

Office of the Secretary of Defense  
Chief, RDD, ESD, WHS 545C552

Date: 23 Jan 2014 Authority: EO 13526

Declassify: Deny in Full:

Declassify in Part: X

Reason: 3.3(b)(1) and 545C552(b)(1)

MDR: 13-M-4671

~~CONFIDENTIAL~~

72

102-16(b)  
5455

X/30702

18 APR 1979

MEMORANDUM FOR DISTRIBUTION LIST

SUBJECT: DoD Shuttle Flight Control Capability (U)

(U) At the meeting on 11 April 1979 of the STS Enhancement Study Group the subject of a Department of Defense Shuttle flight control capability was discussed.

(S) ONR initiated a separate study on 1 February 1979 to determine whether a joint mission control center at Johnson Space Center or separate DoD and NASA facilities should be used to meet out-year Shuttle mission requirements. NASA and DCI are cooperating with DoD in this study. The final report is due 1 August 1979.

(U) For your information I am attaching the minutes from the 9 April 1979 Shuttle Control Capabilities Steering Group meeting which provides the status and actions pending on this ONR study. Please note that we are now in the process of documenting the need for a DoD Shuttle flight control capability and a joint position has not been established.

/s/ S. L. Zeiberg

S. L. Zeiberg

Deputy Under Secretary

Strategic & Space Systems

Attachment

DISTRIBUTION LIST:

Dr. Mark, SPS  
Dr. Lovelace, NASA  
Mr. Williamson, NASA  
Helen Yost, AF/RDS  
Helen Taylor, AF/RDS

Mr. Taft, ONR  
Mr. Quire, ONR  
Mr. DeJong, ONR

OSD 3.3(b)(1)

DECLASSIFIED IN PART  
Authority: EO 13526  
Chief, Records & Declass Div, WHS  
Date:

JUN 28 2014

Classified by 6080(SIS).  
Declassify on 18 Apr 1985.

3E139

OD(OSS)  
18Apr79

5 U.S.C. § 552 (b)(6)

~~CONFIDENTIAL~~

NRS-2 ✓  
SSS  
SEAS COMEX  
AUTHOR

13-M-4671

~~CONFIDENTIAL~~

MINUTES, THIRD MEETING  
SATELLITE CONTROL CAPABILITIES STEERING GROUP  
9 April 1979

(C) The meeting, chaired by Dr. Zeiberg, was held primarily to review the Interim Report prepared by the Air Force for submission to OMB in response to the joint DoD, NASA, and DCI cooperative study requested by OMB. The agenda and attendance list are attached (Attachments 1 and 2). Meeting highlights are as follows:

o Mission Element Need Statements (MENSs)

(U) Maj. Pagano, AF/XOX, reported that both the DoD Shuttle control capability and STC II MENSs were in draft form. Dr. Zeiberg stressed that the need statements were important to the Final Report.

(U) The Group developed a consensus that actions were required to expedite completion of the MENSs by 1 August 1979.

o Interim Report

(U) Maj. Pagano tabled the Interim Report requesting approval for submission to OMB. Dr. Zeiberg expressed that the report, a detailed outline, might not sufficiently reflect the activity to date. Suggestions were made that additional material, probably in the form of briefings, should also be considered for submission to OMB and that the report should be completed in an expedited manner.

o STC II Implementation Plan

(U) Maj. Byrne, AF/RDS, briefed the subject plan depicting milestones for a 1984 STC II IOC. However, this schedule was predicated upon reaching a near-term decision identifying levels of protection against paramilitary attack (PMA) and electromagnetic pulse (EMP) to which STC II will be designed. Maj. Byrne also reported that Kirtland AFB was the prime candidate for STC II siting.

(U) Although a 1984 STC II IOC was briefed, other Air Force representatives indicated that STC II would not be a major POM issue until 1982, thus predicated a 1985 IOC.

(U) Dr. Zeiberg did not take issue with the IOC dates as such, but questioned the achievability of the IOC dates without making STC II an FY 1981 POM issue, i.e., getting started sooner. He specifically referenced historical difficulties associated with ADP system acquisitions. Colonel Capper, AFSCF, affirmed that the SCF Data System Modernization Program, about to begin its initial contract phase, would be compatible with system definitions and acquisitions for the STC II.

Classified by 8050 (SSS)  
Declassify on 18 April 1985.

~~CONFIDENTIAL~~

DECLASSIFIED IN FULL  
Authority: EO 13526  
Chief, Records & Declass Div, WHS  
Date: JUN 28 2014

~~CONFIDENTIAL~~

2

o STC II Hardening Analysis

(U) L/C Starnes, AFSCF, briefed the hardening analysis and related it to a STC II facility located at Kirtland AFB. He stated that Kirtland's geographical location coupled with the current STC II baseline provides adequate protection against all but the most dedicated and professional attacks with protection against such attacks being prohibitively expensive and operationally impractical. The analysis also concluded that EMP protection is technically possible, but that the high cost is out of proportion to the threat presented. This conclusion was controversial and it was agreed that it needs to be studied further. L/C Starnes recommended that the STC II baseline be adopted except for enhancements associated with antenna radomes (\$2.2M) and additional fences (\$0.6M).

(U) Prior to meeting adjournment, Dr. Zelberg indicated a need for informal follow-on meetings to determine actions to assure that the Final Report provides a substantive treatment of concepts for Shuttle control and STC II which can lead to a recommended approach concurred in by DoD, NASA, and DCI in a timely manner. Following are action items to be accomplished towards this endeavor:

ACTION ITEMS

(U) Attached (Attachment 3) is a memorandum to Dr. Jordan, the Principal Deputy Assistant Secretary of the Air Force, identifying actions needed as a result of this meeting.

(U) Mr. Culbertson, NASA, and [REDACTED] IC Staff, are requested to work with Dr. Jordan as necessary to assure that proper interfaces exist for effective NASA and DCI participation at all stages of the OMB report preparation.

OSD 3.3(b)(1)

(U) Mr. Culbertson is requested to provide as soon as possible a statement on the benefits which NASA and the civil Shuttle users will derive from a DoD Shuttle flight control capability which can back up JSC facilities and share DoD Shuttle control workload with JSC.

(U) [REDACTED] is requested to provide as soon as possible DCI views on the need for an improved DoD satellite control capability, and a backup DoD Shuttle flight control capability. Included should be a clear statement on the need to handle intelligence payload data above the Secret level at JSC during certain Shuttle missions, and the impact on such payload operations.

OSD 3.3(b)(1)

~~CONFIDENTIAL~~

DECLASSIFIED IN PART  
Authority: EO 13526  
Chief, Records & Declass Div, WHS  
Date:

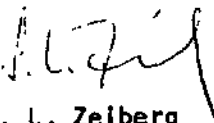
JUN 28 2014

~~CONFIDENTIAL~~

3

(U) Lt. Col. O'Hern is requested to prepare as soon as possible a memorandum for Deputy Under Secretary for Policy signature expressing the views of that organization on the urgency of the problems under consideration by the Satellite Control Capabilities Steering Group.

DECLASSIFIED IN FULL  
Authority: EO 13526  
Chief, Records & Declass Div, WHS  
Date: **JUN 23 2016**

  
S. L. Zeiberg  
Deputy Under Secretary  
Strategic & Space Systems  
Chairman, SCCSG

~~CONFIDENTIAL~~

UNCLASSIFIED

SATELLITE CONTROL CAPABILITIES STEERING GROUP  
AGENDA  
(9 APRIL 1979)

- o SOPC & STC II MISSION ELEMENT NEED STATEMENTS - MAJ PAGANO XOX
- o OMB SHUTTLE CONTROL SIUDY - MAJ PAGANO XOX
- o STC II IMPLEMENTATION PLAN - MAJ BYRNE RDS
- o STC II HARDENING ANALYSIS - LT COL STARNES AFSCF

Page determined to be Unclassified  
Reviewed Chief, RDD, WHS  
IAW EO 13526, Section 3.5  
Date: JUN 23 2018

UNCLASSIFIED

## ATTENDANCE

9 APR 1979

## SCCSG MEETING

Maj. Dennis L. Nawrocki

AF/XOORS

695-3684

OSD 3.3(b)(1)

Maj. Bruce Baron

SAFSS

697-8443

Col. D. L. Capper

AFSCF

AU 359-3203

Maj. Lewis White

HQ AFSC/TEUP

AU 858-4595

Maj. Vito Pagano

HQ AF/XOXFD

697-1189

OUSDRE

HQ NASA (OSTS/MH)

755-3743

A. Saavedra

SAFSS

697-7111

D. Hill

R. C. Taylor

USAF/XO

695-9104

OUSDRE

OUSDRE

Zelberg

Jordan

SAFAL

Yost, M/G

USAF/RDS

695-9104

DDTE

OASD(C31)

AFSCF-AEROSPACE

STC x3821

L. K. Konopasek

AFSCF/DVA

AU 359-3535

L/C A. Jay Starnes

Col. Bricker

USAF/RDS

694-8570

OUSDRE

USAF/XO

697-9991

LGEN C. A. Gabriel

OSD  
5 U.S.C. § 552 (b)(6)OSD  
5 U.S.C. § 552 (b)(6)

DECLASSIFIED IN PART  
 Authority: EO 13526  
 Chief, Records & Declass Div, WHS  
 Date:

JUN 23 2014

ATCP

UNCLASSIFIED



RESEARCH AND  
ENGINEERING

OFFICE OF THE UNDER SECRETARY OF DEFENSE  
WASHINGTON, D.C. 20301

19 APR 1979

MEMORANDUM FOR THE PRINCIPAL DEPUTY ASSISTANT SECRETARY OF THE AIR FORCE  
(RESEARCH AND DEVELOPMENT)

SUBJECT: Satellite Control Capabilities Steering Group Meeting, 9 March 1979

I believe there was general agreement at the subject meeting that action is needed in several areas discussed below.

Your assistance is requested in expediting the preparation and coordination within the Air Force of mission Element Need Statements (MENS) for the DoD Shuttle control capability and for an improved satellite control capability. We need these statements from the Air Force by 1 June 1979. To expedite subsequent coordination, I will alert OSD organizations involved in coordination ahead of time. Coordinated need statements are essential to support our current budget cycle and the study for OMB.

Regarding the OMB study, your assistance is requested in fully identifying the Air Force team responsible for the final report preparation. We need this as soon as possible so that we can define proper interfaces with NASA and DCI to assure their full participation. We also need a schedule for the report preparation in enough detail so we can measure our progress toward a 1 August final submission that fully meets OMB needs.

A number of specific studies were identified in Air Force briefings at the 9 March meeting which were said to be essential to support the OMB effort and our planning for an improved satellite control capability. These should be expedited.

In reference to the STC II briefing, I would appreciate your assuring that every consideration is given to combining the GPS ground station and STC II. We need to understand the impact of such a combination on GPS and STC II costs and operational capabilities, assuming various locations for STC II.

The tradeoff studies on hardening STC II need further review. I think we need to look more carefully at the tradeoffs of putting more of STC II below ground. STC II EMP considerations should be reviewed using a

Page determined to be Unclassified  
Reviewed Chief, RDD, WHS  
IAW EO 13526, Section 3.5  
Date:

JUN 23 2014

UNCLASSIFIED


at 13

UNCLASSIFIED

2

scenario which assumes a precursor 0.5 MT burst at 400-600 kilometers altitude. The EMP environment on the ground from such a burst can be assumed to be 50 KV/M. We need to define, for such a burst, the impact on our operational space systems and relate this to the SCF and STC II.

Page determined to be Unclassified  
Reviewed Chief, RDD, WHS  
IAW EO 13526, Section 3.5  
Date: JUN 23 2014

  
S. L. Zeiberg  
Deputy Under Secretary  
Strategic & Space Systems

UNCLASSIFIED