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OFFICE OF THE UNDER SECRETARY OF DEFENSE

WASHINGTON, D.C. 20301

RESEARCH AND  
ENGINEERING

DECLASSIFIED IN FULL  
Authority: EO 13526  
Chief, Records & Declass Div, WHS  
Date: JUN 16 2015

DEC 22 1981

MEMORANDUM FOR ASSISTANT SECRETARY OF THE ARMY (RD&A)  
ASSISTANT SECRETARY OF THE NAVY (RE&S)  
ASSISTANT SECRETARY OF THE AIR FORCE (RD&L)

SUBJECT: The MILSTAR Program: A New Military Communications Satellite (U)

(b) During the past year we have been analyzing our military communications satellite architecture with emphasis on evolving a very survivable, jam-resistant, strategic and tactical user system. The new system would also be used for ~~NCA~~ connectivity and would host communications relay capability for the intelligence community. *copy 1, 5, 8*

(d) The results of our studies have led to the definition of the Military Strategic Tactical and Relay (MILSTAR) system. This system will consist of seven (7) EHF (44 GHZ uplink and 20 GHZ downlink) satellites in which four are in synchronous orbit and three are in highly elliptic polar orbit all cross-linked together. Numerous survivability features are to be developed such that we believe the overall system will be enduring. *1117*

(U) The USAF Space Division will function as the overall development and acquisition management organization wherein a Joint Program Office (JPO) will be established shortly. Under the direction of the JPO, the Navy will be responsible for joint Service engineering development of the EHF satellite terminals. A joint Service terminal SPO will be established, with Navy lead, on the East Coast. The Air Force is currently developing a detailed program management and security plan.

(U) Enclosed for your information is a copy of a Memorandum of Understanding which further clarifies the roles and responsibilities in this important program.

*Donald C. Latham*

Donald C. Latham  
Deputy Under Secretary of Defense  
(Communications, Command, Control  
and Intelligence)

Enclosure

~~Classified by: DUSD(C3I)~~  
~~Declassify on: 17 Dec 87~~

13-M-4750 RT

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11171111 01.10.87

MEMORANDUM OF UNDERSTANDING

SUBJECT: The EHF MILSTAR Program (U)

Discussion: (U)

(U) A meeting was held on 10 December 1981, between Dr. James P. Wade, Lt Gen Richard C. Henry, VADM Gordon Nagler, Lt Gen Hillman Dickinson, and Don Latham to discuss the MILSTAR program in general, and in particular, the concept and need for a so-called "transition" EHF package on a FLTSAT.

Agreement: (U)

Out of that discussion, the following statements and indicated initiatives were agreed upon:

o Extremely High Frequency (EHF) Satellite Communications, with Low Probability of Intercept and anti-jam capability, is an operational need that is required by all services and agencies as soon as possible.

o Military Strategic Tactical and Relay (MILSTAR) System will satisfy this need. The required IOC of 1987 can be met with intensive management and application of resources.

o A Joint Program Office, located at Space Division, USAF, has overall responsibility for the total MILSTAR System, both the space and terminal segments.

o To reduce the technical risk and to provide a means to conduct technical and operational evaluation testing of engineering development EHF satellite terminals, a small EHF FLTSAT applique package will be deployed on FLTSAT's 7 and 8. The option to place this package on FLTSAT 8 will remain under continuous review depending upon the overall progress of the MILSTAR satellite. Such small EHF applique package should provide for limited National Command Authorities connectivity during a stressed environment.

o Under the direction of the MILSTAR Joint Program Office, the Navy will be responsible for providing executive agent funding for the EHF package on FLTSAT's 7 and 8.

o Under the direction of the Joint Program Office, the Navy will be responsible for Joint Service engineering development of the EHF satellite ground terminals.

o The EHF package will be procured through Space Division, USAF, from MIT Lincoln Laboratory, who will also be used as part of the MILSTAR engineering and system development team working for the Space Division, USAF, MILSTAR Joint Program Office.

o The EHF applique package will be the forerunner of the EHF segment of a larger, more capable MILSTAR satellite system.

o The Air Force, in conjunction with the Army, Navy, and other agencies, will develop a management and security plan for the MILSTAR program as soon as possible.

o Space Division, USAF, and COMNAVELEXSYSCOM, USN, will develop an agreed management plan for the EHF package on FLTSAT 7 and 8, taking into consideration the overall MILSTAR management plan under development.

*James P. Wade, Jr.*

James P. Wade, Jr.  
Principal Deputy Under Secretary  
of Defense for Research and  
Engineering

COORDINATION:

*Richard C. Henry*  
Lt Gen Richard C. Henry

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12/15/81

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*Gordon Nagler*  
VADM Gordon Nagler

12/15/81

*Hillman Dickinson*  
Lt Gen Hillman Dickinson

12/17/81

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17 DEC 1981

MEMORANDUM FOR UNDER SECRETARY OF DEFENSE FOR RESEARCH AND ENGINEERING <sup>WR</sup>  
SUBJECT: Priority Rating for the MILSTAR Program

As explained in the enclosed cover memorandum, the MILSTAR program needs a high priority rating in order to achieve an initial operational capability (IOC) in 1987. Accordingly, I recommend your signature on the enclosed memorandum which asks the Deputy Secretary of Defense to assign a high priority rating to MILSTAR.

*Don Latham*  
Donald C. Latham  
DUSD(C<sup>3</sup>I)

Attachments

Coordination:

*William A. Long*  
\_\_\_\_\_  
DUSD(AM)

*12-17-81*  
\_\_\_\_\_  
Date

~~UPON REMOVAL THIS DOCUMENT  
BECOMES UNCLASSIFIED~~

OFFICE OF THE SECRETARY OF DEFENSE

22 DEC 1981

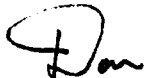
Memo For Dr. Wade

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Subj: Priority Rating for MILSTAR

In accordance with your request I have changed the word "highest" to "high" in the proposed SecDef memo and made a number of other changes to bring the cover memo in line with recent events (e.g., we have moved the enduring satellite communications funds into the MILSTAR program, whereas the former memo indicates that the move had been requested by the Air Force).

By using the word "highest," I did not mean to imply a priority ranking within the FAD-I category -- the Services assign these secondary priorities (e.g., FAD 1-3) after the original SecDef assignment is made. My intent was to emphasize the fact that the FAD-I priority grouping represents the highest priority needs in the DOD and as such the MILSTAR belongs in this highest category.



Donald C. Latham  
DUSD (C3I)

OFFICE OF THE SECRETARY OF DEFENSE

18/12

Memo For C3I (D LAMM)

Don

Clarify your memo for me please, re your own memo asks for assignment of a "high priority" rating. Your recommended decision memo uses highest priority in your force planning.

Does this mean that a FAD-1 Priority includes a priority listing within the description? My questions come from my memory on GPS, where-in I recall the Air Force assigned GB a priority place on their list of #1.

Does this suggest we are ranking GPS + HWSMR in some preference order?

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DIRECTORATE OF SPACE SYSTEMS AND COMMAND,  
CONTROL, COMMUNICATIONS (DCS/RD&A), HQ USAF

● OFFICE OF THE DIRECTOR

DATE: 21 Dec

MEMORANDUM FOR: Mr. Latham

SUBJECT: Priority Rating for MILSTAR

I have changed the proposed SecDef Memorandum to reflect Dr. Wade's desire not to use the word "Highest" in the SecDef Memorandum.

In the process of changing this, we also made several editorial changes to the cover memorandum. The rationale for the changes are:

1. We decided several months ago not to call the MILSTAR the Strategic, Tactical and Relay Satellite System.
2. The Congress added the additional funds to MILSTAR in FY82 not FY83.
3. The DRB increased the Air Force funding only in FY83 and FY84. Reductions were actually made in the out years.
4. PBD #228R transferred the RESC funds to MILSTAR
5. We estimate that it will take about five years to achieve MILSTAR FOC because of the long terminal installation cycle.

4 Tabs

- A. Proposed Memo for Mr. Latham
- B. Dr. Wade Note
- C. Revised Memo Package
- D. Copies of Original Memos

  
BERNARD P. RANDOLPH  
BRIGADIER GENERAL, USAF

Office of the Secretary of Defense  
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