ADMIN & SRVWD ACTIVITIES SERVICEWIDE TRANSPORTATION CLASSIFIED PROGRAMS SUBTOTAL ADMIN & SRVWD ACTIVITIES	61,600 3,150 <b>64,750</b>		61,600 3,150 <b>64,750</b>
	TOTAL OPERATION & MAINTENANCE, MARINE CORPS	1,116,640	-164,733	951,907
030	OPERATION & MAINTENANCE, NAVY RES Operating forces Aircraft depot maintenance	14,964		14,964

080	COMBAT SUPPORT FORCES	9,016 <b>23,980</b>		9,016 <b>23,980</b>
	TOTAL OPERATION & MAINTENANCE, NAVY RES	23,980		23,980
010	OPERATION & MAINTENANCE, MC RESERVE OPERATING FORCES OPERATING FORCES BASE OPERATING SUPPORT SUBTOTAL OPERATING FORCES	2,548 819 <b>3,367</b>		2,548 819 <b>3,367</b>
	TOTAL OPERATION & MAINTENANCE, MC RESERVE	3,367		3,367
5	OPERATION & MAINTENANCE, AIR FORCE OPERATING FORCES DEMANDAL CORDER	340,040		300 0 80
010	COMBAT ENHANCEMENT FORCES	246,233 1.394.962	-96.522	246,233 1.298,440
	Realign European Reassurance Initiative to Base		[-96,522]	
030	AIR OPERATIONS TRAINING (OJT, MAINTENANCE)	5,450	10 470	5,450
040	Realign European Reassurance Initiative to Base	000,660	[-18,521]	600,617
020	Restoration of Damaged U-2 Aircraft FACILITIES SUSTAINMENT, RESTORATION & MODERNIZATION	113,131	[38,000] -22,700	90,431
090	Realign European Reassurance Initiative to Base	2.039.551	[–22,700] –4.279	2,035,272
070	Realign European Reassurance Initiative to Base	2.059.363	[-4,279] -66,667	1.992.696
080	Reassurance Initiative to Base	1.088,946	[-66,667] $-13,705$	1,075,241
060	Realign European Reassurance Initiative to Base	15,274	[-13,705] -2,000 [-2,000]	13,274

	House Authorized	.2 178,528 .21	385	381	35,239	159,520 19.000		1,952,241	0 1,425,716	0] 0 113 957		0 1,539,673	Ċ	300	06	25,675	879	1,114 1,426
	House Change	-19,562 [-19,562]					205.05	-203,93b	-4,600	[-4,600] -99,870	[-99,870]	-104,470						
ONS	FY 2018 Request	198,090	385	381	35,239	159,520 19.000	58,098	8,138,203	1,430,316	213 827		1,644,143	c	300	06	25,675	879	1,114 1,426
SEC. 4302. OPERATION AND MAINTENANCE FOR OVERSEAS CONTINGENCY OPERATIONS (In Thousands of Dollars)	ltem	OTHER COMBAT OPS SPT PROGRAMS	LAUNCH FÄCILITIES SPACE CONTROL SYSTEMS	US NORTHCOM/NORAD	US CYBERCOM	US CENICOM US SOCOM	PROGRA	SUBIUIAL UPERAIING FURCES	MUBILIZATION AIRLIFT OPERATIONS	Realign European Reassurance Initiative to Base	Realign European Reassurance Initiative to Base	SUBTOTAL MOBILIZATION	TRAINING AND RECRUITING	UFFICER ACQUINT TRAINING	RESERVE OFFICERS TRAINING CORPS (ROTC)	SPECIALIZED SKILL TRAINING		PROFESSIONAL DEVELOPMENT EDUCATION TRAINING SUPPORT
	Line	100	120	160	180	190 200	215		220	230			6	280	290	320	330	340 350

	SUBTOTAL TRAINING AND RECRUITING	29,782		29,782
420	ADMIN & SRVWD ACTIVITIES Logistics operations Realign Eurodean Reassurance Initiative to Base	151,847	-3,000 [-3,000]	148,847
430	TECHNICAL SUPPORT ACTIVITIES	8,744		8,744
480	SERVICEWIDE COMMUNICATIONS OTHER SERVICEMINE ACTIVITIES	129,508		129,508
530	UTERNATIONAL SUPPORT	04,110 120		64,110 120
535	CLASSIFIED PROGRAMS  SUBTOTAL ADMIN & SRVWD ACTIVITIES	53,255 <b>434,167</b>	-3,000	53,255 <b>431,167</b>
	TOTAL OPERATION & MAINTENANCE, AIR FORCE	10,266,295	-313,426	9,952,869
030	OPERATION & MAINTENANCE, AF RESERVE OPERATING FORCES DEPOT PURCHASE EQUIPMENT MAINTENANCE DACE CURDADET	52,323		52,323
000	SUBTOTAL OPERATING FORCES	58,523 58,523		58,523
	TOTAL OPERATION & MAINTENANCE, AF RESERVE	58,523		58,523
020	OPERATION & MAINTENANCE, ANG OPERATING FORCES MISSION SUPPORT OPERATIONS RASE CUIPPORT	3,468 11 932		3,468
8	SUBTOTAL OPERATING FORCES	15,400		15,400
	TOTAL OPERATION & MAINTENANCE, ANG	15,400		15,400

OPERATION AND MAINTENANCE, DEFENSE-WIDE

	SEC. 4302. OPERATION AND MAINTENANCE FOR OVERSEAS CONTINGENCY OPERATIONS (In Thousands of Dollars)	SNO		
Line	Item	FY 2018 Request	House Change	House Authorized
	OPERATING FORCES IOINT CHIEFS OF STAFF	4 841		4 841
040	SPCIAL OPERATIONS COMMAND/OPERATING FORCES.  Papalian European Passeurance Initiative to Base	3,305,234	-68,830	3,236,404
	Unforded Requirement - Joint Task Forter Platform Expansion		[6,300]	
	Untunded Requirement-Publicty Available Information (FAI) Capability Acceleration Subtotal operating forces	3,310,075	[20,840] <b>-68,830</b>	3,241,245
	ADMIN & SRVWIDE ACTIVITIES			
0		9,853		9,853
120		21,317		21,317
o ,	DEFENSE INFORMATION SYSTEMS AGENCY	64,137		64,1
0 0	DEFENSE LEGAL SERVICES AGENCY	115,000	C	115,000
>	PETENNE MEDIA ACTIVILI	13,233	_369 <u>]</u>	12,0
200	DEFENSE SECURITY COOPERATION AGENCY	2,312,000	-300,000	2,012,000
	a		[-150,000]	
	Transfer of funds to Ukraine Security Assistance		[-150,000]	
260	DEPARTMENT OF DEFENSE EDUCATION ACTIVITY	31,000		31,0
0	OFFICE OF THE SECRETARY OF DEFENSE	34,715		34,715
0	Washington Headquarters services	3,179		3,179
5	CLASSIFIED PROGRAMS	1,797,549	-55,320	1,742,229
	Realign European Reassurance Initiative to Base		[-55,320]	
	SUBTOTAL ADMIN & SRVWIDE ACTIVITIES	4,402,005	-355,689	4,046,316

010	UKRAINE SECURITY ASSISTANCE UKRAINE SECURITY ASSISTANCE UKRAINE SECURITY ASSISTANCE		150,000	150,000
	SUBTOTAL UKRAINE SECURITY ASSISTANCE		150,000]	150,000
	TOTAL UKRAINE SECURITY ASSISTANCE		150,000	150,000
	TOTAL OPERATION & MAINTENANCE	48,037,028	-2,107,850	45,929,178
SEC. 430	SEC. 4303. OPERATION AND MAINTENANCE FOR OVERSEAS CONTINGENCY OPERATIONS FOR BASE REQUIREMENTS.	:MENTS.		
	SEC. 4303. OPERATION AND MAINTENANCE FOR OVERSEAS CONTINGENCY OPERATIONS FOR BASE REQUIREMENTS (In Thousands of Dollars)	REQUIREMENTS		
Line	ltem	FY 2018 Request	House Change	House Authorized
5	OPERATION & MAINTENANCE, ARMY OPERATING FORCES FACH THE CHEVANAMENT DESTADATION & MODERMIZATION		770 003	F 80 003
110	PROLITIES SUSTAININGENI, RESTORATION & MODERNIZATION  Demolition of excess facilities  Demolition of excess facilities		[50,000]	023,047
	restore restoration and modernization snortialls		[154,500] [424,547]	
	SUBTOTAL OPERATING FORCES		629,047	629,047
	TOTAL OPERATION & MAINTENANCE, ARMY		629,047	629,047
	OPERATION & MAINTENANCE, ARMY RES Operating forces			
100	FACILITIES SUSTAINMENT, RESTORATION & MODERNIZATION  Demolition of excess facilities  Restore restoration and modernization shortfalls		82,619 [25,000] [12,300]	82,619
	Nestole restalation and modernization shortrains		[17,000]	

ltem	FY 2018 Request	House Change	House Authorized
Restore sustainment shortfalls Substance Subst		[45,319] <b>82,619</b>	82,619
TOTAL OPERATION & MAINTENANCE, ARMY RES		82,619	82,619
OPERATION & MAINTENANCE, ARNG OPERATING FORCES FACILITES SUSTAINMENT, RESTORATION & MODERNIZATION Demolition of excess facilities Restore restoration and modernization shortfalls Restore sustainment shortfalls SUBFOTAL OPERATING FORCES		173,900 [25,000] [35,200] [113,700]	173,900
TOTAL OPERATION & MAINTENANCE, ARNG		173,900	173,900
OPERATION & MAINTENANCE, NAVY OPERATING FORCES SUSTAINMENT, RESTORATION AND MODERNIZATION Demolition of excess facilities		414,200 [50,000]	414,200
Restore restoration and modernization shortfalls		[87,200] [277,000] <b>414,20</b>	414,200
TOTAL OPERATION & MAINTENANCE, NAVY		414,200	414,200

OPERATION & MAINTENANCE, MARINE CORPS OPERATING FORCES

090	SUSTAINMENT, RESTORATION & MODERNIZATION  Demolition of excess facilities  Restore restoration and modernization shortfalls  Restore sustainment shortfalls  SUBTOTAL OPERATING FORCES	217,487 [50,000] [35,300] [132,187] <b>217,487</b>	217,487
	TOTAL OPERATION & MAINTENANCE, MARINE CORPS	217,487	217,487
110	OPERATION & MAINTENANCE, NAVY RES OPERATING FORCES SUSTAINMENT, RESTORATION AND MODERNIZATION Restore restoration and modernization shortfalls Restore sustainment shortfalls SUBTOTAL OPERATING FORCES	11,500 [1,500] [10,000] <b>11,500</b>	11,500
	TOTAL OPERATION & MAINTENANCE, NAVY RES	11,500	11,500
030	OPERATION & MAINTENANCE, MC RESERVE OPERATING FORCES SUSTAINMENT, RESTORATION AND MODERNIZATION Restore restoration and modernization shortfalls Restore sustainment shortfalls SUBTOTAL OPERATING FORCES	7,246 [3,900] [3,346] <b>7,246</b>	7,246
	TOTAL OPERATION & MAINTENANCE, MC RESERVE	7,246	7,246
020	OPERATION & MAINTENANCE, AIR FORCE OPERATING FORCES FACILITIES SUSTAINMENT, RESTORATION & MODERNIZATION Demolition of excess facilities Restore restoration and modernization shortfalls Restore sustainment shortfalls	507,700 [50,000] [153,300] [304,400]	507,700

	SEC. 4303. OPERATION AND MAINTENANCE FOR OVERSEAS CONTINGENCY OPERATIONS FOR BASE REQUIREMENTS (In Thousands of Dollars)	REQUIREMENTS		
Line	ltem	FY 2018 Request	House Change	House Authorized
	SUBTOTAL OPERATING FORCES		507,700	507,700
	TOTAL OPERATION & MAINTENANCE, AIR FORCE		507,700	507,700
040	OPERATION & MAINTENANCE, AF RESERVE OPERATING FORCES FACILITIES SUSTAINMENT, RESTORATION & MODERNIZATION Restore restoration and modernization shortfalls Restore sustainment shortfalls SUBTOTAL OPERATING FORCES		15,300 [5,600] [9,700]	15,300 <b>15,300</b>
	TOTAL OPERATION & MAINTENANCE, AF RESERVE		15,300	15,300
040	OPERATION & MAINTENANCE, ANG OPERATING FORCES FACILITIES SUSTAINMENT, RESTORATION & MODERNIZATION Restore restoration and modernization shortfalls Restore sustainment shortfalls SUBTOTAL OPERATING FORCES		47,600 [14,600] [33,000] <b>47,600</b>	47,600 <b>47,600</b>
	TOTAL OPERATION & MAINTENANCE, ANG		47,600	47,600
	TOTAL OPERATION & MAINTENANCE		2,106,599	2,106,599

### TITLE XLIV—MILITARY PERSONNEL

SEC. 4401. MILITARY PERSONNEL.

SEC. 4401. MILITARY PERSONNEL (In Thousands of Dollars)			
ltem	FY 2018 Request	House Change	House Authorized
Military Personnel Appropriations  Military Personnel Pay Raise  Realign European Reassurance Initiative to Base  Freeze BAH reduction for Military Housing Privatization Initiative  Historical unobligated balances  Department of Defense State Partnership Program	133,881,636	184,389 [206,400] [214,289] [125,000] [-383,300] [2,000]	134,066,025
Medicare-Eligible Retiree Health Fund Contributions	7,804,427		7,804,427
Total, Military Personnel	141,686,063	182,389	141,870,452
SEC. 4402. MILITARY PERSONNEL FOR OVERSEAS CONTINGENCY OPERATIONS.			
SEC. 4402. MILITARY PERSONNEL FOR OVERSEAS CONTINGENCY OPERATIONS (In Thousands of Dollars)	RATIONS		
ltem	FY 2018 Request	House Change	House Authorized
Military Personnel Appropriations	4,276,276	<b>-214,289</b> [-214,289]	4,061,987

SEC. 4403. MILITARY PERSONNEL FOR OVERSEAS CONTINGENCY OPERATIONS FOR BASE REQUIREMENTS.

SEC. 4403. MILITARY PERSONNEL FOR OVERSEAS CONTINGENCY OPERATIONS FOR BASE REQUIREMENTS.  (In Thousands of Dollars)	BASE REQUIREMENTS		
ltem	FY 2018 Request	House Change	House Authorized
Military Personnel Appropriations Increase Active Army end strength by 10k Increase Army National Guard end strength by 4k Increase Army Reserve end strength by 3k		1,017,700 [829,400] [105,500] [82,800]	1,017,700
Medicare-Eligible Retiree Health Fund Contributions		<b>44,140</b> [44,140]	44,140
Total, Military Personnel		1,061,840	1,061,840

## TITLE XLV-0THER AUTHORIZATIONS

#### SEC. 4501. OTHER AUTHORIZATIONS.

SEC. 4501. OTHER AUTHORIZATIONS (In Thousands of Dollars)			
ltem	FY 2018 Request	House Change	House Authorized
WORKING CAPITAL FUND, ARMY			
Industrial operations	43,140		43,140
SUPPLY MANAGEMENT—ARMY	40,636	50,111	90,747
Realign European Reassurance Initiative to Base		[50,111]	
TOTAL WORKING CAPITAL FUND, ARMY	83,776	50,111	133,887

WORKING CAPITAL FUND, AIR FORCE	66.462		66.462
TOTAL WORKING CAPITAL FUND, AIR FORCE	66,462		66,462
WORKING CAPITAL FUND, DECA  COMMISSARY OPERATIONS  Civilian Personnel Compensation and Benefits  Commissary operations	1,389,340	-45,000 [-20,000] [-25,000]	1,344,340
TOTAL WORKING CAPITAL FUND, DECA	1,389,340	<b>-45,000</b>	1,344,340
WORKING CAPITAL FUND, DEFENSE-WIDE Supply Chain Management—Defense Total Working Capital Fund, Defense-Wide	47,018 <b>47,018</b>		47,018 <b>47,018</b>
NATIONAL DEFENSE SEALIFT FUND LG MED SPD RO/RO MAINTENANCE DOD MOBILIZATION ALTERATIONS	135,800		135,800
IAH MAINIENANCE RESEARCH AND DEVELOPMENT READY RESERVE FORCES	54,453 18,622 289,255	7,000	54,453 18,622 296,255
Strategic Sealiff SLEP TOTAL NATIONAL DEFENSE SEALIFT FUND	509,327	[7,000] <b>7,000</b>	516,327
CHEM AGENTS & MUNITIONS DESTRUCTION CHEM DEMILITARIZATION—O&M CHEM DEMILITARIZATION—RDT&E CHEM DEMILITARIZATION—RDT&C CHEM DEMILITARIZATION—PROC TOTAL CHEM AGENTS & MUNITIONS DESTRUCTION	104,237 839,414 18,081 <b>961,732</b>		104,237 839,414 18,081 <b>961,732</b>
DRUG INTERDICTION & CTR-DRUG ACTIVITIES, DEF  DRUG INTERDICTION AND COUNTER-DRUG ACTIVITIES, DEFENSE  Administrative Overhead	674,001	17,000 [-2,000]	691,001

SEC. 4501. OTHER AUTHORIZATIONS (In Thousands of Dollars)			
ltem	FY 2018 Request	House Change	House Authorized
SOUTHCOM ISR Travel, Infrastructure, Support DRUG DEMAND REDUCTION PROGRAM TOTAL DRUG INTERDICTION & CTR-DRUG ACTIVITIES, DEF	116,813 <b>790,814</b>	[21,000] [-2,000] 17,000	116,813 <b>807,814</b>
OFFICE OF THE INSPECTOR GENERAL OPERATION AND MAINTENANCE RDT&E TOTAL OFFICE OF THE INSPECTOR GENERAL	334,087 2,800 <b>336,887</b>		334,087 2,800 <b>336,887</b>
DEFENSE HEALTH PROGRAM  OPERATION & MAINTENANCE IN-HOUSE CARE Maintenance of inpatient capabilities of OCONUS MTFs	9,457,768	18,000 [10,000]	9,475,768
Pre-mobilization health care under section 12304b PRIVATE SECTOR CARE CONSOLIDATED HEALTH SUPPORT INFORMATION MANAGEMENT MANAGEMENT ACTIVITIES	15,317,732 2,193,045 1,803,733 330,752	[8,000] 000,6—	15,317,732 2,193,045 1,803,733 321,752
Program decrease	737,730 2,255,163	[-9,000]	737,730 2,255,163
RDT&E RESEARCH EXPLORATRY DEVELOPMENT ADVANCED DEVELOPMENT	9,796 64,881 246,268	30,000	9,796 64,881 276,268

Program increase for hypoxia research Research of chronic traumatic encephalopathy DEMONSTRATION/VALIDATION ENGINERRING DEVELOPMENT MANAGEMENT AND SUPPORT CAPABILITIES ENHANCEMENT	99,039 170,662 69,191 13,438	[5,000]	99,039 170,602 69,191 13,438
PROCUREMENT INITIAL OUTFITTING REPLACEMENT & MODERNIZATION THERSTEP MEDICAL INCOMMATION DESCRAME	26,978 360,831		26,978 360,831
I REALER MEDICAL INFORMATION PYSTEM JOINT OPERATIONAL MEDICINE INFORMATION SYSTEM DOD HEALTHCARE MANAGEMENT SYSTEM MODERNIZATION	8,326 499,193		8,326 499,193
UNDISTRIBUTED Undistributed		-149,600	-149,600
Foreign Currency adjustments Historical unobligated balances TOTAL DEFENSE HEALTH PROGRAM	33,664,466	[-15,500] [-134,100] - <b>118,600</b>	33,545,866
TOTAL OTHER AUTHORIZATIONS	37,849,822	-89,489	37,760,333
SEC. 4502. OTHER AUTHORIZATIONS FOR OVERSEAS CONTINGENCY OPERATIONS.			
SEC. 4502. OTHER AUTHORIZATIONS FOR OVERSEAS CONTINGENCY OPERATIONS (In Thousands of Dollars)	PERATIONS		
Item	FY 2018 Request	House Change	House Authorized
WORKING CAPITAL FUND, ARMY Industrial operations Supply Management—army	50,111	-50,111	

SEC. 4502. OTHER AUTHORIZATIONS FOR OVERSEAS CONTINGENCY OPERATIONS (In Thousands of Dollars)	ERATIONS		
ltem	FY 2018 Request	House Change	House Authorized
Realign European Reassurance Initiative to Base	50,111	[-50,111] - <b>50,111</b>	
WORKING CAPITAL FUND, DEFENSE-WIDE  ENERGY MANAGEMENT—DEFENSE  SUPPLY CHAIN MANAGEMENT—DEFENSE  TOTAL WORKING CAPITAL FUND, DEFENSE-WIDE	70,000 28,845 <b>98,845</b>		70,000 28,845 <b>98,845</b>
DRUG INTERDICTION & CTR-DRUG ACTIVITIES, DEF  DRUG INTERDICTION AND COUNTER-DRUG ACTIVITIES, DEFENSE  Total Drug Interdiction & CTR-Drug Activities, def	196,300 <b>196,300</b>		196,300 <b>196,300</b>
OFFICE OF THE INSPECTOR GENERAL OPERATION AND MAINTENANCE TOTAL OFFICE OF THE INSPECTOR GENERAL	24,692 <b>24,692</b>		24,692 <b>24,692</b>
DEFENSE HEALTH PROGRAM  OPERATION & MAINTENANCE IN-HOUSE CARE PRIVATE SECTOR CARE CONSOLIDATED HEALTH SUPPORT  TOTAL DEFENSE HEALTH PROGRAM	61,857 331,968 1,980 <b>395,805</b>		61,857 331,968 1,980 <b>395,805</b>
TOTAL OTHER AUTHORIZATIONS	765,753	-50,111	715,642

# TITLE XLVI-MILITARY CONSTRUCTION

SEC. 4601. MILITARY CONSTRUCTION.

		SEC. 46 (Ir	SEC. 4601. MILITARY CONSTRUCTION (In Thousands of Dollars)			
Account	State/ Country	Installation	Project Title	FY 2018 Request	House Change	House Agreement
Army	ALABAMA	Fort Rucker	TRAINING SUPPORT FACILITY	38,000		38,000
Army	ARIZONA	Davis-Monthan AFB	GENERAL INSTRUCTION BUILDING	22,000		22,000
Army	ARIZONA	Fort Huachuca	GROUND TRANSPORT EQUIPMENT BUILDING	30,000		30,000
Army	CALIFORNIA	Fort Irwin	Land acquisition	3,000		3,000
Army	COLORADO	Fort Carson	AMMUNITION SUPPLY POINT	21,000		21,000
Army	COLORADO	Fort Carson	BATTLEFIELD WEATHER FACILITY	8,300		8,300
Army	FLORIDA	Eglin AFB	MULTIPURPOSE RANGE COMPLEX	18,000		18,000
Army	GEORGIA	Fort Benning	AIR TRAFFIC CONTROL TOWER	0	10,800	10,800
Army	GEORGIA	Fort Benning	TRAINING SUPPORT FACILITY	28,000		28,000
Army	GEORGIA	Fort Gordon	ACCESS CONTROL POINT	33,000		33,000
Army	GEORGIA	Fort Gordon	AUTOMATION-AIDED INSTRUCTIONAL BUILDING	18,500		18,500
Army	GERMANY	Stuttgart	COMMISSARY	40,000		40,000
Army	GERMANY	Wiesbaden	ADMINISTRATIVE BUILDING	43,000		43,000
Army	HAWAII	Fort Shafter	COMMAND AND CONTROL FACILITY, INCR 3	000'06		90,000
Army	INDIANA	Crane Army Ammunition Plant	SHIPPING AND RECEIVING BUILDING	24,000		24,000
Army	KOREA	Kunsan AB	UNMANNED AERIAL VEHICLE HANGAR	53,000		53,000
Army	NEW YORK	U.S. Military Academy	CEMETERY	22,000		22,000
Army	SOUTH CAROLINA	Fort Jackson	RECEPTION BARRACKS COMPLEX, PH1	000'09		60,000
Army	SOUTH CAROLINA	Shaw AFB	MISSION TRAINING COMPLEX	25,000		25,000
Army	TEXAS	Camp Bullis	VEHICLE MAINTENANCE SHOP	13,600		13,600
Army	TEXAS	Fort Hood	VEHICLE MAINTENANCE SHOP	0	33,000	33,000
Army	TEXAS	Fort Hood	BATTALION HEADQUARTERS COMPLEX	37,000		37,000

		SEC. 461 (In	SEC. 4601. MILITARY CONSTRUCTION (In Thousands of Dollars)			
Account	State/ Country	Installation	Project Title	FY 2018 Request	House Change	House Agreement
Army	TURKEY	Turkey Various	FORWARD OPERATING SITE	6,400	-6,400	0
Army	VIRGINIA	Fort Belvoir	SECURE ADMIN/OPERATIONS FACILITY, INCR 3	14,124		14,124
Army	VIRGINIA	Joint Base Langley-Eustis	AIRCRAFT MAINTENANCE INSTRUCTIONAL BLDG	34,000		34,000
Army	VIRGINIA	Joint Base Myer-Henderson	SECURITY FENCE	20,000		20,000
Army	WASHINGTON	Joint Base Lewis-McChord	CONFINEMENT FACILITY	000'99		66,000
Army	WASHINGTON	Yakima	FIRE STATION	19,500		19,500
Army	WORLDWIDE UNSPECIFIED	Unspecified Worldwide Locations	HOST NATION SUPPORT	28,700		28,700
Army	WORLDWIDE UNSPECIFIED	Unspecified Worldwide Locations	PLANNING AND DESIGN	72,770		72,770
Army	WORLDWIDE UNSPECIFIED	Unspecified Worldwide Locations	PRIOR YEAR SAVINGS: UNSPECIFIED MINOR CONSTRUCTION, ARMY.	0	-10,000	-10,000
Army	<b>WORLDWIDE UNSPECIFIED</b>	Unspecified Worldwide Locations	UNSPECIFIED MINOR CONSTRUCTION	31,500	10,000	41,500
Ē	Military Construction, Army Total			920,394	37,400	957,794
Navy	ARIZONA	Yuma	ENLISTED DINING FACILITY & COMMUNITY BLDGS	36,328		36,328
Navy	CALIFORNIA	Barstow	COMBAT VEHICLE REPAIR FACILITY	36,539		36,539
Navy	CALIFORNIA	Camp Pendleton, California	AMMUNITION SUPPLY POINT UPGRADE	61,139		61,139
Navy	CALIFORNIA	Coronado	UNDERSEA RESCUE COMMAND OPERATIONS BUILD-ING.	0	36,000	36,000
Navy	CALIFORNIA	Lemoore	F/A 18 AVIONICS REPAIR FACILITY REPLACEMENT	60,828		60,828
Navy	CALIFORNIA	Miramar	AIRCRAFT MAINTENANCE HANGAR (INC 2)	39,600		39,600
Navy	CALIFORNIA	Miramar	F-35 SIMULATOR FACILITY	0	47,600	47,600
Navy	CALIFORNIA	Twentynine Palms, California	POTABLE WATER TREATMENT/BLENDING FACILITY	55,099		55,099
Navy	DISTRICT OF COLUMBIA	NSA Washington	ELECTRONICS SCIENCE AND TECHNOLOGY LABORA-TORY.	37,882		37,882
Navy	DISTRICT OF COLUMBIA	NSA Washington	WASHINGTON NAVY YARD AT/FP	000'09	-45,190	14,810
Navy	DJIBOUTI	Camp Lemonier, Djibouti	AIRCRAFT PARKING APRON EXPANSION	13,390	-13,390	0

Navy	FLORIDA	Mayport	ADVANCED WASTEWATER TREATMENT PLANT (AWWTP).	74,994		74,994
Navy	FLORIDA	Mayport	MISSILE MAGAZINES	9,824		9,824
Navy	GEORGIA	Albany	COMBAT VEHICLE WAREHOUSE	0	43,300	43,300
Navy	GREECE	Souda Bay	STRATEGIC AIRCRAFT PARKING APRON EXPANSION	22,045		22,045
Navy	GUAM	Joint Region Marianas	AIRCRAFT MAINTENANCE HANGAR #2	75,233		75,233
Navy	GUAM	Joint Region Marianas	CORROSION CONTROL HANGAR	66,747		66,747
Navy	GUAM	Joint Region Marianas	MALS FACILITIES	49,431		49,431
Navy	GUAM	Joint Region Marianas	NAVY-COMMERCIAL TIE-IN HARDENING	37,180		37,180
Navy	GUAM	Joint Region Marianas	WATER WELL FIELD	56,088		56,088
Navy	HAWAII	Joint Base Pearl Harbor-Hickam	SEWER LIFT STATION & RELIEF SEWER LINE	73,200		73,200
Navy	HAWAII	Kaneohe Bay	LHD PAD CONVERSIONS MV-22 LANDING PADS	19,012		19,012
Navy	HAWAII	Wahiawa	COMMUNICATIONS/CRYPTO FACILITY	65,864		65,864
Navy	JAPAN	Iwakuni	KC-130J ENLISTED AIRCREW TRAINER FACILITY	21,860		21,860
Navy	MAINE	Kittery	PAINT, BLAST, AND RUBBER FACILITY	61,692		61,692
Navy	NORTH CAROLINA	Camp Lejeune	BACHELOR ENLISTED QUARTERS	37,983		37,983
Navy	NORTH CAROLINA	Camp Lejeune	WATER TREATMENT PLANT REPLACEMENT HADNOT	65,784		65,784
			PT.			
Navy	NORTH CAROLINA	Marine Corps Air Station Cherry Point	F-35B VERTICAL LIFT FAN TEST FACILITY	15,671		15,671
Navy	VIRGINIA	Dam Neck	ISR OPERATIONS FACILITY EXPANSION	29,262		29,262
Navy	VIRGINIA	Joint Expeditionary Base Little Creek—Story	ACU-4 ELECTRICAL UPGRADES	2,596		2,596
Navy	VIRGINIA	Norfolk	CHAMBERS FIELD MAGAZINE RECAP PH 1	34,665		34,665
Navy	VIRGINIA	Portsmouth	SHIP REPAIR TRAINING FACILITY	72,990		72,990
Navy	VIRGINIA	Yorktown	BACHELOR ENLISTED QUARTERS	36,358		36,328
Navy	WASHINGTON	Indian Island	MISSILE MAGAZINES	44,440		44,440
Navy	WORLDWIDE UNSPECIFIED	Unspecified Worldwide Locations	PLANNING AND DESIGN	219,069		219,069
Navy	WORLDWIDE UNSPECIFIED	Unspecified Worldwide Locations	PRIOR YEAR SAVINGS: UNSPECIFIED MINOR CON-	0	-10,000	-10,000
			STRUCTION.			
Navy	WORLDWIDE UNSPECIFIED Military Construction. Navy Total	Unspecified Worldwide Locations	WORLDWIDE UNSPECIFIED Unspecified Worldwide Locations UNSPECIFIED MINOR CONSTRUCTION Military Construction. Navy Total	23,842 <b>1.616.665</b>	58.320	23,842 <b>1.674.985</b>

		SE	SEC. 4601. MILITARY CONSTRUCTION (In Thousands of Dollars)			
Account	State/ Country	Installation	Project Title	FY 2018 Request	House Change	House Agreement
ΔF	A PSKA	Fielson AFR	E-354 ADAL CONVENTIONAL MINITIONS FACILITY	2 500		2 500
Ē	NISCH V	LIGISOII AI D	איייי איייי אייייי אייייי אייייי אייייי אייייי אייייי	4,300		4,300
AF	ALASKA	Eielson AFB	F-35A AGE FACILITY / FILLSTAND	21,000		21,000
AF	ALASKA	Eielson AFB	F-35A CONSOLIDATED MUNITIONS ADMIN FACILITY	27,000		27,000
AF	ALASKA	Eielson AFB	F-35A EXTEND UTILIDUCT TO SOUTH LOOP	48,000		48,000
AF	ALASKA	Eielson AFB	F-35A OSS/WEAPONS/INTEL FACILITY	11,800		11,800
AF	ALASKA	Eielson AFB	F-35A R-11 FUEL TRUCK SHELTER	009'6		009'6
AF	ALASKA	Eielson AFB	F-35A SATELLITE DINING FACILITY	8,000		8,000
AF	ALASKA	Eielson AFB	Repair Central Heat/Power Plant Boiler PH 4	41,000		41,000
AF	AUSTRALIA	Darwin	APR—BULK FUEL STORAGE TANKS	76,000		76,000
AF	CALIFORNIA	Travis Air Force Base	KC-46A ADAL B14 FUEL CELL HANGAR	0	1,400	1,400
AF	CALIFORNIA	Travis Air Force Base	KC-46A AIRCRAFT 3-BAY MAINTENANCE HANGAR	0	107,000	107,000
AF	CALIFORNIA	Travis Air Force Base	KC-46A ALTER B181/185/187 SQUAD OPS/AMU	0	6,400	6,400
AF	CALIFORNIA	Travis Air Force Base	KC-46A ALTER B811 CORROSION CONTROL HANGAR	0	7,700	7,700
AF	COLORADO	Buckley Air Force Base	SBIRS OPERATIONS FACILITY	38,000		38,000
AF	COLORADO	Fort Carson, Colorado	13 ASOS EXPANSION	13,000		13,000
AF	COLORADO	U.S. Air Force Academy	AIR FORCE CYBERWORX	30,000		30,000
AF	FLORIDA	Eglin AFB	F-35A ARMAMENT RESEARCH FAC ADDITION (B614)	8,700		8,700
AF	FLORIDA	Eglin AFB	LONG-RANGE STAND-OFF ACQUISITION FAC	38,000		38,000
AF	FLORIDA	Eglin AFB	DORMITORIES (288 RM)	0	44,000	44,000
AF	FLORIDA	MacDill AFB	KC-135 BEDDOWN OG/MXG HQ	8,100		8,100
AF	FLORIDA	Tyndall Air Force Base	FIRE STATION	0	17,000	17,000
AF	GEORGIA	Robins AFB	COMMERCIAL VEHICLE VISITOR CONTROL FACILITY	008'6		9,800
AF	ITALY	Aviano AB	GUARDIAN ANGEL OPERATIONS FACILITY	27,325	-27,325	0
AF	KANSAS	McConnell AFB	COMBAT ARMS FACILITY	17,500		17,500
AF	MARIANA ISLANDS	Tinian	APR LAND ACQUISITION	12,900		12,900
AF	MARYLAND	Joint Base Andrews	PAR LAND ACQUISITION	17,500		17,500

124,000 11,400 23,000 38.000	2,000	6,100	18,000	3,300	2,300	4,100	17,000	9,000	5,800	72,000		42,000	4,250	9,300	27,000	4,900	0	10,000	38,000	90,130	18,500	0	2,150	38,000	5,500	20,000
-130,000	2,000	6,100	18,000	3,300	2,300	4,100	17,000	9,000	5,800	72,000				9,300			-15,000					-25,997				
254,000 11,400 23,000 38,000	0	0	0	0	0	0	0	0	0	0		42,000	4,250	0	27,000	4,900	15,000	10,000	38,000	90,130	18,500	25,997	2,150	38,000	5,500	20,000
PRESIDENTIAL AIRCRAFT RECAP COMPLEX	KC-46A ADAL B1749 FOR ATGL & LST SERVICING KC-46A ADAL B1816 FOR SUPPLY	KC-46A ADAL B2319 FOR BOOM OPERATOR TRAIN- ER.	KC-46A ADAL B2324 REGIONAL MX TRAINING FAC	KC-46A ADAL B3209 FOR FUSELAGE TRAINER	KC-46A ADD TO B1837 FOR BODY TANKS STORAGE	KC-46A AEROSPACE GROUND EQUIPMENT STORAGE	KC-46A ALTER APRON & FUEL HYDRANTS	KC-46A ALTER BLDGS FOR OPS AND TFI AMU-AMXS	KC-46A ALTER FACILITIES FOR MAINTENANCE	KC-46A TWO-BAY GENERAL PURPOSE MAINTENANCE	HANGER.	DANGEROUS CARGO PAD RELOCATE CATM	RPA FIXED GROUND CONTROL STATION FACILITY	FIRE STATION	INDOOR FIRING RANGE	KC-46A FTU FUSELAGE TRAINER PHASE 2	CONSOLIDATED SQUADRON OPERATIONS FACILITY	AIR TRAFFIC CONTROL TOWER	BMT CLASSROOMS/DINING FACILITY 4	BMT RECRUIT DORMITORY 7	CAMP BULLIS DINING FACILITY	DORMITORY—216 PN	EIC RC-135 INFRASTRUCTURE	EIC RC-135 INTEL AND SQUAD OPS FACILITY	EIC RC-135 RUNWAY OVERRUN RECONFIGURATION	CONSULIDATED CORROSION CONTROL FACILITY
Joint Base Andrews Hanscom AFB Nellis AFB Nellis AFB	McGuire-Dix-Lakehurst McGuire-Dix-Lakehurst	McGuire-Dix-Lakehurst	McGuire-Dix-Lakehurst	McGuire-Dix-Lakehurst	McGuire-Dix-Lakehurst	McGuire-Dix-Lakehurst	McGuire-Dix-Lakehurst	McGuire-Dix-Lakehurst	McGuire-Dix-Lakehurst	McGuire-Dix-Lakehurst		Cannon AFB	Holloman AFB	Kirtland Air Force Base	Minot AFB	Altus AFB	Al Udeid	Joint Base San Antonio	Joint Base San Antonio	Joint Base San Antonio	Joint Base San Antonio	Incirlik AB	Royal Air Force Fairford	Royal Air Force Fairford	Royal Air Force Fairford	Koyal Air Force Lakenheath
MARYLAND MASSACHUSETTS NEVADA NEVADA	NEW JERSEY NEW JERSEY	NEW JERSEY	NEW JERSEY	NEW JERSEY	NEW JERSEY	NEW JERSEY	NEW JERSEY	NEW JERSEY	NEW JERSEY	NEW JERSEY		NEW MEXICO	NEW MEXICO	NEW MEXICO	NORTH DAKOTA	OKLAHOMA	QATAR	TEXAS	TEXAS	TEXAS	TEXAS	TURKEY	UNITED KINGDOM	UNITED KINGDOM	KINGE	UNITED KINGDOM
AF AF AF	AF AF	AF	AF	AF	AF	AF	AF	AF	AF	AF		AF	AF	AF	AF	AF	AF	AF	AF	AF	AF	AF	AF	AF	AF	AF

	House Agreement	24,000 10,800 12,492 22,000 6,700 41,000 28,000 97,852 31,400 62,000	26,400 9,958 7,284 96,077 46,175 66,218 50,265 10,200 64,364 5,000 4,100 34,700 11,700
	House Change	-269,000 -128,022	
	FY 2018 Request	24,000 10,800 12,492 22,000 6,700 41,000 28,000 269,000 97,852 31,400 62,000 1,738,796	26,400 9,958 7,284 96,077 46,175 66,218 50,265 10,200 64,364 5,000 4,100 34,700 11,700
SEC. 4601. MILITARY CONSTRUCTION (In Thousands of Dollars)	Project Title	F-35A 6-BAY HANGAR F-35A F-15 PARKING F-35A FIELD TRAINING DETACHMENT FACILITY F-35A FILGHT SIMULATOR FACILITY F-35A INFRASTRUCTURE F-35A SQUADRON OPERATIONS AND AMU UTTR CONSOLIDATED MISSION CONTROL CENTER KC-46A MAIN OPERATING BASE 4 UNSPECIFIED MINOR CONSTRUCTION UNSPECIFIED MINOR CONSTRUCTION CONSOLIDATED HELO/TRF OPS/AMU AND ALERT FAC	AMBULATORY CARE CENTER REPLACEMENT  SOF MARINE BATTALION COMPANYTEAM FACILITIES  SOF MOTOR TRANSPORT FACILITY EXPANSION  SOF SEAL TEAM OPS FACILITY  SOF SEAL TEAM OPS FACILITY  AMBULATORY CARE CENTER/DENTAL ADD_ALT  SOF SIMULATOR FACILITY  BATTALION COMPEX, PH 1  SOF SIMULATOR FACILITY  SOF SIMULATOR & FUSELAGE TRAINER FACILITY  BLOOD DONOR CENTER REPLACEMENT
SEC. 460 (In	Installation	Royal Air Force Lakenheath Hill AFB Unspecified Worldwide Locations Unspecified Worldwide Locations Various Worldwide Locations F. E. Warren AFB	Camp Pendleton Camp Pendleton Camp Pendleton Coronado Coronado Coronado Coronado Coronado Classified Location Eglin AFB Eglin AFB Hurlburt Field Hurlburt Field Fort Gordon
	State/ Country	UNITED KINGDOM WORL DWIDE WORL DWIDE UNSPECIFIED WORL DWIDE UNSPECIFIED WORL DWIDE UNSPECIFIED WORL DWIDE UNSPECIFIED WORL DWIDE ON STRING OF TOTAL	CAL FORNIA CLORADO CONUS CLASSIFIED FLORIDA FLORIDA FLORIDA FLORIDA GEORGIA
	Account	AF AF AF AF AF AF AF AF AF	Def-Wide

106,700 79,141 46,609 18,100 23,900 5,000 62,406 30,800 3,972 27,573 11,900 45,600 25,323 10,800 12,034 8,590 21,300 20,000 8,228 15,300 21,400 22,000 10,800 22,000 10,800 22,000 10,800 20,539 20,539 20,539
-22,400 $-11,941$ $-100,000$ $-181,000$
106,700 79,141 46,609 18,100 23,900 5,000 22,406 30,800 3,972 27,573 11,900 45,600 25,323 10,800 12,034 8,590 25,323 11,900 12,034 8,590 21,900 313,968 11,941 250,000 38,208 11,941 250,000 38,228 11,940 25,000 31,300 31
MEDICAL CENTER REPLACEMENT INCR 7  SPANGDAHLEM ELEMENTARY SCHOOL REPLACEMENT ROBINSON BARRACKS ELEM. SCHOOL REPLACEMENT CONSTRUCT HYDRANT SYSTEM CONSTRUCT HYDRANT SYSTEM CONSTRUCT HYDRANT SYSTEM VICENZA HIGH SCHOOL REPLACEMENT CONSTRUCT HYDRANT SYSTEM VICENZA HIGH SCHOOL REPLACEMENT SOF SPECIAL TACTICS OPERATIONS FACILITY SOF SOF MAINTENANCE HANGAR SOF SPECIAL HACTICS OPERATIONS FACILITY REPLACE MOORING SYSTEM UPGRADE FULE WHARF SOF TACTICAL EQUIPMENT MAINTENANCE Facility ARFIELD APRON HANGAR/AIRCRAFT MAINTENANCE UNIT OPERATIONS AND WAREHOUSE FACILITIES SIMULATOR FACILITY MEDICAL CENTER ADDITIONALTERATION INCR 2 NSAW RECAPITALIZE BUILDING #2 INCR 3 BLOOD PROCESSING CENTER REPLACEMENT HOSPITAL REPLACEMENT NEXT NGA WEST (NZW) COMPLEX SOF C-130 AGE FACILITY AMBULATORY CARE CENTER ADDITION/ALTERATION AMBULATORY CARE CENTER ADDITION/ALTERATION AMBULATORY CARE CENTER ADDITION/ALTERATION AMBULATORY CARE CENTER ADDITION/ALTERATION SOF HUMAN PERFORMANCE TRAINING CENTER SOF HUMAN PERFORMANCE TRAINING CENTER SOF SUPPORT BATTALION ADMIN FACILITY SOF SUPPORT BATTALION ADMIN FACILITY SOF TACTICAL EQUIPMENT MAINTENANCE FACILITY SOF TACTICAL EQUIPMENT MAINTENANCE FACILITY SOF SUPPORT EATLEND ADMINITY SOF SULPTOR FACILITY SO
Rhine Ordnance Barracks Spangdahlem AB Stuttgart Souda Bay Andersen AFB Kunia Sigonella Vicenza Iwakuni Kadena AB Kadena AB Okinawa Sasebo Torri Commo Station Yokota AB Yokota AB Yokota AB Fort Reade Fort Leonard Wood Fort Leonard Wood St Louis Cannon AFB Camp Lejeune
GERMANY GERMANY GERMANY GERMANY GRECE GUAM HAWAII ITALY ITALY ITALY ITALY ITALY ITALY IAPAN JAPAN JAPA
Def-Wide Def

		SEC. 460 (In	SEC. 4601. MILITARY CONSTRUCTION (In Thousands of Dollars)			
Account	State/ Country	Installation	Project Title	FY 2018 Request	House Change	House Agreement
Def-Wide Def-Wide Def-Wide Def-Wide	NORTH CAROLINA NORTH CAROLINA PUERTO RICO SOUTH CAROLINA	Fort Bragg Seymour Johnson AFB Punta Borinquen Shaw AFB	SOF TELECOMM RELIABILITY IMPROVEMENTS	4,000 20,000 61,071 22,900		4,000 20,000 61,071 22,900
Def-Wide Def-Wide Def-Wide Def-Wide	TEXAS TEXAS UNITED KINGDOM UTAH VIRGINIA	Fort Bliss Fort Bliss Menwith Hill Station Hill AFB Joint Expeditionary Base Little	BLOOD PROCESSING CENTER	8,300 251,330 11,000 20,000 23,000	-8,300	251,330 11,000 20,000 23,000
Def-Wide Def-Wide	VIRGINIA VIRGINIA	Norfolk Pentagon	REPLACE HAZARDOUS MATERIALS WAREHOUSE PENTAGON CORR 8 PEDESTRIAN ACCESS CONTROL PT	18,500 8,140		18,500 8,140
Def-Wide Def-Wide Def-Wide Def-Wide Def-Wide Def-Wide Def-Wide Def-Wide	VIRGINIA VIRGINIA VIRGINIA WORLDWIDE UNSPECIFIED WORLDWIDE UNSPECIFIED WORLDWIDE UNSPECIFIED WORLDWIDE UNSPECIFIED WORLDWIDE UNSPECIFIED	Pentagon Pentagon Portsmouth Unspecified Worldwide Locations	S.E. SAFETY TRAFFIC AND PARKING IMPROVEMENTS SECURITY UPDATES REPLACE HAZARDOUS MATERIALS WAREHOUSE CONTINGENCY CONSTRUCTION ENERGY RESILIENCE AND CONSERV. INVEST. PROG. ERCIP DESIGN EXERCISE RELATED MINOR CONSTRUCTION PLANNING & DESIGN	28,700 13,260 22,500 10,000 150,000 11,490 23,012	-10,000	28,700 13,260 22,500 0 150,000 11,490 23,012
Def-Wide Def-Wide Def-Wide Def-Wide Def-Wide	WORLDWIDE UNSPECIFIED WORLDWIDE UNSPECIFIED WORLDWIDE UNSPECIFIED WORLDWIDE UNSPECIFIED WORLDWIDE UNSPECIFIED WORLDWIDE UNSPECIFIED	Unspecified Worldwide Locations Unspecified Worldwide Locations Unspecified Worldwide Locations Unspecified Worldwide Locations Unspecified Worldwide Locations Unspecified Worldwide Locations	PLANNING & DESIGN MDA EAST COAST SITE PLANNING AND DESIGN	26,147 39,746 1,942 1,150 40,220	10,000	10,000 26,147 39,746 1,942 1,150 40,220

20,000 13,500 -27,440 3,000 7,384 3,000 8,000 2,039 10,000 2,763,832	177,932	-25,000 <b>152,932</b>	36,000 9,000 22,000 17,500 19,000 32,000 8,600 15,000 4,550 31,000 16,271 16,731
-27,440	23,932	-25,000 - <b>1,068</b>	9,000 32,000 15,000
20,000 13,500 0 3,000 7,384 3,000 3,000 8,000 2,039 10,000 3,114,913	154,000	0 <b>154,000</b>	36,000 0 22,000 17,500 19,000 39,000 8,600 0 4,550 31,000 16,271 16,731
WORLDWIDE UNSPECIFIED Unspecified Worldwide Locations PLANNING AND DESIGN	NATO SECURITY INVESTMENT PROGRAM	grain ATO Security Investment Pro- PRIOR YEAR SAVINGS: NATO SECURITY INVESTMENT gram PROGRAM.	COMBINED SUPPORT MAINTENANCE SHOP
Unspecified Worldwide Locations	NATO Security Investment Pro-		New Castle MTC Gowen Orchard Training Area Presque Isle Sykesville Arden Hills Springfield Las Cruces Fort Belvoir Fort Pickett Turnwater Unspecified Worldwide Locations Unspecified Worldwide Locations
WORLDWIDE UNSPECIFIED WORLDWIDE WORL	WORLDWIDE UNSPECIFIED	WORLDWIDE UNSPECIFIED NATO Security Investment Program Total	DELAWARE IDAHO IDAHO IDAHO MAINE MAINE MARYLAND MINNESOTA MINSOURI NEW MEXICO VRGINIA VRGINIA VRGINIA WASHINGTON WORLDWIDE UNSPECIFIED
Def-Wide	NATO	NATO NATO S	Army NG

		SEC. 461 (In	SEC. 4601. MILITARY CONSTRUCTION (in Thousands of Dollars)			
Account	State/ Country	Installation	Project Title	FY 2018 Request	House Change	House Agreement
Military	Military Construction, Army National G	uard Total	Army National Guard Total	210,652	26,000	266,652
Army Res Army Res Army Res	CALIFORNIA PUERTO RICO PUERTO RICO	Fallbrook Aguadilla Fort Buchanan	ARMY RESERVE CENTER ARMY RESERVE CENTER RESERVE CENTER	36,000 12,400 0	26,000	36,000 12,400 26,000
Army Res Army Res Army Res		Lewis-McCord Fort McCoy Unspecified Worldwide Locations	RESERVE CENTER	0 13,000 6,887	30,000	30,000 13,000 6,887
Army Res <b>Military</b>	s WORLDWIDE UNSPECIFIED Military Construction, Army Reserve To	UNSPECIFIED Unspecified Worldwide Locations Army Reserve Total	UNSPECIFIED MINOR CONSTRUCTION	5,425 <b>73,712</b>	26,000	5,425 <b>129,712</b>
N/MC Res N/MC Res	CALIFORNIA GEORGIA	Lemoore Fort Gordon	NAVAL OPERATIONAL SUPPORT CENTER LEMOORE NAVAL OPERATIONAL SUPPORT CENTER FORT GOR- DON.	17,330 17,797		17,330 17,797
N/MC Res	NEW JERSEY	Joint Base McGuire-Dix- Lakehurst	AIRCRAFT APRON, TAXIWAY & SUPPORT FACILITIES	11,573		11,573
N/MC Res N/MC Res N/MC Res Military	IS TEXAS S WORLDWIDE UNSPECIFIED S WORLDWIDE UNSPECIFIED MIIITARY CONSTRUCTION, NAVAI Reserve T	Fort Worth UNSPECIFIED Unspecified Worldwide Locations UNSPECIFIED Unspecified Worldwide Locations Naval Reserve Total	KC130-J EACTS FACILITY PLANNING & DESIGN UNSPECIFIED MINOR CONSTRUCTION	12,637 4,430 1,504 <b>65,271</b>	0	12,637 4,430 1,504 <b>65,271</b>
Air NG Air NG Air NG Air NG	CALIFORNIA COLORADO CONNECTICUT INDIANA	March AFB Peterson AFB Bradley IAP Fort Wavne International Airnort	TFI CONSTRUCT RPA FLIGHT TRAINING UNIT	15,000 8,000 7,000 0	1.900	15,000 8,000 7,000 1,900
Air NG Air NG	INDIANA KENTUCKY	Hulman Regional Airport Louisville IAP	CONSTRUCT SMALL ARMS RANGEADD/ALTER RESPONSE FORCES FACILITY	000,6	8,000	8,000

8,000 10,000 6,800 8,000	15,000 8,000 10,500 8,000 12,000 25,000	8,000 18,000 17,191 <b>203,391</b>	25,000 32,000 5,200 5,500 10,000 9,000 6,400 3,100 3,100 4,725 3,610	6,100
8,000	8,000	8,000	32,000 9,000 3,100	
0 10,000 6,800 0	15,000 0 10,500 8,000 12,000 25,000	0 18,000 17,191 <b>161,491</b>	25,000 0 5,200 5,500 10,000 0 6,400 0 3,100 4,725 3,610	6,100
CONSTRUCT SMALL ARMS RANGE	NORTHCOM—CONSTRUCT ALERT HANGAR	SHOPS. CONSTRUCT SMALL ARMS RANGE PLANNING AND DESIGN UNSPECIFIED MINOR CONSTRUCTION	GUARDIAN ANGEL FACILITY  CONSOLIDATED MISSION COMPLEX PHASE 2  RESERVE MEDICAL TRAINING FACILITY  CONSOLIDATED TRAINING FACILITY  INDOOR SMALL ARMS RANGE  INDOOR SMALL ARMS RANGE  KC-4GA ADAL FOR ALT MISSION STORAGE  MUNITIONS TRAINING/ADMIN FACILITY  ADD/ALTER LIFE SUPPORT FACILITY  PLANNING & DESIGN  UNSPECIFIED MINOR CONSTRUCTION	FAMILY HOUSING NEW CONSTRUCTION
Jackson International Airport Rosecrans Memorial Airport Hancock Field Rickenbacker International Air-	Joer Toledo Express Airport Tulsa International Airport Klamath Falls IAP Joe Foss Field McGhee-Tyson Airport	Dane County Regional Airport/ Truax Field SPECIFIED Unspecified Worldwide Locations SPECIFIED Unspecified Worldwide Locations Aational Guard Total	Patrick AFB Robins Air Force Base Joint Region Marianas Joint Base Pearl Harbor-Hickam Westover ARB Minneapolis-St Paul IAP Seymour Johnson AFB NAS JRB Fort Worth HIII AFB PECIFIED Unspecified Worldwide Locations orce Reserve Total	Fort Gordon
MISSISSIPPI MISSOURI NEW YORK OHIO	OHIO OKLAHOMA OREGON OREGON SOUTH DAKOTA TENNESSEE	WISCONSIN WORLDWIDE UNSPECIFIED WORLDWIDE UNSPECIFIED MOINTARY CONSTRUCTION, AIR NATIONAL GUAI	FLORIDA GEORGÍA GEORGÍA GUAM HAWAII MASSACHUSETTS MINNESOTA NORTH CAROLINA TEXAS UTAH WORLDWIDE UNSPECIFIED WORLDWIDE UNSPECIFIED	GEORGIA
Air NG Air NG Air NG Air NG	Air NG Air NG Air NG Air NG Air NG	Air NG Air NG Air NG Militar	AF Res	FH Con Army

		SEC. 46I (In	SEC. 4601, MILITARY CONSTRUCTION (In Thousands of Dollars)			
Account	State/ Country	Installation	Project Title	FY 2018 Request	House Change	House Agreement
FH Con Army FH Con Army FH Con Army FH Con Army FH Con Army FH Con Army FH Con Army	GERMANY GERMANY KOREA KWAJALEIN MASSACHUSETTS WORLDWIDE UNSPECIFIED WORLDWIDE UNSPECIFIED	Baumholder South Camp Vilseck Camp Humphreys Kwajalein Atoll Natick Unspecified Worldwide Locations Unspecified Worldwide Locations	Army         GERMANY         Baumholder         CONSTRUCTION IMPROVEMENTS           Army         GERMANY         South Camp Vilseck         FAMILY HOUSING NEW CONSTRUCTION (36 UNITS)           Army         KOREA         Camp Humphreys         FAMILY HOUSING NEW CONSTRUCTION INCR 2           Army         KWAJALEIN         Kwajalein Atoli         FAMILY HOUSING REPLACEMENT CONSTRUCTION           Army         WORLDWIDE UNSPECIFIED         Unspecified Worldwide Locations         PLANINING & DESIGN           Army         WORLDWIDE UNSPECIFIED         Unspecified Worldwide Locations         PRIOR YEAR SAVINGS. FAMILY HOUSING CONSTRUCTION.           Family Housing Construction, Army Total         Tilon, ARMY.	34,156 22,445 34,402 31,000 21,000 33,559 0	-18,000 -18,000	34,156 22,445 34,402 31,000 21,000 33,559 -18,000
FH Ops Army	Many WORLDWIDE UNSPECIFIED Army WORLDWIDE WORLDW	Unspecified Worldwide Locations Toral	SPECIFIED Unspecified Worldwide Locations HOUSING PRIVATIZATION SUPPORT SPECIFIED Unspecified Worldwide Locations LEASING Unspecified Worldwide Locations MAINTENANCE Unspecified Worldwide Locations MANAGEMENT SPECIFIED Unspecified Worldwide Locations MINSCELLANEOUS SPECIFIED Unspecified Worldwide Locations SPECIFIED Unspecified Worldwide Locations SPECIFIED Unspecified Worldwide Locations Unspecified Worldwide Locations Unspecified Worldwide Locations SPECIFIED Unspecified Worldwide Locations Office Companies  And Maintenance, Army Total	12,816 20,893 148,538 57,708 37,089 400 8,930 60,251 <b>346,625</b>	0	12,816 20,893 148,538 57,708 37,089 400 8,930 60,251 <b>346,625</b>
FH Con Navy	BAHRAIN ISLAND MARIANA ISLANDS WORLDWIDE UNSPECIFIED WORLDWIDE UNSPECIFIED WORLDWIDE UNSPECIFIED HOUSING CONSTRUCTION, NAVY ANN	SW Asia Guam Unspecified Worldwide Locations Unspecified Worldwide Locations Unspecified Worldwide Locations d Marine Corps Total	Vavy         BAHRAIN ISLAND         SW Asia         CONSTRUCT ON-BASE GFOQ           Vavy         MARIANA ISLANDS         Guam         REPLACE ANDERSEN HOUSING PH II           Vavy         WORLDWIDE UNSPECIFIED         Unspecified Worldwide Locations         CONSTRUCTION IMPROVEMENTS           Vavy         WORLDWIDE UNSPECIFIED         Unspecified Worldwide Locations         PLANNING & DESIGN           Vavy         WORLDWIDE UNSPECIFIED         Unspecified Worldwide Locations         PRIOR YEAR SAVINGS: FAMILY HOUSING CONSTRUCTION, NAMC.           Family Housing Construction, Navy And Marine Corps Total         TION, NAMC.	2,138 40,875 36,251 4,418 0	-8,000 -8,000	2,138 40,875 36,251 4,418 -8,000

14,529 27,587 61,921 95,104 50,989 15,649 62,167 <b>328,282</b>	80,617 4,445 -20,000 <b>65,062</b>	29,424 21,569 16,818 134,189 53,464 1,839 13,517 47,504 <b>318,324</b>	407 641 6 12,390 39,716
0	-20,000 - <b>20,000</b>	0	
14,529 27,587 61,921 95,104 50,989 15,649 62,167 <b>328,282</b>	80,617 4,445 0 85,062	29,424 21,569 16,818 134,189 53,464 1,839 13,517 47,504 <b>318,324</b>	407 641 6 12,390 39,716
SPECIFIED Unspecified Worldwide Locations FURNISHINGS	SPECIFIED Unspecified Worldwide Locations CONSTRUCTION IMPROVEMENTS	FURNISHINGS	FURNISHINGS FURNISHINGS FURNISHINGS LEASING LEASING
Unspecified Worldwide Locations	Unspecified Worldwide Locations Unspecified Worldwide Locations Unspecified Worldwide Locations er Total	SPECIFIED Unspecified Worldwide Locations And Maintenance, Air Force Total	Unspecified Worldwide Locations Unspecified Worldwide Locations Unspecified Worldwide Locations Unspecified Worldwide Locations Unspecified Worldwide Locations
Navy WORLDWIDE UNSPECIFIED	AF WORLDWIDE UNSPECIFIED AF WORLDWIDE UNSPECIFIED AF WORLDWIDE UNSPECIFIED Family Housing Construction, Air Forc	AF WORLDWIDE UNSPECIFIED AF WORLDWIDE WORLDWIDE UNSPECIFIED AF WORLDWIDE WORLDWIDE UNSPECIFIED AF WORLDWIDE WORLDWIDE UNSPECIFIED AF WORLDWIDE WORLDWIDE WORLDWIDE WORLDWIDE WORLDWIDE WORLDWIDE WORLDWID WORLDWIDE WORLDWIDE WORLDWIDE WORLDWIDE WORLDWID WORLDWIDE WORLDWID W	WORLDWIDE UNSPECIFIED WORLDWIDE UNSPECIFIED WORLDWIDE UNSPECIFIED WORLDWIDE UNSPECIFIED WORLDWIDE UNSPECIFIED
FH Ops Nawy	FH Con AF FH Con AF FH Con AF Family	FH Ops AF	FH Ops DW FH Ops DW FH Ops DW FH Ops DW FH Ops DW

	House Agreement	567 655 319	14 268 4,100 86 <b>59,169</b>	2,726 <b>2,726</b>	623 <b>623</b>	58,000 <b>58,000</b>	128,474	8,428 23,753 647 40 5,355
	House Change		0	0	0	0	35,000	
	FY 2018 Request	567 655 319	268 4,100 86 <b>59,169</b>	2,726 <b>2,726</b>	623 <b>623</b>	58,000 <b>58,000</b>	93,474	8,428 23,753 647 40 5,355
SEC. 4601. MILITARY CONSTRUCTION (In Thousands of Dollars)	Project Title	MAINTENANCE MAINTE	SERVICES UTILITIES UTILITIES	ADMINISTRATIVE EXPENSES—FHIF	anied Housing Im- ADMINISTRATIVE EXPENSES—UHIF	ISPECIFIED Base Realignment & Closure, BASE REALIGNMENT AND CLOSURE	BASE REALIGNMENT & CLOSURE	DON-100: PLANNING, DESIGN AND MANAGEMENT DON-101: VARIOUS LOCATIONS DON-138: NAS BRUNSWICK, ME DON-157: MCSA KANSAS CITY, MO
SEC. 460 (In '	Installation	Unspecified Worldwide Locations Unspecified Worldwide Locations Unspecified Worldwide Locations	SPECIFIED Unspecified Worldwide Locations SPECIFIED Unspecified Worldwide Locations SPECIFIED Unspecified Worldwide Locations SPECIFIED Unspecified Worldwide Locations And Maintenance, Defense-Wide Total	cified Worldwide Locations	~ ~	Base Realignment & Closure, Army <b>Total</b>	Base Realignment & Closure, Naw	Unspecified Worldwide Locations Unspecified Worldwide Locations Unspecified Worldwide Locations Unspecified Worldwide Locations Unspecified Worldwide Locations
	State/ Country	WORLDWIDE UNSPECIFIED WORLDWIDE UNSPECIFIED WORLDWIDE UNSPECIFIED	DW WORLDWIDE UNSPECIFIED DW WORLDWIDE UNSPECIFIED DW WORLDWIDE UNSPECIFIED DW WORLDWIDE UNSPECIFIED Family Housing Operation And Mainten	WORLDWIDE UNSPECIFIED Unspe DOD Family Housing Improvement Fund Total	WORLDWIDE UNSPECIFIED Unaccomp provem Unaccompanied Housing Improvement Fund Total	WORLDWIDE UNSPECIFIED Base Realignment and Closure—Army	Worldwide unspecified	WORLDWIDE UNSPECIFIED WORLDWIDE UNSPECIFIED WORLDWIDE UNSPECIFIED WORLDWIDE UNSPECIFIED WORLDWIDE UNSPECIFIED
	Account	FH Ops DW FH Ops DW FH Ops DW	FH Ops DW	FHIF DOD F	UHIF	BRAC Base	BRAC	BRAC BRAC BRAC BRAC BRAC

SRAC WORLDWIDE UNSPECIFIED Unspecified Worldwide Locations DON—84. JRB WILLOW GROVE & CAMBRIA REG AP  Base Realignment and Closure—Navy Total  WORLDWIDE UNSPECIFIED Unspecified Worldwide Locations DOD BRAC ACTIVITIES—AIR FORCE  Base Realignment and Closure—Air Force Total  Total, Military Construction  SEC. 4602. MILITARY CONSTRUCTION FOR OVERSEAS CONTINGENCY OPERATIONS.	CIFIED Unspecified Worldwid	e Loca e Loca e Loca e Loca MTIN	UNSPECIFIED Unspecified Worldwide Locations DON-84: JRB WILLOW GROVE & CAMBRIA REG AP  Closure—Navy Total  UNSPECIFIED Unspecified Worldwide Locations DOD BRAC ACTIVITIES—AIR FORCE  Closure—Air Force Total  tion  SEC AGNY MILITARY CONTINGENCY OPERATIONS.	4,737 7,210 143,644 54,223 54,223 9,782,451	35,000 0 -197,451	4,737 7,210 178,644 54,223 54,223 9,585,000
		SEC. 4602. MILITARY C	SEC. 4602. MILITARY CONSTRUCTION FOR OVERSEAS CONTINGENCY OPERATIONS (In Thousands of Dollars)			
Account	State/ Country	Installation	Project Title	FY 2018 Request	House Change	House Agreement
Army	CUBA TURKFY	Guantanamo Bay Varinus Locations	OCO: BARRACKSFORWARD OPFRATING SITE	115,000	6.400	115,000
Army	WORLDWIDE UN- SPECIFIED	Unspecified Worldwide Locations	ERI: PLANNING AND DESIGN	15,700		15,700
Army	WORLDWIDE UN- SPECIFIED	Unspecified Worldwide Locations	OCO: PLANNING AND DESIGN	000'6		6,000
Σ	Military Construction, Army Total			139,700	6,400	146,100
Navy Navy	DJIBOUTI WORLDWIDE UN- SPECIFIED	Camp Lemonier Unspecified Worldwide Locations	AIRCRAFT PARKING APRON EXPANSIONERI: PLANNING AND DESIGN	0 18,500	13,390	13,390 18,500
Σ	ilitary Construction, Navy T	otal	Military Construction, Navy Total	18,500	13,390	31,890
AF AF AF	ESTONIA ESTONIA HUNGARY	Amari Air Base Amari Air Base Kecskemet AB	eri: Pol capacity phase II	4,700 9,200 12,900	-12,900	4,700 9,200 0

		SEC. 4602. MILITARY C	SEC. 4602. MILITARY CONSTRUCTION FOR OVERSEAS CONTINGENCY OPERATIONS (In Thousands of Doliars)			
Account	State/ Country	Installation	Project Title	FY 2018 Request	House Change	House Agreement
AF	HUNGARY	Kecskemet AB	ERI: CONSTRUCT PARALLEL TAXIWAY	30,000	-30,000	0
AF	HUNGARY	Kecskemet AB	ERI: INCREASE POL STORAGE CAPACITY	12,500	-12,500	0
AF	ICELAND	Keflavik	ERI: AIRFIELD UPGRADES	14,400		14,400
AF	ITALY	Aviano AB	GUARDIAN ANGEL OPERATIONS FACILITY	0	27,325	27,325
AF	JORDAN	Azraq	OCO: MSAB DEVELOPMENT	143,000		143,000
AF	LATVIA	Lielvarde Air Base	ERI: EXPAND STRATEGIC RAMP PARKING	3,850		3,850
AF	LUXEMBOURG	Sanem	ERI: ECAOS DEPLOYABLE AIRBASE SYSTEM STORAGE	67,400		67,400
AF	NORWAY	Rygge	ERI: REPLACE/EXPAND QUICK REACTION ALERT PAD	10,300	-10,300	0
AF	QATAR	Al Udeid	CONSOLIDATION SQUADRON OPERATIONS FACILITY	0	15,000	15,000
AF	ROMANIA	Campia Turzii	ERI: UPGRADE UTILITIES INFRASTRUCTURE	2,950		2,950
AF	SLOVAKIA	Malacky	ERI: AIRFIELD UPGRADES	4,000	-4,000	0
AF	SLOVAKIA	Malacky	ERI: INCREASE POL STORAGE CAPACITY	20,000	-20,000	0
AF	SLOVAKIA	Sliac Airport	ERI: AIRFIELD UPGRADES	22,000	-22,000	0
AF	TURKEY	Incirlik AB	DORMITORY—216PN	0	25,997	25,997
AF	TURKEY	Incirlik AB	OCO: RELOCATE BASE MAIN ACCESS CONTROL POINT	14,600		14,600
AF	TURKEY	Incirlik AB	OCO: REPLACE PERIMETER FENCE	8,100		8,100
AF	<b>WORLDWIDE UN-</b>	Unspecified Worldwide Locations	eri: Planning and Design	56,630		56,630
	SPECIFIED					
AF	WORLDWIDE UN- SPECIFIED	Unspecified Worldwide Locations	OCO—PLANNING AND DESIGN	41,500		41,500
Military	ΑĖ	e Total	orce Total	478,030	-43,378	434,652
Def-Wide Def-Wide	ITALY WORLDWIDE UN-	Sigonella Unspecified Worldwide Locations	CONSTRUCT HYDRANT SYSTEMERI: PLANNING AND DESIGN	0 1,900	22,400	22,400 1,900
Military	SPECIFIED Construction, Defense	-Wide Total	SYECITIED Military Construction, Defense-Wide Total	1,900	22,400	24,300

Total, Military Construction	638,130	130 -1,188	636,942
TITLE XLVII—DEPARTMENT OF ENERGY NATIONAL SEC. 4701. DEPARTMENT OF ENERGY NATIONAL SECURITY PROGRAMS	IATIONAL		
Program	FY 2018 Request	House Change	House Authorized
Discretionary Summary By Appropriation Energy And Water Development, And Related Agencies Appropriation Summary: Energy Programs Nuclear Energy	133,000	0	133,000
Atomic Energy Defense Activities National nuclear security administration: Weapons activities	10,239,344	184,200	10,423,544
Defense nuclear nonproliferation  Naval reactors — Federal salaries and expenses  Total, National nuclear security administration — Total nuclear nuclea	1,793,310 1,479,751 418,595 13,931,000	80,000 0 -11,000 <b>253,200</b>	1,873,310 1,479,751 407,595 <b>14,184,200</b>
Environmental and other defense activities:  Defense environmental cleanup	5,537,186 815,512	70,000	5,607,186 818,512

Program Re	FY 2018 Request	House Change	House Authorized
Defense nuclear waste disposal Total, Environmental & other defense activities Total, Atomic Energy Defense Activities Total, Discretionary Funding	30,000 <b>6,382,698</b> <b>20,313,698</b> <b>20,446,698</b>	73,000 326,200 326,200	30,000 <b>6,455,698</b> <b>20,639,898</b> <b>20,772,898</b>
Nuclear Energy Idaho sitewide safeguards and security	133,000 <b>133,000</b>	0	133,000 <b>133,000</b>
Weapons Activities  Directed stockpile work  Life extension programs  BEI life advancion programs	788 572		788 572
V76 Life extension program	, 00,372 224,134 332,292		700,37.2 224,134 332,292
W80–4 Life extension programs	399,090 <b>1,744,088</b>	0	399,090 <b>1,744,088</b>
Stockpile systems B61 Stockpile systems	59,729		59,729
W76 Stockpile systems W78 Stockpile systems W80 Stockpile systems	51,400 60,100 80,087		51,400 60,100 80,087
B83 Stockpile systems W87 Stockpile systems W88 Stockpile systems	35,762 83,200 131,576		35,762 83,200 131,576

52,000	470,400 31,150 196,840 285,400 0 983,790	20,579 210,367 198,152 60,000 206,196 <b>0</b> 695,294 0 3,977,026	57,710 89,313 122,347 37,600 74,833 [-2,000] 52,963 50,755 -2,000 485,521
52,000	470,400 31,150 196,840 285,400	20,579 210,367 198,152 60,000 206,196 <b>695,294</b> 3,977,026	57,710 89,313 122,347 37,600 76,833 52,963 50,755 <b>487,521</b>
Weapons dismantlement and disposition  Operations and maintenance	Stockpile services Production support Research and development support R&D cartification and safety Management, technology, and production Total, Stockpile services	Strategic materials Uranium sustainment Plutonium sustainment Tritium sustainment Domestic uranium enrichment Strategic materials sustainment Total, Strategic materials Total, Directed stockpile work	Research, development, test and evaluation (RDT&E)  Science Advanced certification Primary assessment technologies Dynamic materials properties Advanced radiography Secondary assessment technologies Program decrease Academic alliances and partnerships Enhanced Capabilities for Subcritical Experiments

SEC. 4701. DEPARTMENT OF ENERGY NATIONAL SECURITY PROGRAMS (In Thousands of Dollars)			
Program	FY 2018 Request	House Change	House Authorized
Engineering			
Enhanced surety	39,717		39,717
Weapon systems engineering assessment technology	23,029	,	23,029
Nuclear survivability	45,230	4,000	49,230
Fubrand annulland	14 1 1 1 7	[4,000]	7 K 1 A Z
Shoknije Resnonsiveness	43,147		43,147
Total, Engineering	193,123	4,000	197,123
Inertial confinement fusion ignition and high yield			
Ignition	79,575	-3,000	76,575
Frugialli deutease	23.565	[000,6—]	23 565
Diagnostics, cryogenics and experimental support	77,915		77,915
Pulsed power inertial confinement fusion	7,596		7,596
Joint program in high energy density laboratory plasmas	9,492		9,492
Facility operations and target production	334,791	-3,000	331,791
rogiam decrease	532,934	[-3,000] - <b>6,00</b>	526,934
Advanced simulation and computing Advanced simulation and computing	709 244		709 244
Construction:	1		1
18-D-670, Exascale Class Computer Cooling Equipment, LNL	22,000		22,000
18-D-6zU, Exascale Computing Facility Modernization Project	3,000 <b>25.000</b>	0	3,000 <b>25.000</b>
Total, Advanced simulation and computing	734,244	0	734,244

Additive manufacturing  Component manufacturing development  Processing technology development  Total, Advanced manufacturing  Total, RDT&E	12,000 38,644 29,896 <b>80,540</b> <b>2,028,362</b>	0 -4,000	12,000 38,644 29,896 <b>80,540</b> <b>2,024,362</b>
Infrastructure and operations (formerly RTBF)  Operations of facilities  Safety and environmental operations  Maintenance and repair of facilities  Program increase to address high-priority preventative maintenance through FIRRP  Recapitalization  Program increase to address high-priority deferred maintenance through FIRRP	868,000 116,000 360,000 427,342	35,000 [35,000] 115,000	868,000 116,000 395,000 542,342
Construction:  18—D—670, Material Staging Facility, PX Project initiation  18—D—660, Fire Station, Y—12  18—D—660, Tritium Production Capability, SRS  17—D—640 UIa Complex Enhancements Project, NNSS  17—D—630 Expand Electrical Distribution System, LLNL  16—D—515 Albuquerque complex project  15—D—613 Emergency Operations Center, Y—12  07—D—220 Radioactive liquid waste treatment facility upgrade project, LANL  07—D—20-04 Transuranic liquid waste facility, LANL  06—D—141 Uranium processing facility Y—12, Oak Ridge, TN  04—D—125 Chemistry and metallurgy research facility replacement project, LANL  Total, Construction  Total, Construction	28,000 6,800 22,100 6,000 98,000 7,000 2,100 17,895 663,000 1895 63,000 180,900	5,200 [5,200] <b>5,200</b>	5,200 28,000 6,800 22,100 6,000 7,000 7,000 17,895 663,000 1,036,995

Program FY Rec	FY 2018 Request	House Change	House Authorized
Secure transportation asset  Operations and equipment	219,464 105,600 <b>325,064</b>	0	219,464 105,600 <b>325,064</b>
Defense nuclear security  Operations and maintenance	686,977 <b>776,989</b>	33,000 [33,000] <b>33,</b> 00	719,977 <b>719,977</b>
Information technology and cybersecurity	186,728 232,050 <b>10,239,344</b>	184,200	186,728 232,050 <b>10,423,544</b>
Defense Nuclear Nonproliferation  Defense Nuclear Nonproliferation Programs Global material security International nuclear security Radiological security Nuclear smuggling detection Program decrease Total, Global material security	46,339 146,340 144,429 337,108	-5,000  -5,000]  - <b>5,000</b>	46,339 146,340 139,429 <b>332,108</b>
Material management and minimization HEU reactor conversion Nuclear material removal	125,500 32,925	5,000	125,500 37,925

Acceleration of priority programs	173,669 <b>332,094</b>	[5,000] <b>5,000</b>	173,669 <b>337,094</b>
Nonproliferation and arms control	129,703 446,095	5,000 [5,000]	129,703 451,095
Nonproliferation Construction:  18-D-150 Surplus Plutonium Disposition Project  99-D-143 Mixed Oxide (MOX) Fuel Fabrication Facility, SRS  Program increase  Total, Nonproliferation construction  Total, Defense Nuclear Nonproliferation Programs  1,55	9,000 270,000 <b>279,000</b> <b>1,524,000</b>	70,000 [70,000] <b>70,000</b> <b>75,000</b>	9,000 340,000 <b>349,000</b> <b>1,599,000</b>
Low Enriched Uranium R&D for Naval Reactors	0	5,000 [5,000]	5,000
Legacy contractor pensions 22  Nuclear counterterrorism and incident response program 22  Rescission of prior year balances 22  Actal, Defense Nuclear Nonproliferation 1,775	40,950 277,360 —49,000	000'08	40,950 277,360 -49,000 <b>1,873,310</b>
Naval Reactors  Naval reactors development 47  Columbia-Class reactor systems development 47  S8G Prototype refueling 47  Naval reactors operations and infrastructure 44  Constructions	473,267 156,700 190,000 466,884		473,267 156,700 190,000 466,884
J4 NRF Overpack Storage Expansion 3	13,700 15,000		13,700 15,000

SEC. 4701. DEPARTMENT OF ENERGY NATIONAL SECURITY PROGRAMS (In Thousands of Dollars)			
Program	FY 2018 Request	House Change	House Authorized
14–D–901 Spent fuel handling recapitalization project, NRF  Total, Construction  Total, Naval Reactors	116,000 <b>144,700</b> 48,200 <b>1,479,751</b>	0 0	116,000 144,700 48,200 1,479,751
Federal Salaries And Expenses Program direction Program decrease to support maximum of 1,690 employees Total, Office Of The Administrator	418,595 <b>418,595</b>	-11,000 [-11,000] - <b>11,000</b>	407,595 <b>407,595</b>
Defense Environmental Cleanup Closure sites: Closure sites administration	4,889		4,889
Hanford site: River corridor and other cleanup operations	58,692	35,000	93,692
Acceleration of priority programs	637,879	[35,000] 8,000 [8,000]	645,879
Construction:  18-D-404 WESF Modifications and Capsule Storage 15-D-401 Containerized sludge removal annex, RL  Total, Construction Total, Hanford site	6,500 8,000 <b>14,500</b> <b>716,192</b>	0 43,000	6,500 8,000 <b>14,500</b> <b>759,192</b>

Idaho National Laboratory:  SNF stabilization and disposition—2012  Solid waste stabilization and disposition  Radioactive liquid tank waste stabilization and disposition  Soil and water remediation—2035	19,975 170,101 111,352 44,727		19,975 170,101 111,352 44,727
ldaho community and regulatory support	4,0/1 <b>350,226</b>	0	4,071 <b>350,226</b>
NNSA sites	-		
Lawrence Livermore National Laboratory	1,1/5 1,800		1,1/5 1,800
Nevada	60,136 2.600		60,136 2.600
Los Alamos National Laboratory	191,629		191,629
Total, NNSA sites and Nevada off-sites	257,340	0	257,340
Oak Ridge Reservation: OR Muclear facility D. D.			
OR-0041—D&D - Y-12	29,369		29,369
OR-0042—D&D -ORNL	48,110		48,110
17-D-401 On-site waste disposal facility	5,000		5,000
14-D-403 Outfall 200 Mercury Treatment facility	17,100 <b>82,479</b>	0	17,100 <b>82,479</b>
U233 Disposition Program	33,784		33,784
OR cleanup and disposition	66,632 4,605		66,632 4,605
OR Solid waste stabilization and disposition technology development	3,000 <b>207,600</b>	0	3,000 <b>207,600</b>

SEC. 4701. DEPARTMENT OF ENERGY NATIONAL SECURITY PROGRAMS (In Thousands of Dollars)			
Program	FY 2018 Request	House Change	House Authorized
Office of River Protection:  Waste treatment and immobilization plant Construction:  0D-416 A-D WTP Subprojects A-D column - A-16 E-Pretreatment Facility	655,000		655,000
Total, 01-D-416 Construction	000'069	0	000'069
WTP Commissioning	8,000 <b>698,000</b>	0	8,000 <b>698,000</b>
Tank farm activities Rad liquid tank waste stabilization and disposition	713,311		713,311
Total, Office of River protection	93,000 <b>806,311</b> <b>1,504,311</b>	0 0	93,000 <b>806,311</b> <b>1,504,311</b>
Savannah River Sites: Nuclear Material Management ————————————————————————————————————	323,482	27,000	350,482
Environmental Cleanup Environmental Cleanup	159,478		159,478
Consultations: Contentions Center	500 <b>159,978</b>	0	500 <b>159,978</b>

SR community and regulatory support	11,249		11,249
Radioactive liquid tank waste: Radioactive liquid tank waste stabilization and disposition	597,258		597,258
CONSTRUCTION: 18—D-401, SDU #8/9	200		200
17-D-402—Saltstone Disposal Unit #7	40,000		40,000
05–D-405 Salt waste processing facility, Savannah River Site	150,000 <b>190 500</b>	-	150,000 190 500
Total, Radioactive liquid tank waste	787.758		787.758
	1,282,467	27,000	1,309,467
Waste Isolation Pilot Plant			
Operations and maintenance	206,617		206,617
Central characterization project	22,500		22,500
Transportation	21,854		21,854
Construction:			
15-D-411 Safety significant confinement ventilation system, WIPP	46,000		46,000
15-D-412 Exhaust shaft, WIPP	19,600	,	19,600
Total, Construction	65,600	0	65,600
Total, Waste Isolation Pilot Plant	316,571	0	316,571
Program direction	300.000		300.000
Program support	6.979		6.979
	22,109		22,109
Minority Serving Institution Partnership	6,000		6,000
Safeguards and Security			
Oak Ridge Reservation	16,500 14 049		16,500 14 049
Portsmouth	12.713		12.713
Richland/Hanford Site	75,600		75,600
Savannah Kiver Site	142,314		142,314

SEC. 4701. DEPARTMENT OF ENERGY NATIONAL SECURITY PROGRAMS (In Thousands of Dollars)			
Program	FY 2018 Request	House Change	House Authorized
Waste Isolation Pilot Project West Valley Total, Safeguards and Security	5,200 2,784 <b>269,160</b>	0	5,200 2,784 <b>269,160</b>
Cyber Security Technology development HQEF-0040—Excess Facilities Total, Defense Environmental Cleanup	43,342 25,000 225,000 <b>5,537,186</b>	70,000	43,342 25,000 225,000 <b>5,607,186</b>
Other Defense Activities  Environment, health, safety and security  Environment, health, safety and security  Program direction  Total, Environment, Health, safety and security	130,693 68,765 <b>199,458</b>	0	130,693 68,765 <b>199,458</b>
Independent enterprise assessments Independent enterprise assessments Program direction Total, Independent enterprise assessments	24,068 50,863 <b>74,931</b>	0	24,068 50,863 <b>74,931</b>
Specialized security activities	237,912	3,000	240,912
Office of Legacy Management Legacy management Program direction	137,674 16,932		137,674 16,932

Total, Office of Legacy Management	154,606	0	154,606
Defense-related activities Defense related administrative support			
Chief financial officer	48,484		48,484
Chief information officer	91,443 3,073		91,443 3,073
Total, Defense related administrative support	143,000	0	143,000
Office of hearings and appeals Subtotal, Other defense activities	5,605 <b>815,512</b>	3,000	5,605 <b>818,512</b>
Total, Other Defense Activities	815,512	3,000	818,512
Defense Nuclear Waste Disposal Yucca mountain and interim storage	30,000 <b>30,000</b>	0	30,000 30,000

## DEPARTMENT OF DEFENSE AUTHORIZATION REQUEST

The Department of Defense requested legislation, in accordance with the program of the President, as illustrated by the correspondence set out below:

May 25, 2017.

Hon. PAUL D. RYAN, Speaker of the House of Representatives, Washington, DC.

DEAR MR. SPEAKER: Enclosed please find a draft of proposed legislation, titled the "National Defense Authorization Act for Fiscal Year 2018", which the Department of Defense requests be enacted during the first session of the 115th Congress.

The purpose of each provision in the proposed bill is stated in the

accompanying section-by-section analysis.

The Department is currently working with the Administration on additional legislative initiatives, which the Department hopes to transmit to Congress for its consideration in the coming weeks.

The Office of Management and Budget advises that there is no objection, from the standpoint of the Administration's program, to the presenting of these legislative proposals for your consideration and the consideration of Congress.

Sincerely,

E. Peter Giambastiani, III.

Enclosure: As Stated.

June 16, 2017.

Hon. PAUL D. RYAN, Speaker of the House of Representatives, Washington, DC.

DEAR MR. SPEAKER: Enclosed please find additional legislative proposals that the Department of Defense requests be enacted during the first session of the 115th Congress. The purpose of each proposal is stated in the accompanying section-by-section analysis. These proposals are submitted by the Department as a follow-on to the earlier transmittal of our request for enactment of proposed legislation titled the "National Defense Authorization Act for Fiscal Year 2018."

The Department is currently working with the Administration on additional legislative initiatives, which the Department hopes to transmit to Congress for its consideration in the coming weeks.

The Office of Management and Budget advises that there is no objection, from the standpoint of the Administration's program, to the presenting of these legislative proposals for your consideration and the consideration of Congress.

Sincerely,

E. Peter Giambastiani, III.

Enclosure: As Stated.

## COMMUNICATIONS FROM OTHER COMMITTEES

HOUSE OF REPRESENTATIVES, COMMITTEE ON HOUSE ADMINISTRATION, Washington, DC, June 29, 2017.

Hon. WILLIAM M. "MAC" THORNBERRY, Chairman, Committee on Armed Services, House of Representatives, Washington, DC.

DEAR MR. THORNBERRY: I am writing to you concerning the bill H.R. 2810, the National Defense Authorization Act for Fiscal Year 2018. There are certain provisions in the legislation which fall within the Rule X jurisdiction of the Committee on House Administration.

In the interest of permitting your committee to proceed expeditiously to floor consideration of this important bill, I am willing to waive this committee's right to sequential referral. I do so with the understanding that by waiving consideration of the bill the Committee on House Administration does not waive any future jurisdictional claim over the subject matters contained in the bill which fall within its Rule X jurisdiction. I request that you urge the Speaker to name members of this committee to any conference committee which is named to consider such provisions.

Please place this letter into the committee report on H.R. 2810 and into the Congressional Record during consideration of the measure on the House floor. Thank you for the cooperative spirit in which you have worked regarding this matter and others between our respective committees.

Sincerely,

Gregg Harper, Chairman.

HOUSE OF REPRESENTATIVES, COMMITTEE ON ARMED SERVICES, Washington, DC, July 5, 2017.

Hon. GREGG HARPER, Chairman, Committee on House Administration, House of Representatives, Washington, DC.

DEAR MR. CHAIRMAN: Thank you for your letter regarding H.R. 2810, the National Defense Authorization Act for Fiscal Year 2018. I agree that the Committee on House Administration has valid jurisdictional claims to certain provisions in this important legislation, and I am most appreciative of your decision not to request a referral in the interest of expediting consideration of the bill. I agree that by foregoing a sequential referral, the Committee on House Administration is not waiving its jurisdiction. Further, this exchange of letters will be included in the committee report on the bill.

Sincerely,

House of Representatives, Committee on Agriculture, Washington, DC, July 5, 2017.

Hon. WILLIAM M. "MAC" THORNBERRY, Chairman, Committee on Armed Services, House of Representatives, Washington, DC.

DEAR MR. THORNBERRY: I am writing concerning H.R. 2810, the National Defense Authorization Act for Fiscal Year 2018.

This legislation contains provisions within the Committee on Agriculture's Rule X jurisdiction. As a result of your having consulted with the Committee and in order to expedite this bill for floor consideration, the Committee on Agriculture will forego action on the bill. This is being done on the basis of our mutual understanding that doing so will in no way diminish or alter the jurisdiction of the Committee on Agriculture with respect to the appointment of conferees, or to any future jurisdictional claim over the subject matters contained in the bill or similar legislation.

I would appreciate your response to this letter confirming this understanding, and would request that you include a copy of this letter and your response in the Committee Report and in the *Congressional Record* during the floor consideration of this bill. Thank you in advance for your cooperation.

Sincerely,

K. MICHAEL CONAWAY, Chairman.

House of Representatives, Committee on Armed Services, Washington, DC, July 5, 2017.

Hon. K. MICHAEL CONAWAY, Chairman, Committee on Agriculture, House of Representatives, Washington, DC.

DEAR MR. CHAIRMAN: Thank you for your letter regarding H.R. 2810, the National Defense Authorization Act for Fiscal Year 2018. I agree that the Committee on Agriculture has valid jurisdictional claims to certain provisions in this important legislation, and I am most appreciative of your decision not to request a referral in the interest of expediting consideration of the bill. I agree that by foregoing a sequential referral, the Committee on Agriculture is not waiving its jurisdiction. Further, this exchange of letters will be included in the committee report on the bill.

Sincerely,

House of Representatives, Committee on the Budget, Washington, DC, July 5, 2017.

Hon. WILLIAM M. "MAC" THORNBERRY, Chairman, Committee on Armed Services, House of Representatives, Washington, DC.

DEAR MR. THORNBERRY: I am writing regarding H.R. 2810, the National Defense Authorization Act for Fiscal Year 2018, which the Committee on Armed Services ordered reported on June 28, 2017.

The bill contains provisions that fall within the jurisdiction of the Committee on the Budget. In order to expedite House consideration of H.R. 2810, the Committee on the Budget will forgo action on the bill. This is being done with the understanding that it does not waive any jurisdiction over the subject matter contained in H.R. 2810 or similar legislation and that the Committee will be appropriately consulted and involved as this bill or similar legislation moves forward so that the Committee may address any remaining issues that fall within its jurisdiction. The Committee on the Budget also reserves the right to seek appointment of an appropriate number of conferees to any House-Senate conference involving this or similar legislation and requests your support of any such request.

I also request that you include this letter and your response as part of your committee's report on H.R. 2810 and in the *Congressional Record* during its consideration on the House floor.

Thank you for your attention to these matters. I look forward to working with you as this bill moves through the Congress.

Sincerely,

DIANE BLACK, Chairman.

House of Representatives, Committee on Armed Services, Washington, DC, July 5, 2017.

Hon. DIANE BLACK, Chairman, Committee on the Budget, House of Representatives, Washington, DC.

DEAR MADAM CHAIRMAN: Thank you for your letter regarding H.R. 2810, the National Defense Authorization Act for Fiscal Year 2018. I agree that the Committee on the Budget has valid jurisdictional claims to certain provisions in this important legislation, and I am most appreciative of your decision not to request a referral in the interest of expediting consideration of the bill. I agree that by foregoing a sequential referral, the Committee on the Budget is not waiving its jurisdiction. Further, this exchange of letters will be included in the committee report on the bill.

Sincerely,

HOUSE OF REPRESENTATIVES, COMMITTEE ON ENERGY AND COMMERCE, Washington, DC, July 5, 2017.

Hon. WILLIAM M. "MAC" THORNBERRY, Chairman, Committee on Armed Services, House of Representatives, Washington, DC.

DEAR MR. CHAIRMAN: I write to confirm our mutual understanding regarding H.R. 2810, the "National Defense Authorization Act for Fiscal Year 2018." While the legislation does contain provisions within the jurisdiction of the Committee on Energy and Commerce, the Committee will not request a sequential referral so that it can proceed expeditiously to the House floor for consideration.

The Committee takes this action with the understanding that its jurisdictional interests over this and similar legislation are in no way diminished or altered, and that the Committee will be appropriately consulted and involved as such legislation moves forward. The Committee also reserves the right to seek appointment to any House-Senate conference on such legislation and requests your support when such a request is made.

Finally, I would appreciate a response to this letter confirming this understanding and ask that a copy of our exchange of letters be included in the *Congressional Record* during consideration of H.R. 2810 on the House floor.

Sincerely,

Greg Walden, Chairman.

HOUSE OF REPRESENTATIVES, COMMITTEE ON ARMED SERVICES, Washington, DC, July 5, 2017.

Hon. Greg Walden, Chairman, Committee on Energy and Commerce, House of Representatives, Washington, DC.

DEAR MR. CHAIRMAN: Thank you for your letter regarding H.R. 2810, the National Defense Authorization Act for Fiscal Year 2018. I agree that the Committee on Energy and Commerce has valid jurisdictional claims to certain provisions in this important legislation, and I am most appreciative of your decision not to request a referral in the interest of expediting consideration of the bill. I agree that by foregoing a sequential referral, the Committee on Energy and Commerce is not waiving its jurisdiction. Further, this exchange of letters will be included in the committee report on the bill.

Sincerely,

House of Representatives, COMMITTEE ON EDUCATION AND THE WORKFORCE, Washington, DC, July 5, 2017.

Hon. WILLIAM M. "MAC" THORNBERRY, Chairman, Committee on Armed Services, House of Representatives, Washington, DC.

DEAR MR. CHAIRMAN: I am writing to confirm our mutual understanding with respect to H.R. 2810, the National Defense Authorization Act for Fiscal Year 2018. Thank you for consulting with the Committee on Education and the Workforce with regard to H.R. 2810 on those matters within the Committee's jurisdiction.

In the interest of expediting the House's consideration of H.R. 2810, the Committee on Education and the Workforce will forgo further consideration of this bill. However, I do so only with the understanding this procedural route will not be construed to prejudice my committee's jurisdictional interest and prerogatives on this bill or any other similar legislation and will not be considered as precedent for consideration of matters of jurisdictional interest to my committee in the future.

I respectfully request your support for the appointment of outside conferees from the Committee on Education and the Workforce should this bill or a similar bill be considered in a conference with the Senate. I also request you include our exchange of letters on this matter in the Committee Report on H.R. 2810 and in the Congressional Record during consideration of this bill on the House Floor. Thank you for your attention to these matters.

Sincerely.

Virginia Foxx, Chairwoman.

House of Representatives, COMMITTEE ON ARMED SERVICES. Washington, DC, July 5, 2017.

Hon. VIRGINIA FOXX, Chairwoman, Committee on Education and the Workforce, House of Representatives, Washington, DC.

DEAR MADAM CHAIRWOMAN: Thank you for your letter regarding H.R. 2810, the National Defense Authorization Act for Fiscal Year 2018. I agree that the Committee on Education and the Workforce has valid jurisdictional claims to certain provisions in this important legislation, and I am most appreciative of your decision not to request a referral in the interest of expediting consideration of the bill. I agree that by foregoing a sequential referral, the Committee on Education and the Workforce is not waiving its jurisdiction. Further, this exchange of letters will be included in the committee report on the bill.

Sincerely,

House of Representatives, Committee on Financial Services, Washington, DC, June 30, 2017.

Hon. WILLIAM M. "MAC" THORNBERRY, Chairman, Committee on Armed Services, House of Representatives, Washington, DC.

DEAR MR. CHAIRMAN: I am writing to you regarding H.R. 2810, the National Defense Authorization Act for Fiscal Year 2018. There are certain provisions in the legislation which fall within the Rule

X jurisdiction of the Committee on Financial Services.

In the interest of permitting your committee to proceed expeditiously to floor consideration of this important bill, I am willing to waive this committee's right to sequential referral. I do so with the understanding that by waiving consideration of the bill the Committee on Financial Services does not waive any future jurisdictional claim over the subject matters contained in the bill which fall within its Rule X jurisdiction. I request that you urge the Speaker to name members of this committee to any conference committee which is named to consider such provisions.

Please place this letter into the committee report on H.R. 2810 and into the Congressional Record during consideration of the measure on the House floor. Thank you for the cooperative spirit in which you have worked regarding this matter and others be-

tween our respective committees.

Sincerely,

Jeb Hensarling, Chairman.

House of Representatives, Committee on Armed Services, Washington, DC, July 5, 2017.

Hon. Jeb Hensarling, Chairman, Committee on Financial Services, House of Representatives, Washington, DC.

DEAR MR. CHAIRMAN: Thank you for your letter regarding H.R. 2810, the National Defense Authorization Act for Fiscal Year 2018. I agree that the Committee on Financial Services has valid jurisdictional claims to certain provisions in this important legislation, and I am most appreciative of your decision not to request a referral in the interest of expediting consideration of the bill. I agree that by foregoing a sequential referral, the Committee on Financial Services is not waiving its jurisdiction. Further, this exchange of letters will be included in the committee report on the bill.

Sincerely,

HOUSE OF REPRESENTATIVES, COMMITTEE ON FOREIGN AFFAIRS, Washington, DC, June 30, 2017.

Hon. WILLIAM M. "MAC" THORNBERRY, Chairman, Committee on Armed Services, House of Representatives, Washington, DC.

DEAR MR. CHAIRMAN: I write to confirm our mutual understanding regarding H.R. 2810, the National Defense Authorization Act for Fiscal Year 2018, which contains substantial matter that falls within the Rule X legislative jurisdiction of the Foreign Affairs Committee. I appreciate the cooperation that allowed us to work out mutually agreeable text on numerous matters prior to your markup.

Based on that cooperation and our associated understandings, the Foreign Affairs Committee will not seek a sequential referral or object to floor consideration of the bill text approved at your Committee markup. This decision in no way diminishes or alters the jurisdictional interests of the Foreign Affairs Committee in this bill, any subsequent amendments, or similar legislation. I request your support for the appointment of House Foreign Affairs conferees during any House-Senate conference on this legislation.

Finally, I respectfully request that you include this letter and your response in your committee report on the bill and in the Congressional Record during consideration of H.R. 2810 on the House floor.

Sincerely,

EDWARD R. ROYCE, Chairman.

HOUSE OF REPRESENTATIVES, COMMITTEE ON ARMED SERVICES, Washington, DC, July 5, 2017.

Hon. EDWARD R. ROYCE, Chairman, Committee on Foreign Affairs, House of Representatives, Washington, DC.

DEAR MR. CHAIRMAN: Thank you for your letter regarding H.R. 2810, the National Defense Authorization Act for Fiscal Year 2018. I agree that the Committee on Foreign Affairs has valid jurisdictional claims to certain provisions in this important legislation, and I am most appreciative of your decision not to request a referral in the interest of expediting consideration of the bill. I agree that by foregoing a sequential referral, the Committee on Foreign Affairs is not waiving its jurisdiction. Further, this exchange of letters will be included in the committee report on the bill.

Sincerely,

House of Representatives, PERMANENT SELECT COMMITTEE ON INTELLIGENCE, Washington, DC, July 3, 2017.

Hon. WILLIAM M. "MAC" THORNBERRY, Chairman, Committee on Armed Services, House of Representatives, Washington, DC.

DEAR MR. CHAIRMAN: I write to you concerning H.R. 2810, National Defense Authorization Act for Fiscal Year 2018, which contains provisions within the Rule X jurisdiction of the Permanent Select Committee on Intelligence ("the Committee"). The Committee recognizes the need for proceeding expeditiously to Floor consideration of this important bill. Therefore, I do not intend to

request a sequential referral.

This waiver is conditional on our mutual understanding that my decision to forego Committee consideration of this legislation does not diminish or otherwise affect any future claim over the matters in the bill which fall within the Committee's jurisdiction, and that a copy of this letter and your response acknowledging the Committee's jurisdictional interest will be included in the committee report accompanying H.R. 2810 and submitted into the Congressional Record during consideration of this bill on the House Floor.

I also intend to seek the appointment of Committee Members to any House-Senate conference on this legislation and request your support if such a request is made. Thank you for the cooperative spirit in which you have worked regarding this and other matters

between our respective committees.

Sincerely,

DEVIN NUNES, Chairman.

House of Representatives, COMMITTEE ON ARMED SERVICES, Washington, DC, July 5, 2017.

Hon. DEVIN NUNES. Chairman, Permanent Select Committee on Intelligence, House of Representatives, Washington, DC.

DEAR MR. CHAIRMAN: Thank you for your letter regarding H.R. 2810, the National Defense Authorization Act for Fiscal Year 2018. I agree that the Permanent Select Committee on Intelligence has valid jurisdictional claims to certain provisions in this important legislation, and I am most appreciative of your decision not to request a referral in the interest of expediting consideration of the bill. I agree that by foregoing a sequential referral, the Permanent Select Committee on Intelligence is not waiving its jurisdiction. Further, this exchange of letters will be included in the committee report on the bill.

Sincerely,

HOUSE OF REPRESENTATIVES, COMMITTEE ON THE JUDICIARY, Washington, DC, June 30, 2017.

Hon. WILLIAM M. "MAC" THORNBERRY, Chairman, Committee on Armed Services, House of Representatives, Washington, DC.

DEAR CHAIRMAN THORNBERRY: I write to confirm our mutual understanding regarding H.R. 2810, the National Defense Authorization Act for Fiscal Year 2018. This legislation contains subject matter within the jurisdiction of the Committee on the Judiciary. However, in order to expedite floor consideration of this important legislation, the committee waives consideration of the bill.

The Judiciary Committee takes this action only with the understanding that the committee's jurisdictional interests over this and

similar legislation are in no way diminished or altered.

The Committee also reserves the right to seek appointment to any House-Senate conference on this legislation and requests your support if such a request is made. Finally, I would appreciate your including this letter in your committee report on this bill and in the Congressional Record during consideration of H.R. 2810 on the House Floor. Thank you for your attention to these matters.

Sincerely,

Bob Goodlatte, *Chairman*.

House of Representatives, Committee on Armed Services, Washington, DC, July 5, 2017.

Hon. Bob Goodlatte, Chairman, Committee on the Judiciary, House of Representatives, Washington, DC.

DEAR MR. CHAIRMAN: Thank you for your letter regarding H.R. 2810, the National Defense Authorization Act for Fiscal Year 2018. I agree that the Committee on the Judiciary has valid jurisdictional claims to certain provisions in this important legislation, and I am most appreciative of your decision not to request a referral in the interest of expediting consideration of the bill. I agree that by foregoing a sequential referral, the Committee on the Judiciary is not waiving its jurisdiction. Further, this exchange of letters will be included in the committee report on the bill.

Sincerely,

WILLIAM M. "MAC" THORNBERRY, Chairman.

House of Representatives, Committee on Natural Resources, Washington, DC, June 29, 2017.

Hon. WILLIAM M. "MAC" THORNBERRY, Chairman, Committee on Armed Services, House of Representatives, Washington, DC.

DEAR MR. CHAIRMAN: I write concerning H.R. 2810, the National Defense Authorization Act for Fiscal Year 2018. That bill, as or-

dered reported, contains provisions within the Rule X jurisdiction of the Natural Resources Committee, including those affecting public lands, the National Oceanic and Atmospheric Administration Corps, and matters regarding the Freely Associated States and insular areas of the United States.

In the interest of permitting you to proceed expeditiously to floor consideration of this very important bill, I waive this committee's right to a sequential referral. I do so with the understanding that the Natural Resources Committee does not waive any future jurisdictional claim over the subject matter contained in the bill that fall within its Rule X jurisdiction. I also request that you urge the Speaker to name members of the Natural Resources committee to any conference committee to consider such provisions.

Please place this letter into the committee report on H.R. 2810 and into the Congressional Record during consideration of the measure on the House floor. Thank you for the cooperative spirit in which you and your staff have worked regarding this matter and others between our respective committees, and congratulations on

this significant achievement.

Sincerely,

ROB BISHOP, Chairman.

House of Representatives, COMMITTEE ON ARMED SERVICES. Washington, DC, July 5, 2017.

Hon. Rob Bishop, Chairman, Committee on Natural Resources, House of Representatives, Washington, DC.

DEAR MR. CHAIRMAN: Thank you for your letter regarding H.R. 2810, the National Defense Authorization Act for Fiscal Year 2018. I agree that the Committee on Natural Resources has valid jurisdictional claims to certain provisions in this important legislation, and I am most appreciative of your decision not to request a referral in the interest of expediting consideration of the bill. I agree that by foregoing a sequential referral, the Committee on Natural Resources is not waiving its jurisdiction. Further, this exchange of letters will be included in the committee report on the bill.

Sincerely,

WILLIAM M. "MAC" THORNBERRY, Chairman.

House of Representatives, Committee on Oversight OUSE OF REFRESENTATION AND GOVERNMENT REFORM,

Washington, DC, June 29, 2017.

Hon. WILLIAM M. "MAC" THORNBERRY, Chairman, Committee on Armed Services, House of Representatives, Washington, DC.

DEAR MR. CHAIRMAN: I am writing to you concerning the jurisdictional interest of the Committee on Oversight and Government Reform in matters being considered in H.R. 2810, the National Defense Authorization Act for Fiscal Year 2018.

Our committee recognizes the importance of H.R. 2810 and the need for the legislation to move expeditiously. Therefore, while we have a valid claim to jurisdiction over the bill, I do not intend to request a sequential referral. This, of course, is conditional on our mutual understanding that nothing in this legislation or my decision to forego a sequential referral waives, reduces or otherwise affects the jurisdiction of the Committee on Oversight and Government Reform, and that a copy of this letter and your response acknowledging our jurisdictional interest will be included in the Committee Report and as part of the Congressional Record during consideration of this bill by the House.

The Committee on Oversight and Government Reform also asks that you support our request to be conferees on the provisions over which we have jurisdiction during any House-Senate conference.

Thank you for your consideration in this matter. Sincerely,

TREY GOWDY, Chairman.

House of Representatives, Committee on Armed Services, Washington, DC, July 5, 2017.

Hon. TREY GOWDY, Chairman, Committee on Oversight and Government Reform, House of Representatives, Washington, DC.

DEAR MR. CHAIRMAN: Thank you for your letter regarding H.R. 2810, the National Defense Authorization Act for Fiscal Year 2018. I agree that the Committee on Oversight and Government Reform has valid jurisdictional claims to certain provisions in this important legislation, and I am most appreciative of your decision not to request a referral in the interest of expediting consideration of the bill. I agree that by foregoing a sequential referral, the Committee on Oversight and Government Reform is not waiving its jurisdiction. Further, this exchange of letters will be included in the committee report on the bill.

Sincerely,

WILLIAM M. "MAC" THORNBERRY, Chairman.

House of Representatives, Committee on Small Business, Washington, DC, June 27, 2017.

Hon. WILLIAM M. "MAC" THORNBERRY, Chairman, Committee on Armed Services, House of Representatives, Washington, DC.

DEAR CHAIRMAN THORNBERRY: I write to confirm our mutual understanding regarding H.R. 2810, the National Defense Authorization Act for Fiscal Year 2018. This legislation contains subject matter within the jurisdiction of the Committee on Small Business. However, in order to expedite floor consideration of this important legislation, the committee waives consideration of the bill.

The Committee on Small Business takes this action only with the understanding that the committee's jurisdictional interests over this and similar legislation are in no way diminished or altered.

The committee also reserves the right to seek appointment to any House-Senate conference on this legislation and requests your support if such a request is made. Finally, I would appreciate your including this letter in the Congressional Record during consideration of H.R. 2810 on the House Floor. Thank you for your attention to these matters.

Sincerely,

STEVE CHABOT, Chairman.

House of Representatives, Committee on Armed Services, Washington, DC, July 5, 2017.

Hon. Steve Chabot, Chairman, Committee on Small Business, House of Representatives, Washington, DC.

DEAR MR. CHAIRMAN: Thank you for your letter regarding H.R. 2810, the National Defense Authorization Act for Fiscal Year 2018. I agree that the Committee on Small Business has valid jurisdictional claims to certain provisions in this important legislation, and I am most appreciative of your decision not to request a referral in the interest of expediting consideration of the bill. I agree that by foregoing a sequential referral, the Committee on Small Business is not waiving its jurisdiction. Further, this exchange of letters will be included in the committee report on the bill.

Sincerely,

WILLIAM M. "MAC" THORNBERRY, Chairman.

House of Representatives, Committee on Transportation and Infrastructure, Washington, DC, July 5, 2017.

Hon. WILLIAM M. "MAC" THORNBERRY, Chairman, Committee on Armed Services, House of Representatives, Washington, DC.

DEAR CHAIRMAN THORNBERRY: I write concerning H.R. 2810, the National Defense Authorization Act for Fiscal Year 2018, as amended. There are certain provisions in the legislation that fall within the Rule X jurisdiction of the Committee on Transportation and Infrastructure.

However, in order to expedite this legislation for floor consideration, the Committee will forgo action on this bill. This, of course, is conditional on our mutual understanding that forgoing consideration of the bill does not prejudice the Committee with respect to the appointment of conferees or to any future jurisdictional claim over the subject matters contained in the bill or similar legislation that fall within the Committee's Rule X jurisdiction. I request you urge the Speaker to name members of the Committee to any conference committee named to consider such provisions.

Please place a copy of this letter and your response acknowledging our jurisdictional interest into the committee report on H.R. 2810 and into the Congressional Record during consideration of the measure on the House floor.

Sincerely,

BILL SHUSTER, Chairman.

HOUSE OF REPRESENTATIVES, COMMITTEE ON ARMED SERVICES, Washington, DC, July 5, 2017.

Hon. BILL SHUSTER, Chairman, Committee on Transportation and Infrastructure, House of Representatives, Washington, DC.

DEAR MR. CHAIRMAN: Thank you for your letter regarding H.R. 2810, the National Defense Authorization Act for Fiscal Year 2018. I agree that the Committee on Transportation and Infrastructure has valid jurisdictional claims to certain provisions in this important legislation, and I am most appreciative of your decision not to request a referral in the interest of expediting consideration of the bill. I agree that by foregoing a sequential referral, the Committee on Transportation and Infrastructure is not waiving its jurisdiction. Further, this exchange of letters will be included in the committee report on the bill.

Sincerely,

WILLIAM M. "MAC" THORNBERRY, Chairman.

House of Representatives, Committee on Veterans' Affairs, Washington, DC, June 30, 2017.

Hon. WILLIAM M. "MAC" THORNBERRY, Chairman, Committee on Armed Services, House of Representatives, Washington, DC.

DEAR MR. THORNBERRY: I write to confirm our mutual understanding regarding H.R. 2810, the National Defense Authorization Act for Fiscal Year 2018. This legislation contains subject matter within the jurisdiction of the Veterans' Affairs Committee. However, in order to expedite floor consideration of this important legislation, the committee waives consideration of the bill.

The Veterans' Affairs Committee takes this action only with the understanding that the committee's jurisdictional interests over this and similar legislation are in no way diminished or altered.

The committee also reserves the right to seek appointment to any House-Senate conference on this legislation and requests your support if such a request is made. Finally, I would appreciate your including this letter in the Congressional Record during consideration of H.R. 2810 on the House Floor. Thank you for your attention to these matters.

Sincerely,

DAVID P. ROE, M.D., *Chairman*.

House of Representatives, Committee on Armed Services, Washington, DC, July 5, 2017.

Hon. David P. Roe, M.D., Chairman, Committee on Veterans' Affairs, House of Representatives, Washington, DC.

DEAR MR. CHAIRMAN: Thank you for your letter regarding H.R. 2810, the National Defense Authorization Act for Fiscal Year 2018. I agree that the Committee on Veterans' Affairs has valid jurisdictional claims to certain provisions in this important legislation, and I am most appreciative of your decision not to request a referral in the interest of expediting consideration of the bill. I agree that by foregoing a sequential referral, the Committee on Veterans' Affairs is not waiving its jurisdiction. Further, this exchange of letters will be included in the committee report on the bill.

Sincerely,

WILLIAM M. "MAC" THORNBERRY, Chairman.

#### CONGRESSIONAL BUDGET OFFICE ESTIMATE

In compliance with clause 3(c)(3) of rule XIII of the House of Representatives, the cost estimate prepared by the Congressional Budget Office and submitted pursuant to section 402 of the Congressional Budget Act of 1974 is as follows:

### CONGRESSIONAL BUDGET OFFICE PRELIMINARY COST ESTIMATE

July 5, 2017.

Hon. Mac Thornberry, Chairman, Committee on Armed Services, House of Representatives, Washington, DC.

DEAR MR. CHAIRMAN: The Congressional Budget Office has completed a preliminary estimate of the direct spending and revenue effects of H.R. 2810, the National Defense Authorization Act for Fiscal Year 2018, as ordered reported by the House Committee on Armed Services on June 28, 2017. This preliminary estimate is based on the Committee Print 115–23 of H.R. 2810 that was posted to the website of the House Committee on Rules on June 30, 2017. CBO's complete cost estimate for H.R. 2810, including discretionary costs, will be provided shortly.

Several provisions of the legislation would have insignificant effects on direct spending over the 2017–2026 period, primarily as a result of changes to military health care benefits. On a preliminary basis, CBO estimates that in total enacting H.R. 2810 would increase or decrease net direct spending by less than \$500,000 over the 2018–2027 period.

The bill also would add a specified offense under the military justice system that CBO expects would increase the amount of fines and forfeitures of pay, which are classified as revenues, that are assessed at military courts-martial. Those increases would total less than \$500,000 over the next 10 years, CBO estimates. Because en-

acting the bill would affect direct spending and revenues, pay-as-

you-go procedures apply.

If you wish further details on this estimate, we will be pleased to provide them. The CBO staff contact is David Newman, who can be reached at 226–2840.

Sincerely,

KEITH HALL, Director.

Attachment.

### STATEMENT REQUIRED BY THE CONGRESSIONAL BUDGET $_{ m ACT}$

Pursuant to clause (3)(c)(2) of rule XIII of the Rules of the House of Representatives, and section 308(a) of the Congressional Budget Act of 1974 (Public Law 93–344):

- (1) this legislation does not provide budget authority subject to an allocation made pursuant to section 302(b) of Public Law 93–344;
- (2) the Congressional Budget Office (CBO) Estimate included in this report pursuant to clause (3)(c)(3) of rule XIII of the Rules of the House of Representatives contains CBO's projection of how this legislation will affect the levels of budget authority, budget outlays, revenues, and tax expenditures for fiscal year 2018 and for the ensuring 5 fiscal years; and
- (3) the CBO Estimate does not identify any new budget authority for assistance to state and local governments by this measure at

the time that this report was filed.

#### COMMITTEE COST ESTIMATE

Pursuant to clause (3)(d)(2)(B) of rule XIII of the Rules of the House of Representatives, the Congressional Budget Office Estimate included in this report satisfies the requirement for the committee to include an estimate by the committee of the costs incurred in carrying out this bill.

#### ADVISORY OF EARMARKS

The committee finds that H.R. 2810, the National Defense Authorization Act for Fiscal Year 2018, as reported, does not contain any congressional earmarks, limited tax benefits, or limited tariff benefits as defined in clause 9 of rule XXI of the Rules of the House of Representatives.

#### OVERSIGHT FINDINGS

With respect to clause 3(c)(1) of rule XIII of the Rules of the House of Representatives, this legislation results from hearings and other oversight activities conducted by the committee pursuant to clause 2(b)(1) of rule X. The findings are reflected in the body of this report.

#### GENERAL PERFORMANCE GOALS AND OBJECTIVES

With respect to clause 3(c)(4) of rule XIII of the Rules of the House of Representatives, the general goal and objective of H.R. 2810 is to begin the restoration of our national defense, to prepare

the warfighter for the threats of tomorrow as well as today, and to do so in a fiscally responsible manner.

The world is growing increasingly dangerous. In just the last year, the fight against the Islamic State of Iraq and the Levant (ISIL) in the Republic of Iraq and the Syrian Arab Republic has intensified, the Russian Federation has continued an aggressive push to destabilize the United States and its allies, and the Democratic People's Republic of Korea has tested increasingly sophisticated ballistic missiles. Unfortunately, constraints on defense funding are directly affecting our country's ability to address threats to our security, interests, and values and to deter aggression from adversaries and rising regional powers. As a result of the increased threat to national security and our concurrent military drawdown, there is a significant gap between what the American people expect the military to be able to do and what it actually could do effectively if called upon today. Much of the funding provided to the Department of Defense has been consumed by current operations and to keep the next to deploy forces ready. We have allowed other capabilities to atrophy, capacity to shrink, and the readiness of forces training at home station to suffer.

This legislation is a continuation of efforts of the Committee on Armed Services to reverse these trends and restore our national defense to a level the American people can, and should expect. The bill provides \$621.5 billion to support core Department of Defense requirements, and an increase of \$18.5 billion over the budget request. It also includes an additional \$74.6 billion of Overseas Contingency Operations, \$10.0 billion of which is set aside for additional base requirements. This includes money to fully fund the 2.4 percent pay raise troops are entitled to by law, to increase the size of the Army, Navy, and Air Force, to expand funding for maintenance and readiness, and to deter Russian aggression in Europe and their continued violations of bilateral treaty obligations.

The bill also refocuses the Armed Forces on crucial areas that have been neglected. The United States must be prepared to fight the wars of tomorrow, not just today. To that end, this legislation creates a Space Corps within the Department of the Air Force to ensure the Armed Forces are adequately focused on warfighting in space; it increases congressional oversight of military cyber operations, and it funds numerous upgrades to equipment that will ensure the warfighter is entering battle with 21st century weapon systems.

Finally, this bill cuts waste. Though we must increase our commitment to national defense, we must also ensure that increase is spent efficiently and effectively. This legislation includes numerous reforms to streamline the Department of Defense so that dollars invested in national defense are spent to secure the Nation, not on overhead or unnecessary red tape. The bill increases oversight of service contracts, which constitute a majority of Department of Defense contracting dollars; it improves purchasing of off-the-shelf goods, so that the Government is not paying needlessly high prices for items easily available on the commercial market; and it reforms contract auditing to return the most value for invested resources.

#### STATEMENT OF FEDERAL MANDATES

Pursuant to section 423 of Public Law 104–4, this legislation contains no Federal mandates with respect to state, local, and tribal governments, nor with respect to the private sector. Similarly, the bill provides no Federal intergovernmental mandates.

#### FEDERAL ADVISORY COMMITTEE STATEMENT

Consistent with the requirements of section 5(b) of the Federal Advisory Committee Act, the committee finds that the functions of the proposed advisory committee authorized in the bill are not currently being nor could they be performed by one or more agencies, an advisory committee already in existence or by enlarging the mandate of an existing advisory committee.

#### APPLICABILITY TO THE LEGISLATIVE BRANCH

The committee finds that this legislation does not relate to the terms and conditions of employment or access to public services or accommodations within the meaning of section 102(b)(3) of the Congressional Accountability Act (Public Law 104–1).

#### DUPLICATION OF FEDERAL PROGRAMS

No provision of H.R. 2810 establishes or reauthorizes a program of the Federal Government known to be duplicative of another Federal program, a program that was included in any report from the Government Accountability Office to Congress pursuant to section 21 of Public Law 111–139, or a program related to a program identified in the most recent Catalog of Federal Domestic Assistance.

#### DISCLOSURE OF DIRECTED RULE MAKINGS

The committee estimates that H.R. 2810 requires six instances of directed rule makings. They are contained in the following provisions:

- (1) section 815;
- (2) section 822;
- (3) section 833;
- (4) section 851;
- (5) section 856; and
- (6) section 1722.

#### COMMITTEE VOTES

In accordance with clause 3(b) of rule XIII of the Rules of the House of Representatives, record votes were taken with respect to the committee's consideration of H.R. 2810. The record of these votes is contained in the following pages.

The committee ordered H.R. 2810 to be reported to the House with a favorable recommendation by a vote of 60–1, a quorum being present.

#### ROLL CALL VOTE NO. 1

#### H.R. 2810

On Moulton Log 121r1—Reduces amount of Littoral Combat Ship by a quantity of 1 and adds corresponding cost to PACOM and EUCOM munitions shortfalls.

Member	Aye	No	Present	Member	Aye	No	Present
Mr. Thornberry		Х		Mr. Smith	Х		
Mr. Jones	Χ			Mr. Brady		Х	
Mr. Wilson		Х		Mrs. Davis	Х		
Mr. LoBiondo		Х		Mr. Langevin		Х	
Mr. Bishop		Х		Mr. Larsen	Χ		
Mr. Turner		Х		Mr. Cooper	Х		
Mr. Rogers		Х		Ms. Bordallo	Х		
Mr. Franks		Х		Mr. Courtney		Х	
Mr. Shuster		Х		Ms. Tsongas	Х		
Mr. Conaway		Х		Mr. Garamendi	Х		
Mr. Lamborn		Х		Ms. Speier	Х		
Mr. Wittman		Х		Mr. Veasey	Х		
Mr. Hunter		Х		Ms. Gabbard	Х		
Mr. Coffman		Х		Mr. O'Rourke	Х		
Mrs. Hartzler		Х		Mr. Norcross		Х	
Mr. Scott		Х		Mr. Gallego		Х	
Mr. Brooks		Х		Mr. Moulton	Χ		
Mr. Cook		Х		Ms. Hanabusa	Χ		
Mr. Bridenstine		Х		Ms. Shea-Porter	Χ		
Dr. Wenstrup		Χ		Ms. Rosen	Χ		
Mr. Byrne		Х		Mr. McEachin		Х	
Mr. Graves		Х		Mr. Carbajal	Χ		
Ms. Stefanik		Х		Mr. Brown		Х	
Ms. McSally		Х		Mrs. Murphy	Χ		
Mr. Knight		Х		Mr. Khanna	Χ		
Mr. Russell		Х		Mr. O'Halleran		Х	
Dr. DesJarlais		Χ		Mr. Suozzi		Χ	
Dr. Abraham		Х		Mr. Walz		Х	
Mr. Kelly		Χ					
Mr. Gallagher		Χ					
Mr. Gaetz		Χ					
Mr. Bacon		Χ					
Mr. Banks		Χ					
Ms. Cheney		Х					
Roll Call Vote Total:	19	43	0				

#### ROLL CALL VOTE NO. 2

#### H.R. 2810

On Speier Log 096—Extend the application of military selective service registration and conscription requirements to female citizens and US residents between ages of 18 and 26.

Member	Aye	No	Present	Member	Aye	No	Present
Mr. Thornberry		Х		Mr. Smith	Х		
Mr. Jones		Χ		Mr. Brady	Χ		
Mr. Wilson		Х		Mrs. Davis	Χ		
Mr. LoBiondo		Х		Mr. Langevin	Χ		
Mr. Bishop		Χ		Mr. Larsen	Χ		
Mr. Turner		Χ		Mr. Cooper	Χ		
Mr. Rogers		Х		Ms. Bordallo	Χ		
Mr. Franks		Χ		Mr. Courtney	Χ		
Mr. Shuster		Χ		Ms. Tsongas	Χ		
Mr. Conaway		Х		Mr. Garamendi	Χ		
Mr. Lamborn		Χ		Ms. Speier	Χ		
Mr. Wittman		Х		Mr. Veasey	Χ		
Mr. Hunter		Х		Ms. Gabbard			
Mr. Coffman		Χ		Mr. O'Rourke	Χ		
Mrs. Hartzler		Х		Mr. Norcross	Χ		
Mr. Scott		Χ		Mr. Gallego	Χ		
Mr. Brooks		Х		Mr. Moulton	Χ		
Mr. Cook		Х		Ms. Hanabusa	Х		
Mr. Bridenstine		Х		Ms. Shea-Porter	Χ		
Dr. Wenstrup		Х		Ms. Rosen	Х		
Mr. Byrne		Х		Mr. McEachin	Χ		
Mr. Graves		Х		Mr. Carbajal	Χ		
Ms. Stefanik		Х		Mr. Brown	Х		
Ms. McSally	Х			Mrs. Murphy	Χ		
Mr. Knight		Х		Mr. Khanna	Χ		
Mr. Russell		Х		Mr. O'Halleran	Х		
Dr. DesJarlais		Х		Mr. Suozzi	Х		
Dr. Abraham		Х		Mr. Walz	Χ		
Mr. Kelly		Х					
Mr. Gallagher		Х					
Mr. Gaetz		Х					
Mr. Bacon		χ					
Mr. Banks		Х					
Ms. Cheney		Х					
Roll Call Vote Total:	28	33	0				

#### ROLL CALL VOTE NO. 3

#### H.R. 2810

On Speier Log 095—This amendment requires TRICARE to offer similar contraceptive coverage currently provided through the Affordable Care Act by removing cost sharing through the mail order pharmacy and removal of cost sharing for related contraceptive care, education and counseling.

Member	Aye	No	Present	Member	Aye	No	Present
Mr. Thornberry		Х		Mr. Smith	Х		
Mr. Jones		Х		Mr. Brady	Х		
Mr. Wilson		χ		Mrs. Davis	Χ		
Mr. LoBiondo		Х		Mr. Langevin	Х		
Mr. Bishop		Х		Mr. Larsen	Х		
Mr. Turner		χ		Mr. Cooper	Χ		
Mr. Rogers		Х		Ms. Bordallo	Х		
Mr. Franks		Х		Mr. Courtney	Х		
Mr. Shuster		Х		Ms. Tsongas	Х		
Mr. Conaway		Х		Mr. Garamendi	Х		
Mr. Lamborn		Х		Ms. Speier	Х		
Mr. Wittman		Х		Mr. Veasey	Х		
Mr. Hunter		Х		Ms. Gabbard			
Mr. Coffman		Х		Mr. O'Rourke	Х		
Mrs. Hartzler		Х		Mr. Norcross	Х		
Mr. Scott		Х		Mr. Gallego	Х		
Mr. Brooks		Х		Mr. Moulton	Х		
Mr. Cook		Х		Ms. Hanabusa	Х		
Mr. Bridenstine		Х		Ms. Shea-Porter	Х		
Dr. Wenstrup		Х		Ms. Rosen	Х		
Mr. Byrne		X		Mr. McEachin	X		
Mr. Graves		Х		Mr. Carbajal	Х		
Ms. Stefanik	Х			Mr. Brown	X		
Ms. McSally	Х			Mrs. Murphy	Х		
Mr. Knight	Х			Mr. Khanna	Х		
Mr. Russell		Х		Mr. O'Halleran	X		
Dr. DesJarlais		X		Mr. Suozzi	X		
Dr. Abraham		Х		Mr. Walz	Х		
Mr. Kelly		Х					
Mr. Gallagher		X					
Mr. Gaetz		Х					
Mr. Bacon		X					
Mr. Banks		X					
Ms. Cheney		X					
-							
Roll Call Vote Total:	30	31	0				

#### ROLL CALL VOTE NO. 4

#### H.R. 2810

On Byrne Log 345—Substitute Amendment to O'Halleran Log 220r1 requiring DOD to submit an annual report on the costs to DOD in support of travel of the President, Vice President, and members of the cabinet.

Member	Aye	No	Present	Member	Aye	No	Present
Mr. Thornberry	Х			Mr. Smith		Х	
Mr. Jones		Χ		Mr. Brady		Х	
Mr. Wilson	Χ			Mrs. Davis		Х	
Mr. LoBiondo	Χ			Mr. Langevin		Х	
Mr. Bishop	Х			Mr. Larsen		Х	
Mr. Turner	χ			Mr. Cooper		Х	
Mr. Rogers	Х			Ms. Bordallo		Х	
Mr. Franks	χ			Mr. Courtney		Х	
Mr. Shuster	χ			Ms. Tsongas		Х	
Mr. Conaway		Х		Mr. Garamendi		Х	
Mr. Lamborn		Х		Ms. Speier		Х	
Mr. Wittman	Х			Mr. Veasey		Х	
Mr. Hunter		Х		Ms. Gabbard			
Mr. Coffman	Х			Mr. O'Rourke		Х	
Mrs. Hartzler		Х		Mr. Norcross		Х	
Mr. Scott	Х			Mr. Gallego		X	
Mr. Brooks	Х			Mr. Moulton		Х	
Mr. Cook	X			Ms. Hanabusa		X	
Mr. Bridenstine	X			Ms. Shea-Porter		X	
Dr. Wenstrup	Х			Ms. Rosen		Х	
Mr. Byrne	X			Mr. McEachin		X	
Mr. Graves	X			Mr. Carbajal		X	
Ms. Stefanik	Х			Mr. Brown		Х	
Ms. McSally	X			Mrs. Murphy		Х	
Mr. Knight	X			Mr. Khanna		X	
Mr. Russell	X			Mr. O'Halleran		X	
Dr. DesJarlais	X			Mr. Suozzi		Х	
Dr. Abraham	X			Mr. Walz		X	
Mr. Kelly	•	Х				•	
Mr. Gallagher	х						
Mr. Gaetz	^	Х					
Mr. Bacon	Х						
Mr. Banks	^	х					
Ms. Cheney		X					
Roll Call Vote Total:	25	36	0				

#### ROLL CALL VOTE NO. 5

#### H.R. 2810

On Veasey Log 151—Directs the Secretary of Defense to conduct a study on the feasibility of establishing a standalone cyber service tasked with the overall cybersecurity of the United States.

Member	Aye	No	Present	Member	Aye	No	Presen
Mr. Thornberry		Х		Mr. Smith		Х	
Mr. Jones		Х		Mr. Brady		Х	
Mr. Wilson		Х		Mrs. Davis		Х	
Mr. LoBiondo		Х		Mr. Langevin		Х	
Mr. Bishop		Х		Mr. Larsen		Х	
Mr. Turner		Х		Mr. Cooper		Х	
Mr. Rogers		Х		Ms. Bordallo		Х	
Mr. Franks		Х		Mr. Courtney		Х	
Mr. Shuster		Х		Ms. Tsongas		Х	
Mr. Conaway		Х		Mr. Garamendi		Х	
Mr. Lamborn		Х		Ms. Speier	Х		
Mr. Wittman		Х		Mr. Veasey	Х		
Mr. Hunter		Х		Ms. Gabbard			
Mr. Coffman		Х		Mr. O'Rourke	Χ		
Mrs. Hartzler		Х		Mr. Norcross	Χ		
Mr. Scott		Х		Mr. Gallego	Χ		
Mr. Brooks		Х		Mr. Moulton	Χ		
Mr. Cook		Х		Ms. Hanabusa		Х	
Mr. Bridenstine		Х		Ms. Shea-Porter		Х	
Dr. Wenstrup		Х		Ms. Rosen	Х		
Mr. Byrne		Х		Mr. McEachin	Χ		
Mr. Graves		Х		Mr. Carbajal	Х		
Ms. Stefanik		Х		Mr. Brown		Х	
Ms. McSally		Х		Mrs. Murphy	Χ		
Mr. Knight		Х		Mr. Khanna	Χ		
Mr. Russell		Х		Mr. O'Halleran	Χ		
Dr. DesJarlais		Х		Mr. Suozzi	Х		
Dr. Abraham		Х		Mr. Walz		Х	
Mr. Kelly		Х					
Mr. Gallagher		Х					
Mr. Gaetz		Χ					
Mr. Bacon		Х					
Mr. Banks		Χ					
Ms. Cheney		Х					
- Roll Call Vote Total:	13	48	0				

#### ROLL CALL VOTE NO. 6

#### H.R. 2810

On Rogers Log 116—Would require the Army to transfer excess .45 caliber M1911A1 pistols to the Civilian Marksmanship Program (CMP).

Member	Aye	No	Present	Member	Aye	No	Present
Mr. Thornberry	Х			Mr. Smith		Х	
Mr. Jones	Х			Mr. Brady		Х	
Mr. Wilson	Х			Mrs. Davis		Х	
Mr. LoBiondo	Х			Mr. Langevin		Х	
Mr. Bishop	Х			Mr. Larsen		Х	
Mr. Turner	Х			Mr. Cooper	Х		
Mr. Rogers	Х			Ms. Bordallo		Х	
Mr. Franks	Х			Mr. Courtney		Х	
Mr. Shuster	Х			Ms. Tsongas		Х	
Mr. Conaway	Х			Mr. Garamendi		Х	
Mr. Lamborn	Х			Ms. Speier		Х	
Mr. Wittman	Х			Mr. Veasey		Х	
Mr. Hunter	Х			Ms. Gabbard			
Mr. Coffman	Х			Mr. O'Rourke		Х	
Mrs. Hartzler	Х			Mr. Norcross		Х	
Mr. Scott	Х			Mr. Gallego		Х	
Mr. Brooks	Х			Mr. Moulton		Х	
Mr. Cook	Χ			Ms. Hanabusa		Х	
Mr. Bridenstine	Х			Ms. Shea-Porter		Х	
Dr. Wenstrup	Х			Ms. Rosen		Χ	
Mr. Byrne	Х			Mr. McEachin		Х	
Mr. Graves	Х			Mr. Carbajal		Х	
Ms. Stefanik	Х			Mr. Brown		Χ	
Ms. McSally	Х			Mrs. Murphy		Х	
Mr. Knight	Χ			Mr. Khanna		Х	
Mr. Russell	Х			Mr. O'Halleran		Х	
Dr. DesJarlais	Х			Mr. Suozzi		Х	
Dr. Abraham	Х			Mr. Walz		Х	
Mr. Kelly	Х						
Mr. Gallagher	Х						
Mr. Gaetz	X						
Mr. Bacon	X						
Mr. Banks	Χ						
Ms. Cheney	X						
Roll Call Vote Total:	35	26	0				

#### ROLL CALL VOTE NO. 7

#### H.R. 2810

On Speier Log 100—Prohibits DOD funds from being obligated or expended to pay for expenses incurred at a property owned or operated by the President or an immediate family member if the payments will result in their financial benefit.

Member	Aye	No	Present	Member	Aye	No	Present
Mr. Thornberry		Х		Mr. Smith	Х		
Mr. Jones	Х			Mr. Brady	Х		
Mr. Wilson		Х		Mrs. Davis	Х		
Mr. LoBiondo		Х		Mr. Langevin	Х		
Mr. Bishop		Х		Mr. Larsen	Х		
Mr. Turner		Х		Mr. Cooper	Х		
Mr. Rogers		Х		Ms. Bordallo	Х		
Mr. Franks		Χ		Mr. Courtney	Χ		
Mr. Shuster		Х		Ms. Tsongas	Х		
Mr. Conaway		Х		Mr. Garamendi	Х		
Mr. Lamborn		Х		Ms. Speier	Х		
Mr. Wittman		Х		Mr. Veasey	Х		
Mr. Hunter		Х		Ms. Gabbard	Х		
Mr. Coffman	Х			Mr. O'Rourke	Х		
Mrs. Hartzler		Х		Mr. Norcross	Х		
Mr. Scott		Х		Mr. Gallego	Х		
Mr. Brooks		Х		Mr. Moulton	Х		
Mr. Cook		Χ		Ms. Hanabusa	Χ		
Mr. Bridenstine		Х		Ms. Shea-Porter	Х		
Dr. Wenstrup		Х		Ms. Rosen	Х		
Mr. Byrne		Х		Mr. McEachin	Х		
Mr. Graves		Х		Mr. Carbajal	Χ		
Ms. Stefanik		Х		Mr. Brown	Х		
Ms. McSally		Χ		Mrs. Murphy	Χ		
Mr. Knight		Х		Mr. Khanna	Х		
Mr. Russell		Х		Mr. O'Halleran	Х		
Dr. DesJarlais		Χ		Mr. Suozzi	Χ		
Dr. Abraham		Х		Mr. Walz	Х		
Mr. Kelly		Х					
Mr. Gallagher		Х					
Mr. Gaetz		Χ					
Mr. Bacon		χ					
Mr. Banks		Χ					
Ms. Cheney		Х					
Roll Call Vote Total:	30	32	0				

#### ROLL CALL VOTE NO. 8

#### H.R. 2810

On O'Halleran Log 220r1—Requires DOD to provide the committee with a quarterly report detailing costs in support of presidential travel, including costs incurred for travel to property owned by the President or his immediate family.

Member	Aye	No	Present	Member	Aye	No	Present
Mr. Thornberry		Х		Mr. Smith	Х		
Mr. Jones	Χ			Mr. Brady	Χ		
Mr. Wilson		Х		Mrs. Davis	Х		
Mr. LoBiondo		Х		Mr. Langevin	Х		
Mr. Bishop		Х		Mr. Larsen	Х		
Mr. Turner		Х		Mr. Cooper	Х		
Mr. Rogers		Х		Ms. Bordallo	Х		
Mr. Franks		Х		Mr. Courtney	Х		
Mr. Shuster		Х		Ms. Tsongas	Х		
Mr. Conaway		Х		Mr. Garamendi	Х		
Mr. Lamborn		Х		Ms. Speier	Х		
Mr. Wittman		Х		Mr. Veasey	Х		
Mr. Hunter		Х		Ms. Gabbard	Х		
Mr. Coffman	Х			Mr. O'Rourke	Х		
Mrs. Hartzler		Х		Mr. Norcross	Х		
Mr. Scott		Х		Mr. Gallego	Х		
Mr. Brooks		Х		Mr. Moulton	Х		
Mr. Cook		Х		Ms. Hanabusa	Х		
Mr. Bridenstine		Х		Ms. Shea-Porter	Х		
Dr. Wenstrup		Χ		Ms. Rosen	Χ		
Mr. Byrne		Х		Mr. McEachin	Х		
Mr. Graves		Х		Mr. Carbajal	Х		
Ms. Stefanik		Χ		Mr. Brown	Χ		
Ms. McSally		Х		Mrs. Murphy	Х		
Mr. Knight	Х			Mr. Khanna	Х		
Mr. Russell		Х		Mr. O'Halleran	Х		
Dr. DesJarlais		Χ		Mr. Suozzi	Χ		
Dr. Abraham		Χ		Mr. Walz	Χ		
Mr. Kelly		Х					
Mr. Gallagher		Х					
Mr. Gaetz		χ					
Mr. Bacon		χ					
Mr. Banks		χ					
Ms. Cheney		Х					
Roll Call Vote Total:	31	31	0				

#### ROLL CALL VOTE NO. 9

#### H.R. 2810

On Franks Log 274r2—Establishes a Space Test Bed and begins development of a Space Based Missile Defense Layer.

Member	Aye	No	Present	Member	Aye	No	Present
Mr. Thornberry	Х			Mr. Smith		Х	
Mr. Jones	Χ			Mr. Brady		Χ	
Mr. Wilson	Х			Mrs. Davis		Х	
Mr. LoBiondo	Х			Mr. Langevin		Х	
Mr. Bishop	Х			Mr. Larsen		Х	
Mr. Turner	Х			Mr. Cooper		Х	
Mr. Rogers	Х			Ms. Bordallo		Х	
Mr. Franks	Х			Mr. Courtney		Х	
Mr. Shuster	Χ			Ms. Tsongas		Х	
Mr. Conaway	Χ			Mr. Garamendi	Х		
Mr. Lamborn	Х			Ms. Speier		Х	
Mr. Wittman	Χ			Mr. Veasey		Х	
Mr. Hunter	Х			Ms. Gabbard		Х	
Mr. Coffman	Х			Mr. O'Rourke		Х	
Mrs. Hartzler	Χ			Mr. Norcross	Χ		
Mr. Scott	Χ			Mr. Gallego		Х	
Mr. Brooks	Χ			Mr. Moulton		Х	
Mr. Cook	Х			Ms. Hanabusa		Х	
Mr. Bridenstine	Х			Ms. Shea-Porter		Х	
Dr. Wenstrup	Χ			Ms. Rosen		Χ	
Mr. Byrne	Х			Mr. McEachin		Х	
Mr. Graves	Х			Mr. Carbajal		Х	
Ms. Stefanik	Х			Mr. Brown		Х	
Ms. McSally	Х			Mrs. Murphy		Х	
Mr. Knight	Х			Mr. Khanna		Х	
Mr. Russell	Χ			Mr. O'Halleran		Χ	
Dr. DesJarlais	Х			Mr. Suozzi		Х	
Dr. Abraham	Χ			Mr. Walz		Χ	
Mr. Kelly	Χ						
Mr. Gallagher	Χ						
Mr. Gaetz	Χ						
Mr. Bacon	Χ						
Mr. Banks	Χ						
Ms. Cheney	Х						
Roll Call Vote Total:	36	26	0				

#### ROLL CALL VOTE NO. 10

#### H.R. 2810

On the motion by Mr. Wilson to report the bill H.R. 2810 as amended favorably to the House, with a recommendation that it do pass.

Member	Aye	No	Present	Member	Aye	No	Present
Mr. Thornberry	Х			Mr. Smith	Х		
Mr. Jones	Х			Mr. Brady	Х		
Mr. Wilson	Х			Mrs. Davis	Х		
Mr. LoBiondo	Х			Mr. Langevin	Х		
Mr. Bishop	Х			Mr. Larsen	Х		
Mr. Turner	Х			Mr. Cooper	Х		
Mr. Rogers	Х			Ms. Bordallo	Х		
Mr. Franks	Х			Mr. Courtney	Х		
Mr. Shuster	Х			Ms. Tsongas	Х		
Mr. Conaway	Х			Mr. Garamendi	Х		
Mr. Lamborn	Х			Ms. Speier	Х		
Mr. Wittman	Х			Mr. Veasey	Х		
Mr. Hunter	Х			Ms. Gabbard		Χ	
Mr. Coffman	Х			Mr. O'Rourke	Х		
Mrs. Hartzler	Х			Mr. Norcross	Х		
Mr. Scott	Х			Mr. Gallego	Х		
Mr. Brooks	Х			Mr. Moulton	Х		
Mr. Cook	Х			Ms. Hanabusa	Х		
Mr. Bridenstine	Х			Ms. Shea-Porter	Х		
Dr. Wenstrup	Х			Ms. Rosen	Х		
Mr. Byrne	Х			Mr. McEachin	Х		
Mr. Graves	Х			Mr. Carbajal	Х		
Ms. Stefanik	Х			Mr. Brown	Х		
Ms. McSally	Х			Mrs. Murphy	Х		
Mr. Knight	Х			Mr. Khanna	Х		
Mr. Russell	Х			Mr. O'Halleran	Х		
Dr. DesJarlais	Х			Mr. Suozzi	Х		
Dr. Abraham	Х			Mr. Walz	Х		
Mr. Kelly	Х						
Mr. Gallagher	Х						
Mr. Gaetz							
Mr. Bacon	Х						
Mr. Banks	X						
Ms. Cheney	X						
Roll Call Vote Total:	60	1	0				

## CHANGES IN EXISTING LAW MADE BY THE BILL, AS REPORTED

The committee has taken steps to make available the analysis of changes in existing law made by the bill, as required by clause 3(e) of rule XIII of the Rules of the House of Representatives, and will make the analysis available as soon as possible.

#### RANKING MEMBER ADAM SMITH'S ADDITIONAL VIEWS ON H.R. 2810, THE NATIONAL DEFENSE AUTHORIZATION ACT FOR FISCAL YEAR 2018

I thank Chairman Thornberry for his efficient, bipartisan work in developing the National Defense Authorization Act for Fiscal Year 2018, and I congratulate him for successfully passing the bill out of committee. I appreciate that this bill includes needed measures to strengthen deterrence and to boost unity against Russia's campaign to undermine democracy worldwide. I also appreciate the steps the bill takes to fill genuine military readiness gaps; to require strategies from President Trump and the Department of Defense on Russia, Syria, Afghanistan, Yemen, and Somalia; and to acknowledge and to plan for the real threat that climate change poses to national security. However; I am concerned by several aspects of the bill, and I look forward to working with Chairman Thornberry to further improve it.

My chief concern relates to the bill's funding. While we have marked this bill up to support an overall top line of \$696.1 billion in discretionary budget authority for the national defense budget function, including \$621.5 billion in base budget authority, it is unlikely that, at the end of this legislative process, we will have that much money. The budget cap for defense spending for fiscal year 2018 is \$549 billion, and if the House, the Senate, and the President do not come to an agreement to lift or modify the budget caps, the base budget supported by the bill would fall from \$621.5 billion to \$549 billion as a matter or law. The constraints imposed by the Budget Control Act of 2011 (the BCA) continue to pose significant challenges for the military, and the bill currently does nothing to alleviate the situation.

The bill also authorizes \$74.6 billion for overseas contingency operations (OCO). Of that amount, nearly \$10 billion is reserved for base budget requirements. So, the bill not only fails to comply with the discretionary caps imposed by the BCA, it also misuses the BCNs off-book allowance for OCO by using it for significant non-OCO purposes. If this same approach is ultimately taken to buffer sequestration, then \$147.1 billion in OCO funding would need to be authorized to support a top line of \$696.1 billion. That would be a tremendous abuse since only \$64.6 billion has been requested for actual OCO. We need to exercise better fiscal discipline.

Unfortunately, this bill does not attempt to make really hard choices regarding national security priorities. That is a serious mistake, the consequences of which Congress will eventually be forced to confront. We cannot indiscriminately fund every single program on every defense wish list, while cutting taxes, refusing to raise revenue, refusing to reform mandatory spending, imposing draconian cuts on non-defense discretionary programs that keep our

country safe and prosperous, and insisting on a balanced budget.

It doesn't add up.

Moreover, President Trump's budget has thrown into stark relief the relationship between defense spending and non-defense spending, by requesting trade-off cuts to domestic discretionary spending to subsidize increases for defense. It would be unconscionable and a net loss for national security to plus up defense, while imposing a requested cut of 28% to the State Department and USAID. As Secretary Mattis said, "If you don't fund the State Department fully, then I need to buy more ammunition ultimately."

I am disappointed that the bill extends provisions, which effectively prevent closure of the detention facility at Guantanamo Bay, Cuba (GTMO). The bill prohibits the transfer of detainees from GTMO to the United States and the construction or modification of facilities within the United States to house GTMO detainees for another calendar year. Our perennial failure to close the detention facility at GTMO continues to undermine our standing within the

international community.

I run disappointed that the bill includes provisions that would prohibit funding for the extension of the New START treaty; abrogate the Intermediate Nuclear Forces treaty by 2019 if Russia has not returned to compliance; limit funding for nuclear weapons dismantlement; mandate the development of space-based interceptors about which the director of the Missile Defense Agency has said, "I have serious concerns about the technical feasibility of the interceptors in space and I have serious concerns about the long-term affordability of a program like that"; and mandate a test of the SM3–IIA missile defense interceptor against an ICBM, which will undermine strategic and regional stability. Strategic stability is in the manifest interest of the United States, and we must respond to Russia's aggressive actions in ways that seek to preserve it, rather than adopting reckless measures that could fuel a nuclear arms race or increase the risk of accidental nuclear war.

I am also disappointed that the bill contains a provision prohibiting a new base realignment and closure (BRAC) round, rejecting DOD's request for flexibility to implement a BRAC for the sixth

year in a row.

ADAM SMITH.

## ADDITIONAL VIEWS FOR H.R. 2810, THE NATIONAL DEFENSE AUTHORIZATION ACT FOR FISCAL YEAR 2018

We congratulate Chairman Thornberry and Ranking Member Smith on the passage of the committee mark for the 56th National Defense Authorization Act, and appreciate the attentions of all members of the House Armed Services Committee on this important endeavor. However, a particular issue remains of concern to

In 2012, Congress created U.S.C. Title 10, §12304b to give combatant commanders the authority to utilize the reserve component more broadly in order to meet combatant commander requirements. Unfortunately, when involuntarily mobilized under this authority, members of the National Guard and Reserves are not granted the same benefits as the active-duty military members with whom they serve. These reserve component troops who mobilize under §12304b do not currently receive pre-mobilization and transitional TRICARE access, eligibility for educational benefits such as the Post-9/11 GI bill, high temp deployment accounting, or early retirement credit.

While deployed in such places as the Sinai Peninsula, Kosovo, the Americas, and across Eastern Europe, these reserve component troops perform the same missions and duties as active component troops, but are not entitled to the same benefits. This is unjust and wrong. Along with their active-duty counterparts, Reserve and Guard troops have served in a variety of essential missions, including the European Reassurance Initiative in Germany and Ukraine to counter Russian aggression. Fixing this inequity—getting our reserve component service members the benefits they earned for their active duty service—is a high priority for the National Guard Bureau, the Office of the Chief of the Army Reserve, other reserve components, as well as many state governors across the country.

Drawn from H.R. 1384, the Reserve Component Benefits Parity Act of which we are sponsors, a provision contained within H.R. 2810, the National Defense Authorization Act (NDAA) for Fiscal Year 2018 corrects part of this inequity by providing pre-mobilization and transitional TRICARE benefits for those mobilized under \$12304b. Upon final passage of the NDAA, this will allow Guard and Reserve troops to access the healthcare they need before and after mobilization. This is a step in the right direction, and we thank the Chairman and Ranking Member for assenting to its inclusion.

H.R. 1384 corrects the remainder of inequities under §12304b, and has been endorsed by a host of organizations, including: the National Guard Association of the United States (NGAUS), the Military Coalition (TMC), the Reserve Officers Association (ROA), the Enlisted Association of the National Guard of the United States (EANGUS), the Minnesota National Guard Enlisted Association

(MNGEA), The American Legion, the Veterans of Foreign Wars of the United States (VFW), the United States Army Warrant Officers Association (USAWOA), the Student Veterans of America (SVA), the Military Order of the Purple Heart (MOPH), VoteVets.org, the Fleet Reserve Association (FRA), the Air Force Association, the Air Force Sergeants Association, the Military Officers Association of America (MOAA), AMVETS, Army Aviation Association of America, National Military Family Association, AMSUS, Naval Enlisted Reserve Association, Association of the United States Navy (AUSN), The Military Chaplains Association of the USA, Commissioned Officers Association of the US Public Health Service, INC, the Retired Enlisted Association, Tragedy Assistance Program for Survivors, the USCG Chief Petty Officers Association, Gold Star Wives of America, Iraq and Afghanistan Veterans of America, and the Jewish War Veterans of the USA.

It is our hope that the rest of this bill will pass without delay, as it is needed to provide the reserve component full parity in benefits with their active duty counterparts in this time of increasing operational utilization of the reserve components. We thank you for your consideration of this important matter and for your continued support of the men and women of our Armed Forces.

CAROL SHEA-PORTER.
WALTER JONES.
JIM BRIDENSTINE.
TIM WALZ.
MADELEINE Z. BORDALLO.
ANTHONY G. BROWN.
JACKY ROSEN.

#### ADDITIONAL VIEWS OF MR. LARSEN

This bill includes many provisions which will contribute to overall warfighter readiness. I am pleased that many of my proposals have been included in this legislation and the committee report, and I will work with Chairman Thornberry and Ranking Member Smith to ensure they remain in the final text of the legislation.

Congress is considering this NOAA in the absence of a budget resolution to guide the committee's work. In addition, the topline authority granted in this law greatly exceeds the defense discretionary cap in the Budget Control Act (BCA). The bipartisan BCA was enacted to mollify House Republicans who threatened default on the national debt absent discretionary spending cuts. As much as members may dislike it, the BCA remains the law of the land. Authorizing \$624 billion for base requirements against a \$549 billion cap is irresponsible, because it forces others to make the difficult decisions about how to set priorities for the Department of Defense.

As Ranking Member Smith observed, the trade-offs in President Trump's 2018 budget request exposed as a myth the oft-repeated refrain that HASC must ignore the non-defense budget when considering the NOAA. Paying for defense increases with dollar-fordollar cuts to non-defense spending is not just harmful to working Americans—it's also self-defeating. As witness after witness has told this committee, our national security is based on more than our strength of arms. National security depends on capable diplomacy, scientific leadership, and healthy, educated young Americans willing to wear the uniform. The President's proposed cuts to these building blocks of national security would force our military to shoulder even more of the burden in keeping Americans safe from

It is my hope that the whole Congress will address these larger budget issues. And I will work with my colleagues to ensure the conference bill includes important priorities I support, including resources to address physiological episodes on EA-18G Growler aircraft, justice for victims of child abuse, and improved oversight of nuclear modernization programs.

Lastly, I would like the record to include an explanation of my absence from the subcommittee mark-ups. Due to a request by the Governor of Washington to lead the largest-ever state delegation to the Paris Air Show, I was unable to participate in HASC proceedings for the week of June 19–23, 2017.

The Paris Air Show brings together the world aerospace industry, and provides Washington companies the opportunity to showcase the products and services they provide that make my state's aerospace sector the envy of the world.

Consequently, I would like to submit for the record how I would have voted in subcommittee. During the Strategic Forces sub-

committee mark-up, I would have voted no on an amendment offered by Mr. Franks because I am concerned it would have reduced Congressional oversight of the Missile Defense Agency.

In addition, I would have spoken in favor of an amendment offered by Ranking Member Cooper to strike a provision in the underlying mark which prohibits funding to extend the New START treaty. According to testimony from senior military leadership the treaty. According to testimony from senior military leadership, the New START treaty is in America's national security interest and

strengthens strategic stability.

I commend Chairman Thornberry and Ranking Member Smith for their leadership on this committee, and look forward to working with them further on the Fiscal Year 2018 National Defense Au-

thorization Act.

RICK LARSEN.

#### CONGRESSMAN JOHN GARAMENDI ADDITIONAL VIEWS FOR H.R. 2810, THE NATIONAL DEFENSE AUTHORIZATION ACT FOR FISCAL YEAR 2018

I congratulate Chairman Thornberry and Ranking Member Smith on the passage of the committee mark for the 56th National Defense Authorization Act. I also appreciate the efforts of the House Armed Services Committee to prepare a committee mark that aims to ensure that our men and women in uniform have the means to protect our nation and advance American interests. However, there are several areas of concern that I have with this bill, and I look forward to our continued work to improve this critically important legislation.

Most importantly, this bill and the associated budget process demonstrate Congress's continued refusal to make the difficult choices necessary to fund our national defense in a responsible manner. It continues the annual cycle of debate between defense hawks and budget hawks over spending levels which is completely devoid of a thorough assessment of a broader national security strategy. That strategy would recognize that the United States will only be secure when we adequately and responsibly fund all elements of our national power and do not fund the military at the

expense of important domestic programs.

Just one example of our refusal to make difficult choices is the continued march down a road to spending more than one trillion dollars over the next 20–25 to operate, maintain, and recapitalize a nuclear arsenal which is in excess to our real security needs. This bill increases nuclear spending by more than \$300 million over and above the President's increase of more than \$1 billion. If we continue down this path, excessive nuclear weapons spending will put significant pressure on the rest of the procurement budget in the middle of next decade when other areas of our national defense will also require recapitalization.

I am pleased the Committee's mark requires the Department of Defense to deliver assessments of US national security interests in Afghanistan, Syria, Iraq, and Somalia as well as robust military strategies to advance those interests. But piecemeal strategy is piecemeal security. We, as a Congress, must engage with the Executive Branch to develop a comprehensive national security strategy which is clearly linked to stable and responsible funding. This bill does not accomplish that goal and I look forward to working to improve it as the legislative process continues.

JOHN GARAMENDI.

#### ADDITIONAL VIEWS OF REP. SALUD CARBAJAL

As a Marine veteran, I am honored to serve on the House Armed Services Committee and be part of the 56th National Defense Authorization Act. The purpose of this legislation is to ensure the readiness of our military by providing the right resources and implementing the right policies. Today, we face a wide range of traditional and non-traditional security threats, and these threats are evolving on a daily basis. Whether it is the threat from countries like North Korea, Russia and Iran or defending the nation from cybersecurity attacks, the United States must be well-resourced and ready to protect the American people and our interests here and abroad.

We must invest in the right capabilities and continue to promote research and development in order to sustain our technological edge. The Department of Defense must recognize and address the increasing impacts of climate change on national security. It is also imperative that the Department of Defense implement non-discriminatory policies and protect service members and civilian per-

sonnel against any forms of discrimination.

Although I supported the overall bill, I remain deeply concerned over the funding issue. This legislation is funded well-beyond the caps imposed by the Budget Control Act. I believe it is irresponsible and a disservice to the American people to continue to impose arbitrary cuts on domestic spending while increasing defense spending. As I have stated before, I believe the question we must ask ourselves is, what are we trying to defend? As we continue to impose cuts to this country's education and health systems and not take steps to protect our environment, we will ultimately be left with a hollow nation—nothing for the military to protect.

SALUD CARBAJAL.

## CONGRESSMEN RO KHANNA'S ADDITIONAL VIEWS FOR H.R. 2810, THE FISCAL YEAR 2018 NATIONAL DEFENSE AUTHORIZATION ACT

I voted in favor of this bill in committee. I commend the bipartisan nature of the House Armed Services to make sure our defense authorization is done on time in the interest of national security. I support our troops and elements of this bill. But I am very concerned with the size of the defense spending increases, especially in light of the Administration's proposed diplomatic funding cuts and the lack of a new strategy for peace. Not only is this bill a massive increase in defense spending, it will most likely be coupled with cuts to diplomacy and foreign aid. I am also waiting to hear a newly articulated foreign policy for how to best use this money. The administration has asked for this increase in money without offering a new strategy. In Silicon Valley, where I represent California's 17th Congressional District, venture capitalists would not fund businesses seeking more money if they do not have a new strategy. Our recent foreign interventions have led to more terrorism and violence across the world. Although we must have a strong military that deters war and keeps the peace, we should be smarter about when and how we use force abroad.

I am pleased that this bill makes great strides towards improving procurement transparency and aims to reduce waste, fraud and abuse in defense spending. The committee worked with me to secure an important provision that directs the Comptroller General of the United States to conduct a study of Department of Defense (DoD) procurement processes to determine "potential abuses by companies of such processes, and means of improving such processes to improve transparency in commercial acquisitions by the Department of Defense." The bill also includes three of my amendments that will save money for the American taxpayer by: (1) allowing the Chief Operating Officer of Armed Forces Retirement Home (AFRH) to acquire and lease property, generating much needed revenue for the AFRH. (2) requiring a cost-benefit analysis for future afghan military uniform specifications considering the report showing millions of dollars were wasted on forest camouflage in a desert country, and (3) requiring an assessment of design trade options and a cost-benefit analysis of the W80 thermonuclear warhead

I am also pleased that three amendments I cosponsored were adopted. These amendments deem climate change a national security issue, make it easier for the military to contact soldiers following their discharge and require the Secretary of Defense to submit a report on the dual-hat arrangement for the Commander of U.S. Cyber Command.

In sum, I applaud the committee staff that worked with me to include important provisions that will save the taxpayer money.

My main concern remains the increases in defense spending without a new strategy for peace. I am hopeful that this concern will be addressed during the fiscal year 2018 NDAA consideration by the full House of Representatives, and I look forward to working with my colleagues to make sure we are not authorizing additional spending for missions that are not succeeding.

RO KHANNA.

# CONGRESSMAN THOMAS R. SUOZZI'S ADDITIONAL VIEWS FOR H.R. 2810, THE NATIONAL DEFENSE AUTHORIZATION ACT FOR FISCAL YEAR 2018

I congratulate Chairman Thornberry and Ranking Member Smith on the passage of the committee mark for the 56th National Defense Authorization Act. I appreciate the efforts of my colleagues of the House Armed Services to ensure the national security and defense of the United States. I also applaud the Chairman's reform efforts contained in the committee's mark. While I share, and support, the Chairman's objectives, I disagree with several of the methods contained in the mark which seek to address the backlog of incurred cost audits at the Defense Contract Audit Agency (DCAA).

I share the Chairman's goal of reducing the backlog of incurred costs by utilizing qualified private auditors. I believe that qualified private auditors will assist the DCAA's goal of reducing the incurred cost audit backlog. However, I am opposed to adding additional layers of bureaucracy and setting mandates on the amount

of work that must be contracted out to private contractors.

I believe that any reform should give the Director of the DCAA the authority and discretion to hire all the necessary and required qualified private auditors to address the backlog of incurred cost audits instead of a committee. Resting the authority and the discretion with the Director will expedite the hiring of private contractors to address the backlog. Additionally, I am opposed to legislators setting a mandated minimum percentage of contracts that must be completed by private auditors. While I want to ensure measures are in place to prevent a reoccurrence of a backlog, Congress should rely on the expertise of the Director of the DCAA to ensure capacity in the private sector continues to exist whenever needed.

I will continue to work with Chairman Thornberry, Ranking Member Smith and my colleagues to address this issue and to achieve our shared objectives of reform to increase efficiency and save the taxpayers' dollars. I will continue to work to encourage the use of private auditors by the DCAA in their efforts to eliminate the backlog of incurred cost audits, to encourage the use of qualified private auditors to assist with the burden created by the backlog of incurred cost audits to allow the DCAA to reallocate agency resources to prioritize high-risk audits with a higher rate of return on investment, to ensure private sector capacity exists to conduct incurred costs audits to assist the DCAA with any potential surge of incurred costs audits in order to avoid the recurrence of a backlog, and to foster collaboration between the DCAA and the private sector to increase efficiencies and root out waste, fraud, and abuse, and to maximize the return on investment of tax payer dollars.

THOMAS R. SUOZZI.

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