

GENERAL THOMAS D. WHITE  
CHIEF OF STAFF, U S A F

DATE 17 March 1960

MEMORANDUM TO: Dr. Charyk

Reference our conversation regarding Dr. York's unsigned draft memo, I consider this a matter of utmost importance and strongly recommend you respond as per inclosure.

*Thomas D. White*

~~TOP SECRET~~



DEPARTMENT OF THE AIR FORCE  
HEADQUARTERS UNITED STATES AIR FORCE  
WASHINGTON 25, D. C.

MEMORANDUM FOR OFFICE OF SECRETARY OF DEFENSE (DIRECTOR OF DEFENSE  
RESEARCH AND ENGINEERING)

SUBJECT: SAMOS, MIDAS and DISCOVERER Research and Development  
Programs and Development/Operational Plans for SAMOS  
and MIDAS Programs

Reference: Memorandum for Secretary of Defense from Under Secretary  
of the Air Force, subject: Transfer of the SAMOS, MIDAS  
and DISCOVERER Development Programs to the Department of  
the Air Force, dated 18 Feb 1960, and your undated draft  
response to the 18 Feb Memo from Under Secretary of Air  
Force

1. It is understood that the referenced draft memo addresses itself solely to the subject of the R&D programs of DISCOVERER, SAMOS, MIDAS and that specific comment on the SAMOS, MIDAS Dev/Ops plans is awaiting JCS recommendations.
2. There is irrefutable evidence of urgent intelligence needs that are beyond the capability of the "C" program. We are currently re-examining the reliability and probability of success that can be expected from both the recovery and early readout systems. This examination is based upon review of our actual experience in the DISCOVERER program and extensive ground tests. These tests of the E-1 were made with the actual flight hardware and ground support equipment. It does appear that within the presently authorized funds an approach based upon an increase in the readout offers much higher probability of obtaining the intelligence information in the time period rather than extending the "C" program.
3. If a "C" program extension is considered necessary, then as a compromise it is recommended that our R&D programs for DISCOVERER, SAMOS, MIDAS be approved as submitted and that the Air Force be allowed to reprogram FY-61 funds from non-space programs to provide the number of additional "C" shots directed, with the understanding that there is sufficient flexibility to reorient the "C" program or the readout (E-1 or E-2) as will be justified by future development experience.

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MEMORANDUM FOR RECORD

6 November 1959

SUBJECT: SAMOS, MIDAS AND DISCOVERER Programs

**HAP**

Personnel in Attendance:

- Dr. Charyk
- Maj Gen Davis
- Col Oder
- Col Butcher
- Maj Howard
- Maj Floyd

1. The problem that was under discussion could be stated to be the transfer of satellite programs from ARPA to the Air Force. Dr. Charyk has agreed that the Air Force would prepare a new development plan to be submitted to Dr. York by 15 January 1960 and the operational plan with user relationships to be submitted to the Sec/Def by 15 January 1960. The ground rules for the new development plan must be consistent with 1) the new funds; 2) emphasis on the recovery package with high resolution; 3) adequate ground test and environmental testing; 4) a planned program for assuring reliability. We are to prepare a study for submittal to Dr. York on the type of facilities required to assure adequate testing of space programs. This is to determine whether there should be a central facility (AEFC) and/or concentrated facilities spread through the prime contractors.

2. AFDAT is to arrange a meeting next week (probably 13 Nov) to include the following people: Dr. Charyk, Gen Walsh, Gen Davis, Gen Boushey, Col Hicks, Maj Howard, Maj Floyd, and from ARPA Gen Ostrander, Lt Col Nadler, and others. The purpose of this meeting is to get an agreement on the transfer procedure for space programs. With respect to the funds transfer the meeting held between Dr. York, Dr. Charyk and others on the 3rd of Nov established Air Force space program funds at \$100 million dollars; therefore, the FY '61 funds planned were:

31 Oct 59

(in millions)	<u>DISCOVERER</u>	<u>SAMOS</u>	<u>MIDAS</u>	<u>TOTAL</u>	<u>NEW TOTAL</u>
Air Force	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
ARPA	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
MCP	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

Since the Air Force funds were cut from [REDACTED] the current directive for AFDAT to come in on 23 November must be cancelled since the plans are already out of date. The ARPA funds of [REDACTED]

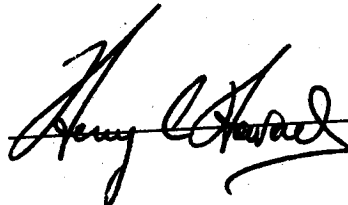
are firm for FY '61. The Discoverer funds do not include Project "A". Dr. Charyk believes that this [redacted] is not irrevocable. The guidance to AFEND should emphasize the criticality of funds but that if justified under the above ground rules the Air Force could recommend re-programming from lower priority projects within the Air Force budget of approximately [redacted]. It is imperative that the Air Staff give program direction to AFEND on how to split up the Air Force and ARPA funds between MIDAS and SAMOS. In order to do this Dr. Charyk suggests a group be established in Hq to assure the documentation to OSD by 15 January 1960. The Weapons Board and the Ballistic Missile Committee are to be given a current status of MIDAS and SAMOS at the 18 and 23 November meetings on space launch pads.

3. Dr. Charyk stated that what is really needed is an understanding of the requirement for the readout program. OSD personnel are not convinced that a readout capability on a 2-hour basis at the specified resolution is valid for strategic intelligence. In order to emphasize the recovery program it would be better to research and develop payloads and not concentrate on so many flights. If the "C" program turns out to be useful it is probable that the number of flights will be increased and thereby increase the recovery program *fund availability* -

4. Dr. Charyk stated that the Communications Satellite is not very healthy. On his and Dr. York's trip out to SAC, General Power told them that moving the positive control line further out is not very important but rather positive control in the existing area is much more important; therefore, York's question "is the Communications Satellite the correct way to spend [redacted] to get better communications?" Major Howard then asked if Dr. Charyk was desirous of receiving the transfer request for the controversial items. Dr. Charyk replied that these should be handled in a different manner and that he wanted to discuss it at a later time.

5. The following actions are required:

- a. A TWX to AFEND to relieve the 23 November deadline.
- b. Set up a meeting with ARPA and Air Staff group next week.
- c. Establish the new ground rules on which a development program is to be forwarded.
- d. Initiate a study for ground test facilities required for space programs.
- e. Establish guidance for distribution of the Discoverer, Midas, and Samos funds.



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**MEMORANDUM FOR THE SECRETARY OF THE AIR FORCE**

**SUBJECT:** SAMOS, MIDAS and DISCOVERER Research and Development Programs and Development/Operational Plans for SAMOS and MIDAS Programs

**Reference:** Memorandum for Secretary of Defense from Under Secretary of the Air Force, subject: Transfer of the SAMOS, MIDAS and DISCOVERER Development Programs to the Department of the Air Force, dated 18 Feb 1960.

Reference memorandum submitted for review and approval proposed Research and Development Programs for SAMOS, MIDAS and DISCOVERER and proposed Development/Operational Plans for the SAMOS and MIDAS programs. The Development/Operational Plans have been referred by the Secretary of Defense to the Joint Chiefs of Staff for review and comment.

The Research and Development Programs were submitted on the basis that there was available to these programs totals of [REDACTED] in FY 1960 [REDACTED]. These amounts are stated by the Air Force to be less than required to accomplish the Research and Development Programs as submitted. The additional amounts required for FY 1960 are stated to be \$20.6 million for MIDAS, and understood to be [REDACTED] for DISCOVERER. The program amounts requested for FY 1961 exceed the amounts presently programmed in the FY 1961 budget estimates.

The MIDAS Research and Development Program, as submitted by the Air Force, has been reviewed and the recommended program estimated at \$51.7 million for FY 1960 [REDACTED] is approved in principle. It is understood that steps are underway within the Air Force to implement the MIDAS program in accordance with the objectives of the Research and Development Program.

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The DISCOVERER Research and Development Program has been reviewed. In accordance with subsequent discussions held with this office, it is understood that the Air Force is preparing a revised Plan further extending the DISCOVERER program within presently estimated requirements of [REDACTED] for FY 1960 and [REDACTED] pending submission of further detailed information for approval by this office. The FY 1961 amount is subject to adjustment contingent upon the submission and approval of a revised Plan by the Air Force.

The SAMOS Research and Development Program has been reviewed. As outlined in subsequent discussions held with this office, it is apparent that the SAMOS Research and Development Program as presented, including the proposal for seven additional shots, must be further reviewed. You are authorized to proceed on an interim basis within funding estimates of \$160.0 million for FY 1960 and [REDACTED]. Upon completion of the current technical review, further detailed guidance will be provided by this office concerning SAMOS objectives. Pending receipt of this guidance, it is desired that current effort assure that available resources are applied to fully achieve research and development objectives, including schedule, in order of priority; accepting slippages as necessary in the lower priority items. It is understood that the priority established in the Research and Development Program provides for emphasizing photographic payloads over ferret, and within photographic mode, recovery over readout.

The above authorizations are based on the availability of funds as follows and do not include military construction requirements:

**PROGRAM FUNDING SUMMARY**

	<u>FY 1960</u>	<u>FY 1961</u>
<u>MIDAS</u>		
Currently Programmed, P600	\$ 31.1	[REDACTED]
Anticipated Emergency Fund transfer to P600	4 20.6	[REDACTED]
To be made available by Reprogramming, P600	----	[REDACTED]
Sub-total MIDAS	51.7	[REDACTED]

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	<u>FY 1960</u>	<u>FY 1961</u>
<u>DISCOVERER</u>		
Currently Programmed, P600 Anticipated Emergency Fund transfer to P600 To be made available by Reprogramming, P600 Sub-total DISCOVERER	[REDACTED]	[REDACTED]
<u>SAMOS</u>		
Currently Programmed P600 Reprogramming Adjustment, P600 Sub-total SAMOS	\$ 160.0  ----- 160.0	1027 [REDACTED]
TOTAL .....	[REDACTED]	[REDACTED]

Source of Funds to Support Programs Summarized above

Currently Programmed P600 Anticipated Emergency Fund transfers to P600 To be made available for the development programs from P200	[REDACTED] 1027	[REDACTED] 1027
TOTAL .....	[REDACTED]	[REDACTED]

As noted above, further detailed technical guidance will be provided on the MIDAS, DISCOVERER and SAMOS programs at an early date. Also, beyond the amounts noted above, these actions do not constitute a basis for any request for supplemental funds. None of the foregoing actions should be construed as approval of any military construction items, which are to be handled separately. The amounts listed above are for purposes of program guidance and actual funding will be arranged through usual fiscal channels.

Herbert F. York

cc: ASD (Comptroller)

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28 Oct 60

MEMORANDUM FOR: Mr. R. T. Masell, CIA  
Col. A. E. Smith, HED&E  
Col. Paul Wortham, AFWD  
Col. Lee Battle, AFWD  
Mr. Jim Finner, LMD  
Mr. Brumler, Antennetics

1. The Under Secretary of the Air Force requests a meeting concerning the DISCOVERER Program in the Pentagon, Room 4E-369 at 1000 hours, 3 November 60, with the following agenda:

- a. Presentation of new program control procedures for DISCOVERER Program.
- b. Presentation of latest schedule.
- c. Discussions by Antennetics of degradation to end product as result of performance specification changes of Ther - Agena B as provided by Lt Colonel C. Worthy on 21 October.
- d. Progress report on test and checkout status of flight items.

*[Signature]*  
JOHN L. MARTIN, JR.  
Colonel, USAF  
Deputy Director, Office of  
Missile & Satellite Systems

*Directed (and letter approved) by Dr. Chayk 28 Oct 60*

*SAFMS FILE COPY  
6 other copies @ /address to Mr. Burton, CIA.*