

SECRET

DTD @ April 60

MEMORANDUM FOR THE SECRETARY OF THE AIR FORCE

SUBJECT: Intelligence System SAMOS

**REFERENCES: Memo from SecDef to SecAF, dtd 17 Nov. 59;
subject "Transfer of the SAMOS Development Program
to the Department of the Air Force."**

On 10 April 1958 certain parts of the SAMOS program were assigned a national priority in order to establish an early operational capability. An attempt to gain this early capability will, undoubtedly, interfere with the research and development program and can only have the effect of delaying the overall program. At the present time many questions are unanswered about the capabilities of SAMOS that could have been answered by now if the development project had been carried out as originally conceived. Apparently, both the contractor and the technical support committees have been confused and slowed down by the impact of operational requirements before the actual capabilities of the system have been established on a developmental basis. This condition has led to advance planning, including facilities and hardware procurement, based on evaluation of hypothetical outputs and needs for the SAMOS system.

It is necessary that the elements of the system be thoroughly tested in order to evaluate this particular method of reconnaissance. In order to concentrate funds where most sorely needed, i. e., in the development area and to speed up the program, it is recommended that steps be taken at the earliest possible date to stop the expenditure of funds for operational aspects of SAMOS. This would include the training of personnel; acquisition of land and new facilities, including the SAMOS aspect of the rehabilitation of the Martin Bomber Plant, Offutt AFB; all data links including the R&D data link from Vandenberg to Sunnyvale; operational launching facilities; operational data and materiel; as well as any equipment needed to process the R&D outputs in an attempt to provide operational warning.

In preparation of the revised development plan under the referenced memorandum, it has been requested that the program be reoriented. It is further recommended that funds presently available for SAMOS be appropriately programmed to emphasize research and development in such a manner as to obtain proven feasibility and reliability of the system at an earlier date than now envisaged.

The revised development plan should provide for continued R&D in the following areas, listed in order of priority:

- a. Recoverable photo package (E-5). *ITEC study 50" to 70" } 5 FT. 54" }*
- E-2*
-b. E-1 and ~~the~~ R&D read-out packages. *6" - E-2 36" } both readout*
- c. E-3 study completed. *- Study, RCA tape rather than film processing.*
- d. Read-out photo package completed *} Sub system E ground equip.*
- e. One set of research and development ground photo read-out equipment, consisting of the minimum required to evaluate E-1 and E-2 package, completed.
- f. Only one tracking and acquisition station equipped with a minimum number of "E", "F" and "H" components, without data links as planned, established at Vandenberg AFB.
- g. F-1, F-2 and ~~the~~ packages continue on the present R&D basis. Read-out for these to be processed by a limited Subsystem "T" program with no emphasis on quick processing to obtain warning at this time.
- h. Subsystem "T" *or replace* completely reoriented and limited to the use of existing resources to exploit the intelligence wherever possible. Equipment developed for processing, storage, recall and viewing must improve equipments now in use that perform the same functions but do not have the capacity to handle the SAMOS collection capability. Individual equipments will be integrated as a system using existing facilities and at a place that will allow for expeditious R&D evaluations as well as maximum exploitation of the end results.

The staff of the Office of the Assistant Director for Special Projects, DR&E, will be available for advise and assistance in regard to the above reorientation.

Herbert F. York