3 October 1962

## BREEFING MEMORANDUM FOR THE DIRECTOR

SUBJECT:

1. The satellite portion of the NRP consists of photographic and 3 projects listed below. The aircraft grogram involves 1 photographic (U-2 - IDEALIST) and 1 project in operation and the OXCART system under development. In and OXCART/TAGBOARD. addition there are 2 drone projects -

Satellite Reconnaissance Program

Project	Agency	Objective	Characteristic	Timing	Remarks
CORONA-M	CIA	Photo-Survey	App. 13' resolution	Present	Proven reliable
CORONA-M	CIA	Photo-Sarvey	Dual capsule recovery	Apr. 162	Relatively straight-forwar
201	AF	Photo-Survey	App. 10' resolution	Near future	No success to date
LANYARD	AF-CIA	Photo-Tech. Intelligence	6' resolution	Mar. '62 (may slip)	Interim margin tech. intell. system
2-35	AF	Weather	Real time cloud cover	Present	Useful for programming photo systems

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2. Within the estellite program the most controversial item involves the continuation of the programs. The slightly higher resolution, approximately in the ratio of 10' as compared with 13'. A COMOR-NPIC study of resolution required to cover priority targets indicates that this degree of improvement is probably of marginal value in that the present CORONA-M system is quite satisfactory for all survey purposes and neither system adequate for sechnical intelligence. The system is capable of carrying twice the film footage of the present M so that in spite of the greater cost It should be slightly cheaper on a dollar per square mile basis (approximately . 5) per successful launch. However, the CORCNA-M system is of proven reliability and even assuming quite optimistic learning curves for the which has not had a success to date, it is system until after unlikely that any economy could result from the 1965. The development of the J varsion of the CORONA-M system would double the film capacity and provide the very attractive feature of dual capsule return so that it is clearly superior to the con every count other, than the marginal difference in theoretical resolution.

3. In view of these factors, it is universally agreed that and the only no long-term commitments should be made for the question that remains is whether the should be cancelled out-right or whether a few of the systems which have already been procured (3 to 5) should be fired in order to determine how useful the system is and recoup some of the funds that have already been sunk into this program. If a decision is made to fire 3 and cancel the rest of the program now, this However, if the would involve the expenditure of about decision on cancellation of the remaining 2 were held up until after the If the entire program third firing, then the net cost would be would be saved. It is my was cancelled out-right, then understanding that the technical gain from determining the effectiveness of the camera system is somewhat marginal since it does not have much application to other systems under development. In view of this, I would recommend that the be cancelled out-right and that the funds saved be put into other programs which have greater potential value. At the very meet I believe that 3 additional flights should be authorized with the understanding that the decision to proceed would be reconsidered after each launch.

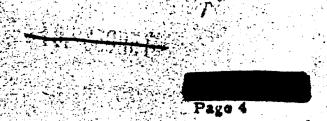
4. The other major question in the satellite program revolves on the desirability of continuing with LANYARD. This is an interior system designed to give 5' to 6' resolution with the object of having some capability for technical intelligence until becomes available. While the LANYARD system is on the borderline of providing technical intelligence material even theoretically and while it is quite a complicated system, I believe on balance one should proceed with this program since there is a definite possibility of alippage with and and the experience of operating LANYARD might operation. However, I believe nothing be of value for later should be allowed to interfere with the prosecution of the program which I consider of highest priority. In this connection a decision has recently been made to change to a water-recovery system similar to CORONA, and this should greatly simplify and increase

broad and useful program. It was prepared as a combined effort of NSA. AF. Navy and CIA personnel with the of our doing a large share of the spade work. The Agency has no specific responsibility in this area other than to provide technical assistance and advice. We do feel that it is quite a reasonable program which is aimed primarily at obtaining intelligence on Soviet anti-ballistic missile systems and secondarily on radar as deployed deep in the Soviet interior. I recommend that you approve this program.

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- b. The three aircraft systems are all under CIA management, and I believe on the whole non-controversial. Development-wise the sain affort in the IDEALIST program is to develop countermeasures and pareiration aids so as to prolong the life of the U-2 with increasing deployment of SAM's throughout the world. The only major problem relative to the OXCART program involves the surfacing of the RB-X (Tab A) and the extraordinarily difficult problem of developing penetration to which will assure the safety and hopefully the lack of detection and the safety permitting a political decision to proceed with
  - The The reast time trans project is being seriously studied for At the present time it appears that photographic



missions are not warranted but that the vehicle offers great potential for obtaining critical intelligence on the details of operation of SAM systems and possibly MIG-21's. The development of a quarter-scale ONGART drone is, in my opinion, very controverisal. An evaluation of the proposal is attached hereto as Tab B. I would recommend that only the initial study and model phase be approved at this time and that the whole program be reconsidered when this has been completed.

3. In addition to the specific collection systems, the NRO is responsible for processing the take. An arrangement has been worked out whereby the AF and CIA facilities at will be combined under CIA management and up-dated to process initially all of the high-quality material and prepare dupes for NPIC-community use. A clitical large-scale production of dupes for other customers will be carried out by the AF facility at Westover. The CIA part of this effort in carried as a line item in its part of the NRO program and is responsible in light of the anticipated requirements. NSA has the prime responsibility for analysis of the SIGINT take, but SAC is doing a fair share of this with NSA's concurrence. CIA has participated by providing technical guidance and assistance.

Signed Herbert Spoville, Jr.,

HERBERT SCOVILLE, JR.
Deputy Director
(Research)

Attachments: (2)

## COVERT SATELLITE SYSTEM

Included in the NRO program is a project for the development of a truly covert satellite reconnaissance system. The development of this capability was approved by the NSC at the end of June, but at BOB intercession the President concurred that activities should initially be limited to studies. Such studies have been under way for many months and hopefully will reach the point where decisions on systems' feasibility could be made during the winter. At this time it is not possible to say whether it will then be possible to select a specific system for development which would, as a consequence, involve fairly large sums of money in FY 1964, or whether further research will be required. Furthermore, the requirement for such a system will, of course, depend on the degree of success which we are achieving in establishing the legitimacy of satellite reconnaissance. I personally believe that this legitimacy is still sufficiently uncertain that considerable priority should be attached to development of a truly covert launch system. I am, therefore, personally more inclined to put greater funding in the FY 1964 budget than Dr. Charyk. The Bureau of the Budget for reasons which are not clear to me seems to be rather strongly opposed to such a development.

Signed Herbert Spoville, Jr.

HERBERT SCOVILLE, JR.
Deputy Director
(Research)