DRAFT

12/2/59

MISMORANDUM FOR THE SECRETARY OF THE ALR FORCE

SUBJECT: Intelligence System SAMOS

Reference: Memo to Secy Air Force from SecDef, dtd 17 Nov. 59; subject:

"Transfer of the SAMOS Development Program to the Department

of the Air Force"

SAMOS was originally assigned HNP on April 10, 1958. At that time it was understood that there were many uncertainties regarding the technical feasibility of achieving the ultimate effective concept of such a system; e.g., continuous coverage, and real time readiment that would result in a capability to provide strategic and tactical warning from photo-intelligence and KLINT. Nevertheless, because of the potential contribution of such a system, if its development should prove to be feasible, it is felt that research and development should proceed without delay.

The subsequent research and development program has been continuously plagued with delays and misunderstandings. This appears to have resulted, in large part, because of repeated reprogramming and rescheduling in an attempt to construct an overall system that could become operational with the first launching. (This, of course, assumes that the first payload will function perfectly.) Appearently, 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 lead to advance planning, including facilities and hardware procurement, based on evaluation of hypothetical outputs and needs for

the SAMOS system.

The most urgent and crucial requirement in SAMOS is the experimental portion of the program where a determined effort is needed to test and evaluate this particular method of recommaissance. To avoid further interference with the critical experimental work, and needless expenditures that might possibly result in the development and deployment of unacceptable system components, it is recommended that **THEMPHILLEMANNEEDEXTEEX**
steps be taken at the earliest possible date to stop any expenditure of funds for operational aspects of the SAMOS program. These include the training of personnel, acquisition of land and new facilities, all data links, operational launching facilities, operational data and material, as well as any equipment needed to process the R&D outputs in an attempt to provide operational warning.

In the preparation of the revised development plan under the referenced memorandum, it appears highly desirable that the program be recriented to minimize the impact of operational concepts and procedures on the research aspects of the surveillance system. 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. Funds to be transferred from ARPA will be utilized only in accordance with approved development plans.

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).
- b. E-1 and E-2 R&D read-out packages.
- c. E-3 study completed.
- d. Read-out photo package completed.
- e. One set of research and development ground photo read-out equipments, 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 System "I" components, without data links as planned, established at Vandenberg AFB.
- g. F-1, F-2, and F-3 packages continue on the present R&D basis. Read-out for these to be processed by a limited Subsystem"I" program with no emphasis on quick processing to obtain warning at this time.
- h. Subsystem "I" completely recriented to provide single sets of read-out and reassembly processing components for R&E basis only. These components should be installed only at the contractor's facility or at Vandenberg AFB as R&B requires.

The Office of the Assistant Director for Special Projects, DR&E, is designated the ODDR&E representative to advise and assist the Air Force in the above reorientation.