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CHRONOLOGY OF

NRO-CIA RELATIONSHIPS

Volume II

30 April 1965

On behalf of Admiral Raborn, Mr. Bross called Mr. Vance with respect to funding of FULCRUM activities for the month of May. Mr. Vance agreed to a minimum sustaining basis for May, but indicated that he wanted to "wind the matter up by May 30th." Mr. Vance left it up to Mr. Bross to work out the details for a minimum sustaining basis and indicated he would accept Bross' determination that it had been done on that basis. (Tab 290)

3 May 1965

In a letter to Admiral Raborn, Dr. McMillan presented a very complete and detailed report of background and status of NRO activities on a new satellite system for general search.

(Tab 291)

25 May 1965

In a reply to Dr. McMillan's letter of 3 May dealing with the status of development of satellite general search systems, Admiral Raborn indicated that he considered it "a matter of great importance and urgency."

Admiral Raborn attached a copy of his letter to Mr. Vance and indicated that he proposed to move quickly to review the competitive programs and establish procedures for meeting the USIB requirement. (Tab 292)

25 May 1965

In a letter to Mr. Vance, Admiral Raborn indicated that CIA was continuing sustaining contracts on the FULCRUM system and had undertaken a re-evaluation of the basic ITEK design. The costs for this effort, which had been approved by Mr. McCone, amounted to for April. Admiral Raborn stated that CIA had reviewed and substantially cut the costs of the FULCRUM project, which were projected for May at

He suggested that he and Mr. Vance meet at Vance's early convenience to review all competitive programs and to establish procedures for selecting the design

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25 May 1965 (Continued)

best calculated to meet the USIB requirement. (Tab 293)

25 May 1965

In a letter to Admiral Raborn, Dr. McMillan indicated that the apportionment requests from the several NRP program directors were being analyzed and noted some elements of the CIA request and some of the problems they posed in settling on a financial plan.

Dr. McMillan remarked that, including the money that would be required if OXCART were operated out of Kadena, the CIA apportionment request was higher than the budget. Of this increase, about represented increases in budget line items, about for items proposed in lesser amounts but not included in the budget, and about items.

(Tab 294)

3 June 1965

Admiral Raborn confirmed a telephone conversation of 2 June in which he had informed Mr. Vance that he felt the need of special technical advice on the results of a review of the FULCRUM camera in relation with the selection of a new general search system as a follow-on to CORONA.

Admiral Raborn had talked with Dr. Hornig who indicated that he would refer the question to the President's Scientific Advisory Committee (PSAC) Reconnaissance Panel of which Dr. Land was the Chairman, Admiral Raborn considered this an ideal solution in view of Dr. Land's previous connection with the problem.

Dr. McMillan had advised Admiral Raborn that the NRO was funding projects by Eastman Kodak

3 June 1965 (Continued)

and also by ITEK in the general search category.

Admiral Raborn stated that Dr. McMillan had also indicated that in view of the Land Panel report on FULCRUM, the project, in his opinion, was no longer a candidate for consideration. Admiral Raborn remarked that it was not his understanding that any definitive decision had been made to eliminate the FULCRUM design, but on the contrary, that there had been agreement that no final decision either to accept or reject any of the competitive proposals in this field could be taken until final reorganization of the NRO.

Admiral Raborn suggested "that appropriate representatives of our respective offices prepare terms of reference to serve as general guidance" to facilitate the work of the PSAC in the review of all of the designs for a new system. (Tab 295)

14 June 1965

In a letter to Admiral Raborn, Dr. McMillan referred to the August 1964 agreement between Mr. Vance and Mr. McCone to certain changes in the contract structure of the CORONA program affecting the conduct of systems integration and systems engineering; specifically that Aerospace Corporation would be given responsibility for over-all systems engineering and that the Director, Program A, would establish a systems integration contract with Lockheed.

Dr. McMillan indicated that, unfortunately, none of the terms of the agreement had been fully complied with by the CIA and explained, in detail, the events that had since occurred. Dr. McMillan informed Admiral Raborn that he was taking the

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14 June 1965 (Continued)

following actions:

- a. Instructing Mr. Kearton, of Lockheed, to sign the contract he had negotiated so that the Government could legally pay the contractor for the work that had been accomplished.
- b. Instructing the Director, Program A, to initiate a continuation of the contract for FY 1966.

Dr. McMillan assured Admiral Raborn that, if changes in the over-all structure were later agreed upon, this particular contract with Lockheed would be adjusted accordingly.

(Tab 296)

17 June 1965

Mr. Vance agreed with Admiral Raborn that arrangements should be made to protect the deployment option of OXCART aircraft to Okinawa in the fall of 1965, and indicated that such actions had already been initiated within the DOD.

Mr. Vance had directed the construction of the required support facilities on Okinawa and had authorized the expenditure of for that purpose.

Mr. Vance suggested an in-depth review of program status prior to charting a future course of action. (Tab 297)

17 June 1965

Admiral Raborn called General Stewart regarding Dr. McMillan's 14 June letter and requested that the Lockheed contracts not be signed until he had discussed the matter with Mr. Vance in a meeting scheduled for 18 June 1965.

17 June 1965 (Continued)

Admiral Raborn indicated that "we shouldn't do something that might have to be undone later... not that I feel anything would have to be done..."

undore"

18 June 1965

General Stewart advised Mr. Vance of Admiral Raborn's call of 17 June and his request that the Lockheed contracts not be signed pending the outcome of his discussion with Mr. Vance.

General Stewart indicated further that he had talked with General Martin and had learned that negotiations could continue but that he should not sign the contracts without specific approval to do so from Dr. McMillan.

CIA had called Lockheed, stating that the DCI did not want them to sign the contracts in question "at this time." (Tab 298)

2 July 1965

Dr. McMillan commended General Ritland for a fine effort in the review of ISINGLASS.

General Ritland's conclusions:

- 1. ISINGLASS needed a total vulnerability study.
- 2. Vehicle and engineering schedules and costs were optimistic.
- 3. Supporting information for proper evaluation was unavailable.
- 4. Lack of performance requirements criteria limited evaluation.
- 5. Major and costly problems were evident in operational and support areas.

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2 July 1965 (Continued) Dr. McMillan considered the identification and recommendation of specific technology proposals related to hypersonic vehicles both timely and worthwhile.
(Tab 299)

10 July 1965

The President announced the nomination of Norman S. Paul as Under Secretary of the Air Force, succeeding Dr. Brockway McMillan, whose resignation the President accepted effective 30 September 1965. (Tab 300)

13 July 1965

In a memorandum for Mr. Vance and Admiral Raborn, Dr. McMillan provided a status report on NRO activities toward meeting satellite search and surveillance requirements in the 1967 and subsequent time period.

Dr. McMillan indicated that in-house NRO analyses, in conjunction with competitive contractor parametric study and technology investigations, had progressed to a point that permitted decisions to be made with a high confidence about the over-all system configuration. He stated, further, that the NRO was now in a position to proceed with an orderly program toward a first launch of a new system in the last quarter of FY 1967.

The memorandum described the major elements of the system.
(Tab 301)

19 July 1965

Admiral Raborn forwarded for Mr. Vance's consideration a new proposed draft of an agreement "to govern our relations on the NRO,"

Admiral Raborn outlined several basic principles which he felt should apply to any agreement:

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19 July 1965 (Continued)

- 1. The necessity for the existence of an Executive Committee consisting of the Deputy Secretary of Defense and the DCI to provide policy guidance and supervision and to allocate responsibilities under the program as a whole. Adopting a recommendation by Mr. McNamara, Admiral Raborn proposed that the President's Special Assistant for Science and Technology join such a committee when research and development matters were discussed.
- 2. The DCI, in order to be responsive to USIB requirements, should maintain the responsibility of providing specific program guidance to ensure optimum exploitation of satellite reconnaissance missions for intelligence purposes. Admiral Raborn suggested that the function and basic personnel incorporated in the NRO Satellite Operations Center be returned to CIA and renamed the Satellite Reconnaissance Programming Office.
- 3. The potentialities of all agencies of the Government for the design and invention of new concepts and techniques for the acquisition of intelligence through overhead reconnaissance should be encouraged and exploited to the maximum.
- 4. The engineering development, testing and production of new systems is normally the responsibility of contracting firms responsible for the design of these systems. Supervision of these contractors should logically be undertaken by the agency with the best facilities and established competence and experience in dealing with these contractors.

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19 July 1965 (Continued)

5. To a large extent, programs of the NRP are financed with confidential funds expended under the authority of the DCI and Public Law 110. Suitable provision should be made to safeguard the DCI's obligation for ensuring appropriate control and accounting for such funds.

(Tab 302)

19 July 1965

In a memorandum for Mr. McNamara, Admiral Raborn confirmed that he had instructed the appropriate committee of the USIB to examine the intelligence requirements for very high resolution photography of the character envisaged for acquisition by the MOL. (Tab 303)

20 July 1965

Admiral Raborn informed Mr. Vance that he had had an indication that the DNRO might already be planning to decide on a specific new satellite search/surveillance system.

Admiral Raborn recalled for Mr. Vance their agreement that any decision should await the technical advice of the Land Panel of PSAC and suggested that such an agreement conformed to Mr. Vance's understanding of how they planned to proceed. (Tab 304)

30 July 1965

Dr. Land's (Reconnaissance) Panel of the PSAC reviewed the P-E, EK and ITEK work on high resolution search systems.

Its conclusions:

"1. There is no technical basis for selecting for development at this time one system over any

30 July 1965 (Continued)

other, nor did the Panel see an urgency for making a selection now rather than, say, six months from now.

- 2. Each system has intrinsic merits which are attractive but, at the same time, each exhibits certain problem areas of concern to the Panel.
- 3. The efforts of all three contractors should be continued in order to better define the advantages and disadvantages of each system."

The Panel strongly recommended that all three contractors be funded for an additional three months and that their efforts be focused on the further definition of the unique and special features of systems design and on such analyses, tests and demonstrations which would further substantiate performance claims.

(Tab 305)

10 August 1965

Dr. Wheelon passed the following note to Dr. McMillan during a PSAC Panel meeting:

"Brock

I know that you would want us to clarify the last minute responsibility for holding the MOL baby pushed off on the intelligence community and DCI. Without clarification, your Aerospace presentation certainly tends to suggest that the problem of expending

he problem of expending to go from (G-3) to

(MOL) has been thoughtfully made by the community in the

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10 August 1965 (Continued)

affirmative. Surely you didn't mean to imply this----"

(Tab 306)

11 August 1965

Mr. Vance (Deputy Secretary of Defense) and Admiral Raborn (DCI) signed an "Agreement for Reorganization of the National Reconnaissance Program."

The NRP was defined as "a single program, national in character, to meet the intelligence needs of the Government under a strong national leadership, for the development, management, control and operation of all projects, both current and long range for the collection of intelligence and of mapping and geodetic information obtained through overflights (excluding peripheral reconnaissance operations)."

The Agreement stated that the NRP "shall be responsive directly and solely to the intelligence collection requirements and priorities established by the USIB" and that targeting requirements and priorities and desired frequency of coverage of both satellite and manned aircraft missions over denied areas "shall continue to be the responsibility of USIB, subject to the operational approval of the 303 Committee."

The Agreement charged responsibilities as follows:

- a. The Secretary of Defense will:
 - 1. Establish the NRO as a separate agency of the DOD and will have the ultimate responsibility for the management and

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11 August 1965 (Continued)

operation of the NRO and the NRP.

- 2. Choose a DNRO who will report to him and be responsive to his instructions.
- Concur in the choice of the Deputy DNRO who will report to the DNRO and be responsive to his instructions.
- 4. Review and have the final power to approve the NRP budget.
- 5. Sit with members of the Executive Committee, when necessary, to reach decisions on issues on which committee agreement could not be reached.
- b. The Director of Central Intelligence will:
 - 1. Establish the collection priorities and requirements for the targeting of NRP operations and the establishment of their frequency and coverage.
 - 2. Review the results obtained by the NRP and recommend, if appropriate, steps for improving such results.
 - 3. Sit as a member of the Executive Committee.
 - 4. Review and approve the NRP budget each year.
 - 5. Provide security policy guidance to maintain a uniform system in the whole NRP area.

The Agreement established an NRP Executive

11 August 1965 (Continued)

Committee, consisting of the Deputy Secretary of Defense, the DCI, and the Special Assistant to the President for Science and Technology to guide and participate in the formulation of the NRP through the DNRO. (The DNRO was named Ex Officio to the Executive Committee.)

The NRP Executive Committee would:

- 1. Recommend to the Secretary of Defense an appropriate level of effort for the NRP in response to reconnaissance requirements provided by USIB and in the light of technical capabilities and fiscal limitations.
- 2. Approve or modify the consolidated NRP and its budget.
- 3. Approve the allocation of responsibility and the corresponding funds for research and exploratory development for new systems. Funds were to be adequate to ensure the achievement and maintenance of a vigorous effort by both DOD and CIA.
- 4. Approve the allocation of development responsibilities and the corresponding funds for specific reconnaissance programs with a view to ensuring that the development, testing and production of new systems were accomplished with maximum efficiency by the component of the Government best equipped with facilities, experience and competence to undertake the assignment. The Executive Committee would also establish guidelines for collaboration between departments and for mutual support where appropriate. Assignment of responsibility for engineering development of sensor subsystems would be made to either CIA or DOD components.

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11 August 1965 (Continued)

- Assign operational responsibility for various types of manned overflight missions to CIA or DOD subject to the concurrence of the 303 Committee.
- 6. Periodically review the essential features of the major program elements of the NRP.

The Agreement stated that, subject to the direction and control of the Secretary of Defense and the guidance of the Executive Committee, the DNRO would:

- 1. Manage and execute the NRP.
- 2. Have the authority to initiate, approve, modify, redirect or terminate all research and development programs in the NRP.
- 3. Ensure, through appropriate recommendations for the assignment of research and development responsibilities and the allocation of funds, that the full potentialities of the agencies of the Government were realized for the invention, improvement and development of reconnaissance systems to meet USIB requirements.
- 4. Have authority to require that he be kept fully and completely informed by all agencies and departments of the Government of all programs and activities undertaken as part of the NRP.
- 5. Maintain and provide, to the Executive Committee, records of the status of all projects, programs and activities of the NRP in research, development, production and/or operational plans.

11 August 1965 (Continued)

- 6. Prepare a comprehensive budget for all aspects of the NRP.
- 7. Establish a fiscal control and accounting procedure to ensure that all funds expended in support of the NRP were fully accounted for and appropriately utilized by the agencies concerned. In particular, the budget would show separately the funds applied to research and exploratory design development, systems development, procurement, and operational activities. Funds expended or obligated under the authority of the DCI (Public Law 110) would be administered and accounted for by CIA.
- 8. Sit with the USIB for matters affecting the NRP.

The Agreement provided for a Deputy DNRO, to be appointed by the DCI with the concurrence of the Deputy Secretary of Defense, who would serve full time in a line position directly under the DNRO. The Deputy DNRO would act for and exercise powers of the DNRO during his absence or disability.

The NRO would be jointly staffed in such a way as to reflect the best talent available from the CIA, the three military departments and other Government agencies. The NRO Staff would report to the DNRO and Deputy DNRO and would maintain no allegiance to the originating agency or department.

The responsibility for existing programs of the NRP was to be allocated as indicated in an annex to the Agreement. These were:

1. CIA to develop improvements in CORONA optical sensor subsystems.

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- 2. CIA to develop optical sensor subsystems for the advanced general search system.
- 3. Air Force (SAFSP) to develop GAMBIT-3 optical sensor subsystem.
- 4. Air Force (SAFSP) to develop optical sensor subsystems (manned and unmanned) for the MOL program.

(Tab 307)

25 August 1965

Referring to an earlier memorandum to Mr.

Vance and "our mutual desire" to give early attention to a project along the lines of Admiral Raborn advised that the

Admiral Raborn stated that, in light of the new NRP Agreement, he felt it proper that the decision should be shared and solicited Mr. Vance's views on the matter before the contractors were notified of the selection decision.

Admiral Raborn proposed to draw from an unobligated remainder of Phase I monies to support a sustaining effort with the designated major contractors and other important related NRO APPROVED FOR RELEASE
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investigations which he felt would permit direction and continuity of the program pending a system procurement decision. (Tab 308)

30 August 1965

Dr. Flax, Acting DNRO, forwarded to Mr. Vance a proposed memorandum to Admiral Raborn regarding a stop-work order on all spacecraft and RV activities for the new search system.

2 September 1965

Mr. James Q. Reber was appointed Deputy Director, NRO. Mr. Reber moved to an office in the NRO Staff area, Room 4C1000, The Pentagon.

15 September 1965

Dr. McMillan informed Mr. Vance that his recommended NRO financial plan for FY 1966 and budget for FY 1967 contained no money explicitly labelled for ISINGLASS against a CIA request for in FY 1966 and in FY 1967.

Dr. McMillan indicated that he had initiated more critical comparative analyses and was convinced that these would show the concept to be worthless.

Dr. McMillan added that, if the analyses did not prove the concept worthless, "further, more penetrating, more time consuming, and more costly studies" could be undertaken with fully sufficient funds in the FY 1966 plan for even "an orderly initiation of the project."

(Tab 310)

23 September 1965

Mr. Vance concurred in the CIA proposal of 25 August to announce the contractor selection and to fund a continuing effort preparatory to program decision.

(Tab 316)

24 September 1965

In a note to Dr. McMillan, General Stewart advised that nothing along the lines of the stop-work memorandum proposed for Mr. Vance's signature on 30 August

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24 September 1965 (Continued)

1965 had been sent to Admiral Raborn.

General Stewart added his understanding that CIA had closed out AVCO; had GE working at a low level providing thermal and interface information to P-E; had STC doing over-all analyses (perhaps akin to the Aerospace role in SAFSP); and had P-E working on camera design.

The total expenditure at P-E, GE and STL was reported to be running about to per month.

(Tab 311)

27 September 1965

In a message for the DNRO, General Ledford reported:

"Due to the establishment of an Office of Special Projects within the DD/S&T, CIA along with a corresponding realignment of functions, I, as Director of Program B, NRO, or as Director of the Office of Special Activities, DD/S&T, CIA, no longer have authority or control over the satellite programs funded to Director, Program B, from your office. Therefore, I can no longer assume any responsibility for these programs."

(Tab 312)

30 September 1965

Upon retiring as DNRO, Dr. McMillan provided Mr. McNamara a report on the status of the NRO and NRP. The report highlighted significant events and changes that had taken place since February 1963 and included several personal judgments with respect to the program and the job of the DNRO.

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30 September 1965 (Continued)

Dr. McMillan described his tenure as beginning with the Gilpatric-McCone Agreement of 13 March 1963, defining the structure, authorities and responsibilities of the NRO. He pointed out that, within a few weeks of the signing of that Agreement, the DCI had challenged its terms and by July 1963 had openly repudiated portions of it. Dr. McMillan stated that at no time after that was there a satisfactory agreement as to the authorities or responsibilities of the DNRO, or as to the structure of the NRO; that there were many disagreements on substance and no satisfactory or agreed-upon means to settle them.

Of particular significance were Dr. McMillan's comments on the "Agreement for the Reorganization of the National Reconnaissance Program" signed on 11 August 1965 by Mr. Vance and Admiral Raborn to replace the Agreement of 13 March 1963. Dr. McMillan felt that the Agreement went less far in defining the structure of the NRO than did the 13 March 1963 Agreement. He considered it to be less definitive about the authorities of the DNRO, circumscribing those which it did define. While the new agreement was evidently intended to palliate some of the frictions which were charged to the prior agreement, Dr. McMillan felt it had weakened considerably the structure provided by the prior Agreement and had introduced a number of potential further sources of friction.

Three specific weaknesses of the Agreement were described by Dr. McMillan:

1. It was quite ambiguous, in fact, about the authorities of the Executive Committee.

30 September 1965 (Continued)

- 2. It almost completely omitted reference to responsibilities of the DNRO in connection with reconnaissance operations.
- 3. It imposed no obligation upon the CIA, or upon anyone other than the Secretary of Defense, to provide any focus of responsibilities for actions undertaken in the NRP.

In general, Dr. McMillan considered the Agreement to have a "trucial character." It scarcely touched on the substance of the NRP, but rather set up procedures for negotiating the kinds of dispute that had marked the recent past. Its emphasis on the procedural and on the dichotomy between CIA and DOD, its inordinate emphasis specifically on procedures for allocating responsibilities for research and development, and its failure to provide any basis for an operating organization left the way fully open for extensive further negotiation on all of the important substantive problems facing the DNRO. (Tab 313)

1 October 1965

The Deputy Secretary of Defense appointed Dr. Alexander H. Flax as Director, National Reconnaissance Office (DNRO), in addition to his duties as Assistant Secretary of the Air Force (R&D). (Tab 314)

1 October 1965

In a letter to Dr. Flax, Mr. Helms reported the consolidation of all CIA elements supporting the NRO into an organization headed by a Director of CIA Reconnaissance Programs, Mr. Huntington Sheldon, who would report to the DD/S&T. All CIA satellite activities (CORONA, FULCRUM, and other projects as required)

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1 October 1965 (Continued)

would be placed in an Office of Special Projects under Mr. John Crowley. Manned reconnaissance aircraft development and operations would be the responsibility of the Office of Special Activities under General Ledford, who would manage the U-2 and OXCART programs. The development of airborne electronic equipment would be accomplished by the Office of ELINT under Mr. George Miller, who would report to General Ledford. A Special Operations Division of the DD/P, CIA, would handle the NROffunded programs.

(Tab 315)

5 October 1965

Referring to Mr. Vance's memorandum of 23
September, Admiral Raborn indicated general agreement with Mr. Vance's identification of the key elements of importance for an Executive Committee decision about 1 December. Admiral Raborn considered the PSAC Reconnaissance Panel as the appropriate organization to advise concerning the technical feasibility of the satellite design and suggested that Dr. Hornig be asked to undertake such an examination.

Admiral Raborn suggested further that the PSAC Reconnaissance Panel be charged with assessing the problems associated with

Admiral Raborn agreed also with the desirability of a cost effectiveness study of and and suggested that he and Mr. Vance each select a qualified individual to form a two-man team to do the study.

- TOP SECRET

5 October 1965 (Continued)

Admiral Raborn iterated the CIA proposal that it continue to be responsible for the over-all

with the Air Force

providing the boosters and the launching support. Admiral Raborn considered this proposal to be compatible with the new NRO Agreement and asked that the proposal be considered in the review of recommendations from the DNRO concerning management of the program. (Tab 316)

6 October 1965

The first meeting of the "new" NRP Executive Committee was held.

Members present:

Mr. Vance

Admiral Raborn

Dr. Hornig

Dr. Flax (Ex Officio)

Mr. Reber (Ex Officio)

Others present:

Mr. Helms (DDCI)

Mr. Crowley (CIA)

Mr. Dirks (CIA)

Dr. Lauderdale (CIA)

Mr. Sheldon (CIA)

Colonel Carter (NRO Staff)

Dr. Steininger (PSAC)

On the new search system, the Executive Committee was presented a short review of the three camera systems under study for the satellite photographic search function and of their contract

6 October 1965 (Continued)

status. Mr. Dirks briefed the P-E proposal. Colonel Carter briefed on the EK and ITEK cameras. Dr. Flax described his plan to establish a technical task group to be composed of representatives of the CIA and SAFSP under chairmanship of the NRO to prepare a statement of system operational requirements, to recommend the selection of a system configuration, to formulate plans for contractor selection, and to recommend a program plan including schedule. Dr. Flax indicated that he planned also to establish a task group to define project management structure. The Executive Committee concurred in the actions indicated by Dr. Flax.

On Dr. Lauderdale reviewed a schematic presentation of the satellite system and the on-going work as authorized subsequent to the briefing of the Executive Committee in late September. Dr. Flax stated that he planned a technical evaluation by an independent panel on the system technical feasibility and the

noted that the NRP Agreement indicated that, as new programs come along, available DOD assets should be employed and that he felt there should be an opportunity for Air Force familiarization with the spacecraft in order that, if the Air Force were assigned that function under the management plan, no time would be lost in familiarization at a later date. Dr. Flax indicated that he believed all parties were in agreement that a cost-effectiveness study should be made. Accordingly, he proposed to appoint a small task force, acceptable to CIA, to complete such a study by 15 November 1965. Dr.

6 October 1965 (Continued)

Flax also stated that he planned to establish a task group to consider and recommend management arrangements for The Executive Committee concurred in the actions proposed by Dr. Flax.

(Tab 317)

6 October 1965

Dr. Flax assured Mr. Helms that the new CIA organizational arrangements for support of the NRP would be appropriately reflected in the near future in NRO documentation implementing the new NRP Agreement.

Dr. Flax indicated that he would be pleased to work directly with Mr. Sheldon in his new capacity and agreed that formal programs approvals and instructions, budget matters, as well as any request or direction which had a significant effect on the total or relative allocation of CIA personnel and resources to the NRP, should go through this single authoritative point of contact. At the same time, Dr. Flax pointed out, the need for a close day-to-day relationship between the various working levels of the CIA, DOD and the NRO Staff must be recognized.

Dr. Flax stated his intent to maintain over-all project directors for systems in the NRP, and to identify subsystem directors when the latter were part of an organization other than the one charged with over-all project management. Where systems or major subsystems were assigned to the CIA, the system or major subsystem director would have free and direct access to Dr. Flax and the NRO Staff, and vice versa. Dr. Flax stated that specific arrangements would be made for those cases wherein the CIA served in a support relationship to an

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6 October 1965 (Continued)

NRP project whose director was not located in CIA.

Dr. Flax assured every effort would be made to develop the most effective and harmonious arrangements possible.
(Tab 318)

15 October 1965

DNRO Action Memorandum No. 1 directed the development of a project management plan assigning responsibilities and authorities and defining management channels for the new photographic search and surveillance system.

A task group, chaired by General Stewart (Director, NRO Staff) was to:

- 1. Recommend alternative project management arrangements.
- 2. Prepare subsequent to DNRO decision/ guidance on the first task, a suitable final project management directive.

(Tab 319)

15 October 1965

DNRO Action Memorandum No. 2 directed the conduct of those reviews and evaluations essential to a decision to proceed with the development of a new photographic satellite search and surveillance system.

A technical task group, chaired by Colonel David L. Carter (MRO Staff) was to:

 Based on applicable USIB requirements, prepare a statement of system operational requirements for a new satellite photo**DECLASSIFIED ON: 1 OCTOBER 2012**

15 October 1965 (Continued)

graphic search and surveillance system which defined the essential technical and operational criteria which must be met by the system.

- 2. Recommend a basic system configuration.
- 3. Recommend the criteria to be used for subsystem design and source selection.
- 4. Formulate a preliminary master project plan (including schedules).
- 5. Prepare necessary project directives.

(Tab 320)

21 October 1965

General Martin provided to Dr. Flax his general comments on the over-all subject of CORONA management.

Key comments:

- 1. There was no single person or element who had effective responsibility for over-all system engineering, acquisition, integration and operations. Solution of this problem would require not only the designation of a responsible person but also the delegation of the authority necessary to exercise this responsibility.
- If the basic principle that some one will have both responsibility and authority for this task over CIA and DOD elements and personnel could not be reached, then General Martin recommended that no CORONA management plan be attempted.
- 3. In addition to the designation of responsibility,

21 October 1965 (Continued)

the necessary authority must include authority to determine and implement, by direction to the CIA and DOD elements involved, all steps necessary to insure that the several aspects of the over-all system were integrated into an effective system in spite of the split management involved. Such authority, General Martin felt, must include complete access at any time to all aspects of the entire system and all contractors and installations involved for information upon which to base the over-all system engineering and subsequent direction.

- 4. With regard to the two unsigned contracts with LMSC, General Martin believed the on-going intent should govern the resolution of the existing pre-contractual exposure.
- 5. The collocation of CIA personnel with SAFSP was a good idea only if the CIA would collocate the people actually responsible for their work on CORONA and would delegate the responsibility and authority to them. Otherwise, General Martin feared the arrangement to become an additional echelon through which one must go, but which was unable to actually assist in the work.
- 6. General Martin emphasized that the lack of harmony in CORONA management had resulted entirely from previous attempts to deal with and make arrangements concerning specific procedures when there was fundamental disagreement on basic underlying principles.

(Tab 321)

26 October 1965

DNRO Action Memorandum No. 3 directed the development of a project management plan assign-

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26 October 1965 (Continued)

ing responsibilities and authorities and defining management channels for the system.

A task group chaired by General Stewart (Director, NRO Staff) was to:

- 1. Recommend alternative project management arrangements.
- 2. Prepare, subsequent to DNRO guidance on first task, a suitable final project management directive.

(Tab 322)

26 October 1965

DNRO Action Memorandum No. 4 directed a review of the feasibility of the proposal as a and an assessment of the expected performance versus technical risk with special emphasis on the

An independent task group, chaired by Dr. James Fletcher (University of Utah) was to:

1. Assess proposed solutions to the problems associated with

which might be encountered.

2. Evaluate the such as etc.

of systems

3. Furnish technical information and possible alternatives to the Cost-Effectiveness Task

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26 October 1965 (Continued)

Group on

4. Review the spacecraft or satellite design if, and insofar as, relevant to

(Tab 323)

26 October 1965

DNRO Action Memorandum No. 5 directed the preparation of a cost-effectiveness study on the system.

The task group, chaired by Mr. James Q. Reber (DDNRO) was to:

- 1. Make a comparison of the tradeoffs of all proposed missions with existing or planned systems which have parallel capabilities, including cost comparisons.
- 2. Weigh the effect of the

(Tab 324)

4 November 1965

Dr. Flax submitted the FY 1967 NRP Budget to the DCI for review preparatory to discussion by the Executive Committee.

Dr. Flax stated his future intent that an earlier opportunity for review and discussion would apply. This opportunity he felt would be prior to submission of the DNRO recommended budget to the Secretary of Defense. (Tab 325)

4 November 1965

CIA commented upon the Task Group Report on alternative management arrangements for the

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4 November 1965 (Continued)

new search and surveillance system.

Key comments:

- 1. There existed two choices:
 - a. how to divide the responsibilities for development of the payload
 - b. the way in which the Air Force and CIA would collaborate in executing assigned responsibilities for the program.
- If it were decided that a single project director would manage the new project then a decision would emerge; namely, whether the CIA or the Air Force should have primary responsibility.
- 3. The most important factor to be considered in carrying forth programs under the "new" NRP was the desire of both the DOD and CIA to insure that the full and creative participation of each organization was totally exercised as responsible contributors.
- 4. CIA agreed with the Report that it was undesirable to have the new system managed within the NRO Staff. CIA also concurred with the rejection of an integrated system project director, which narrowed the choice between a single system project director or a split responsibility a la CORONA. CIA believed there was sufficient analogy between CORONA and the new system which suggested that the new system could be managed successfully on a joint basis. Defined roles and responsibilities which heretofore had been lacking in CORONA would materially add to comparable success in the new search and surveillance system.

4 November 1965 (Continued)

- 5. CIA argued that, if a single organization were chosen to have primary responsibility for the over-all management of the new system, the case for assigning that responsibility to CIA was compelling. The history of the CIA study program dating back to February 1964 was related in support of this argument.
- 6. CIA added its comments on three specific items concerning the assignment of responsibilities:
 - a. System engineering and system integration—CIA considered it essential that specific constraints be placed upon the over-all system engineers and over-all system integrating contractor. CIA felt it important to clearly delimit the degree to which the system engineering and integration activities impinged upon the responsibilities assigned to other Government agencies.
 - b. Recovery vehicle module—in light of its considerable experience with CORONA, CIA was strongly persuaded to endorse a "unanimous recommendation" that it be responsible for sensor module which, according to the Task Group, included the recovery vehicle module. CIA did agree that, if the recovery vehicles were to be employed in other programs managed primarily by the Air Force, then a good case could be made for Air Force procurement for this program.
 - c. Orbit control module contractor--CIA did not consider of critical importance the Task Group recommendation that the orbital control module contractor also build the sensor model structure and perform as the system integration contractor. CIA surmised that, when the over-all hardware

4 November 1965 (Continued)

flow was examined in detail, it might well be more economical and expedient to assign the systems integration function to the booster contractor.

While not pleading a particular arrangement, CIA recommended that these determinations be left, with DNRO concurrence, to program management. (Tab 326)

4 November 1965

General Martin commented upon the Task Group report on alternative management arrangements for the new search and surveillance system.

Key comments:

- 1. In consideration of management arrangements for any projects of the NRP, the over-all objective should be, unequivocally, the strongest, most effective management structure possible. General Martin did not believe that any avoidable degradation of this objective could be accepted responsibly, in the light of the national importance of the projects, nor that the basis of any assignment could be, instead, as had been proposed so often in past discussion, one of maximum utilization of resources, or the equitable distribution of projects or tasks, or the preservation of separate organizational identify and/or prerogatives of the participating agencies.
- 2. Overall project responsibility and corresponding authority, including responsibility and authority for over-all system engineering and system integration, must be delegated to a single person who is organizationally and geographically located and appropriately chartered with respect to the resources involved, such that he can effectively control all such resources as necessary to carry out

4 November 1965 (Continued)

the over-all responsibility.

- 3. No management responsibility or authority should be retained by the parent agency as such (e.g. the Air Force has no management responsibility or authority over NRO projects assigned to SAFSP).
- 4. The person having over-all responsibility and any personnel he designates must have unrestricted access to all contractors and facilities participating in the project, all information concerning all aspects of the project. He must have authority to determine need-to-know, for these personnel, for any information concerning the project, and authority to grant any clearances necessary to personnel he determines to meet published BYEMAN clearability requirements.
- 5. For projects where divided management is directed, the person having the over-all responsibility must be delegated corresponding authority over all participants in both agencies, established by directives in each agency, to all personnel concerned.

General Martin added several practical factors, vis-a-vis his CORONA and GAMBIT experiences, which he considered pertinent to the question of management of the new system.

General Martin considered that the range of the Task Group's excursion into management approaches, some of which were excluded by the NRP Agreement, and the inconsistencies between the Task Group stated conclusions and supporting rationale was such as to render the fact of Task Group agreement, and its recommendations, per se, of questionable value.

4 November 1965 (Continued)

He summarized, in his judgment, the relative strength and weakness of the alternate plans considered by the Task Group.
(Tab 327)

5 November 1965

General Stewart summarized NRO Staff views and reactions and described his personal views on the Task Group Report on alternative management arrangements for the new search and surveillance system.

NRO Staff views:

- 1. The casual discarding of the fully integrated SPO because "... the Agreement reflects an obvious desire to maintain organizational identity and responsibility..." was "deplorable" and "distressing." This approach to management was the only valid one for a complex system development, and all alternatives proposed, were, in effect, committee-management with all inherent weaknesses.
- 2. There must be a single, authoritative, responsive system project director.
- 3. There should be established a fully-integrated SPO (which collocated all necessary CIA-DOD engineering, procurement and security people in one office, and empowered these people to speak authoritatively for their "sponsors").
- 4. Although the overwhelming management capability to do the job is in SAFSP, total system assignment to CIA would be vastly more effective than the "idealistic but impractical social venture" proposed in the Task Group report.

5 November 1965 (Continued)

General Stewart's views:

- 1. Strongly desire the fully integrated SPO approach, but recommend against its selection in view of the apparent intent and specifics of the NRP Agreement.
- 2. Recommend selection of the so-called segregated SPO approach, with over-all system responsibility (and SPD) assigned to SAFSP.
- 3. SAFSP is the only logical choice for over-all system responsibility and for providing the SPD on the basis of personnel skills and experience, and personnel resources available.
- 4. No firm convictions on the matter of collocation; no question about the necessity for collocation of a "line" DSPD.
- 5. CIA-OSP should be charged with the sensor module. This would enhance the Government's ability to hold the camera contractor responsible for key factors associated with proper camera functioning.
- 6. Recommend against inclusion of camera subsystem and a combined sensor/RV module in the sensor source selection.
- 7. Recommendation that the OCV contractor also build the sensor module shell and RV module and be the system integrator is most significant.
- 8. An early selection of the system engineer (regardless of management approach) is vital to the work of the three source selection task groups.

(Tab 328)

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9 November 1965

In a letter to Mr. McNamara, Admiral Raborn stated that the failure of the KH-7 vehicle recently launched, the fourth in the past five missions, underscored the fact that a critical intelligence gap now existed in high resolution coverage of the Soviet Union and China.

Admiral Raborn related his earlier impression that reconnaissance assets could be made available to fill the growing intelligence gaps, but added that further inquiry left him pessimistic.

Admiral Raborn closed by stating "if we must live with this dilemma, it would appear to me all the more important to move forward expeditiously to develop the follow-on search system which has the promise of both high resolution and broad swath width."
(Tab 329)

9 November 1965

In a memorandum for Mr. Sheldon, Dr. Wheelon advised that the Air Force, in the person of Colonel Lew Allen, had approached offering a sole source contract in the amount of approximately for the next few months to adapt designs to the MOL mission.

Indications were that Colonel Allen had similarly approached Lockheed.

Dr. Wheelon stated that this same issue had arisen "during the McMillan regime" and that he had raised the subject with Dr. McMillan, who seemed unwilling to discuss it with the CIA and preferred to keep his dialogue directly with his contractors. Dr. Wheelon added that the impropriety of this approach was discussed several times with General Carter and Mr. McCone, but had never been brought to bear.

9 November 1965 (Continued)

Dr. Wheelon had advised to call Colonel Allen to advise of their interest in participating in MOL and to ask Allen to proceed through channels to the CIA for release of appropriate technology.

Dr. Wheelon alerted Mr. Sheldon to such an inquiry stating that it should be dealt with on its merits when it appeared. Wheelon felt that if no such request were received, it probably represented "an interesting indication of the current implementation process."

(Tab 330)

9 November 1965.

Dr. Brown delegated full directive authority over all SAFSS and SAFSP activities to Dr. Flax as Director, National Reconnaissance Office.

Dr. Flax was also delegated the authority to act for Dr. Brown on all Air Force matters--in-cluding personnel, materiel, and fiscal resources--associated with the NRO and/or within the purview of the NRP, including the MOL reconnaissance payloads.

(Tab 331)

13 November 1965

Referring to Admiral Raborn's 9 November letter to Mr. McNamara, Dr. Flax advised Mr. Vance concerning the possible acceleration of future GAMBIT launches.

Dr. Flax strongly recommended against a slight acceleration of the December and January launches at the cost of reducing desirable test and qualification.

Dr. Flax proposed that the NRO embark on a plan for GAMBIT in 1966 which would:

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13 November 1965 (Continued)

- 1. Insure that at least 15 systems were available for launch.
- 2. Schedule seven systems in each six month period, with the seventh optional depending on the results of its six predecessors.
- 3. Not delay scheduled launches for any reason other than technical difficulties encountered in countdown.
- 4. In case of a mission failure, launch the next vehicle as soon as possible.

Dr. Flax attached a proposed reply to Admiral Raborn for Mr. McNamara's signature. (Tab 332)

16 November 1965

Admiral Raborn commented upon the DNROrecommended budget for FY 1967, submitted to him on 4 November by Dr. Flax.

Admiral Raborn generally accepted the level of funds which Dr. Flax had proposed. He expressed concern, however, that adequate funds may not have been provided to insure that new concepts were "appropriately and energetically pursued."

Key comments:

- He accepted the CORONA line item, but cautioned that a deferred decision on the follow-on search system might require purchase of additional CORONAs.
- 2. He felt the recommended budget for the new general search satellite was adequate.

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16 November 1965 (Continued)

- 3. He was concerned that there was no explicit provision made for the in the event the Executive Committee decided to move forward with the program.
- 4. He found no provision for developmental studies and/or work on such projects as the projects are projects as the projects as the projects are projects as the projects as t
- 5. He generally agreed with the recommendations for aircraft and support programs except for the fact that no funds were provided for either ISINGLASS or photo balloons.

On the non-CIA line items Admiral Raborn commented as follows:

- 1. He was concerned over the recent run of GAMBIT technical failures and judged GAMBIT-3 to be a more difficult technical challenge. He proposed a thorough review before proceeding with an expenditure which he described as representing almost one-quarter of the total NRP budget.
- 2. He suggested that the component of the line item allocated against the not be released until the whole question of satellite effectiveness had been clarified and reviewed in the Executive Committee.
- 3. In the absence of a USIB requirement for an advanced cartographic system, he requested that such funds be reprogrammed to a high priority program.
- 4. He noted that the SCF line was large and should therefore be carefully examined by the Executive Committee.

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16 November 1965 (Continued)

- 5. He noted that Applied Research was presumably a fund for supporting research, development and engineering on new satellite reconnaissance systems, and suggested that the be divided evenly between CIA and the Air Force.
- 6. He suggested that the Advanced Development item for the be placed squarely against the need of for FY 1967.

(Tab 333)

16 November 1965

The NRP Executive Committee met to review the NRP budget for FY 1967.

reviewed the budget, calling attention to problem areas.

The following were resolved:

- 1. U-2 buy. It was agreed to remove the which had been included in the NRP budget for the possible purchase of new U-2s in FY 1967.
- 2. It was agreed to reduce the NRP figure of as recommended by Dr. Foster.
- 3. ISINGLASS. Mr. Vance felt that a much more modest scale of effort in the analytical field was in order. He further believed that the money for this work could come from general R&D funds. It was agreed that Mr. Vance's approach should be followed, although specific funds for FY 1966 and 1967 were not agreed to.

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16 November 1965 (Continued)

The NRO, with the CIA, was to prepare for the ExCom an examination of whether the ISINGLASS concept had a place in the NRP.

- 4. Vulnerability. The NRO would initiate discussions with CIA in regard to joint preparation of threat models and associated analyses.
- 5. Advanced Cartographic Satellite System. It was agreed that the constraint originally included should be removed from the NRP budget.
- 6. indicated that BOB might wish to provide no additional money for this program. A DOD position was established.

The following were discussed inconclusively and continued to the next meeting:

OXCART

Countermeasures General R&D

Other than principals and ex officio members, the following attended:

Dr. Foster (DDR&E)
(NRO Comptroller)
General Stewart (Director, NRO Staff)
Mr. Sheldon (CIA)
Mr. Bross (CIA)
CIA)

(Tab 334)

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23 November 1965

The NRP Executive Committee met to continue its review of the budget. It dealt with the items remaining for consideration, taking into account a 20 November BOB memorandum to Mr. Vance.

The Executive Committee heard further comments on OXCART from Dr. Foster, who proposed that four of the OXCART aircraft could be put on blocks pending an actual need. explained the savings. The Executive Committee approved the NRP budget proposal of the Committee approved for OXCART.

On Mr. Sheldon reported the impact on the program of the DDR&E/BOB proposal for a tentative in FY 1966 and in FY 1967. The Executive Committee approved the proposal to reserve from 1966 appropriations and to recommend in FY 1967 for this purpose.

Dr. Foster emphasized the importance of pushing ahead on the countermeasures problem in light of its critical importance to the survivability of the aircraft in which considerable funds had been invested. The Executive Committee approved a figure of for countermeasures to be allocated on the basis of specific justifications.

Dr. Hornig reported on percentages of total funds employed by NASA and DOD in general research and development. The Executive Committee approved for applied research and agreed, in so approving, that these funds were not being allocated in specific amounts by agency but rather would be allocated after specific R&D projects were submitted by the agencies and approved by the DNRO.

23 November 1965 (Continued)

General Stewart briefed the Executive Committee on the present and near-future schedule of CORONA and GAMBIT capabilities in relation to anticipated operational dates for the new search system and GAMBIT-3. General Stewart proposed that the six additional CORONAs be considered for delivery in late FY 1968 and launching in FY 1969; and a buy of six additional GAMBITs beyond those budgeted for delivery in the spring and summer of 1967.

The Executive Committee discussed and viewed that this capability be retained.

Considerable discussion ensued regarding the BOB proposal to apply of a revised for new general search in FY 1966 against FY 1967 new funds.

quested that the not be frozen for new general search and that if less than the were required for FY 1966, the difference be available for additional GAMBIT and CORONA requirements, since any slowdown in the new general search development would be reflected in the need for additional CORONA and GAMBIT vehicles. The Committee agreed.

Other than the members and ex officio members, the meeting was attended by:

Dr. Foster (DDR&E)
General Stewart (NRO Staff)
(NRO Comptroller)

Mr. Sheldon (CIA)

Mr. Bross (CIA)

Mr. Crowley (C#A)

(CIA)

Dr. Steininger (PSAC)

Mr. Thomas (BOB)

(Tab 335)

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7 December 1965

DNRO Action Memorandum No. 6 directed the activity of a task group to review the status of effort on the photographic sensor subsystem for a new search/surveillance system.

The task group, chaired by Colonel David L. Carter (NRO Staff), was to provide information to assist the DNRO in determining actions at the camera contractors both before and during source selection. The present and projected status of the effort on each of the designs of a photographic sensor subsystem under consideration for a new satellite search and surveillance system would be determined. (Tab 336)

23 December 1965

To insure compliance with the policy that all CORONA technical directives be approved by the DNRO or his Deputy, Dr. Flax requested a joint SAFSP/CIA presentation concerning the proposed recovery vehicle wiring, heat shield, and battery modifications and any proposed orbital tests of these modifications. No hardware was to be committed to flight prior to the presentation. (Tab 337)

8 February 1966

Referring to an SAFSP request for status information on the clearances of several Aerospace personnel, CIA advised the DNRO that it would continue to withhold clearances for any personnel whose purpose would be to work in the CORONA payload area outside CIA's direction until advised by the DNRO to follow other than the "traditional" responsibilities for CORONA agreed to by Mr. Vance and General Carter (as DDCI) in late 1964. (Tab 338)

1 March 1966

In a memorandum for Mr. Sheldon, Mr. Reber addressed the relationship of the Eastman Kodak Company to the NRP. Mr. Reber suggested a visit by Mr. Sheldon and the DCI to Eastman Kodak. The memorandum offered an explanation of the factors which had contributed over the years to the apparent "strained relations." Included were the following:

- a. The understandable preoccupation of Mr. Bissell with the U-2 aircraft as opposed to film and film processing.
- b. The CIA's unfavorable attitude toward the GAMBIT program.
- c. A series of unfortunate circumstances surrounding the New Search System (specifically the affects of certain personalities).
- d. The difficulties experienced by EKC in getting decisions from the CIA in those cases in which it was involved.
- e. The lack of understanding by components of the CIA of certain basic principles which EKC felt were critical to its relations with the Government.

(Tab 339)

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1 April 1966

Dr. Flax forwarded copies of his package proposal on the new general search and surveillance satellite system to Mr. Sheldon, General Martin and Dr. Steininger for their information and advance perusal.

Dr. Flax's proposed memorandum reviewed the activity of the NRO Staff, CIA and SAFSP in the careful evaluation of all aspects of the proposed new system. Specifically, it discussed one of the more difficult problems -- to devise a technique which would permit the equitable competition of three camera designs (designed against varied technical and operational requirements) all of which were at different stages of analysis, design and demonstration of critical technology.

Dr. Flax described further the general system configuration, on which the NRP participants had agreed and which he was recommending for adoption.

Dr. Flax was also recommending a management approach which would make the CIA-OSP responsible for the entire sensor sub-system and SAFSP responsible for the remaining system elements. The Director, SAFSP would be designated as the System Project Director, responsible for over-all system engineering, system integration and integrated project management. Dr. Flax had concluded that this assignment of responsibilities -- generally in accordance with the normal assignments described in the August 1965 NRP Agreement would best meet the conditions imposed by the specific requirements of the Agreement and the requirement for sound and effective system project management.

Dr. Flax intended to send the package to the NRP Executive Committee during the week of April 4 and solicited the advice of the addressees on any

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1 April 1966 (Continued)

factors which they felt might impact on the package proposal.
(Tab 339A)

5 April 1966

General Martin commented on Dr. Flax's proposed memorandum for the NRP Executive Committee on the new general search and surveillance satellite system. Key comments:

- 1. Regardless of the specific assignment of responsibilities in the split management structure, full collocation of the working elements of the project offices of both organizations will result in maximum coordination and best possible working relationships and cooperation.
- 2. Liaison officers are highly undesirable at any location.
- 3. Contemplated schedules leave no alternative but to employ letter contracts -- unquestionably accentuating the problems inherent in the split management concept.
- 4. The role of the system program director in the over-all SE/TD functions imposes restrictions which appear most unrealistic and unnecessary.
- 5. Language describing system program director authority during an operational mission is inappropriately restrictive.

(Tab 339B)

7 April 1966

Mr. Sheldon, in response to Dr. Flax's proposed memorandum for the Executive Committee on the new general search and surveillance satellite system, stated that the proposed plan for management and organizational responsibilities "raises a problem of

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7 April 1966 (Continued)

such magnitude that it must be resolved before other aspects of the program can be meaningfully reviewed."

Mr. Sheldon cited specifically his concern over "the problem of interface between the responsibilities assigned to SAFSP (Air Force) and CIA."

Mr. Sheldon pointed out that with the CIA's in-house technical personnel and its relationships with contractors built up over the years, "the CIA possesses a capability of program management which, in all modesty, is at least commensurate with that of SAFSP.... Therefore, I cannot accept your statement that SAFSP is the only NRP component of the NRO possessing the personnel, facilities, operational resources, experience, and technical competence to be designated as SPD for the new general search and surveillance system."

(Tab 339C)

11 April 1966

Dr. Flax prepared two papers for consideration by the DOD/NASA Manned Space Flight Policy Committee (MSFPC):

- 1. DOD Areas of Concern Relative to NASA Satellite Sensor Programs
- 2. Guidelines for DOD/NASA Committee on Reconnaissance Sensors

The two papers presented criteria and an organizational mechanism for identifying NASA activities of concern to the DOD because of their potential impact on the NRP.

Dr. Flax cautioned the MSFPC that the papers did not contain a formula for resolving the basic problems -those that stemmed from the lack of a policy or rationale agreed to and followed by all government agencies with

BANDLE VIA BYEMAN

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11 April 1966 (Continued)

regard to programs involving the use of high-quality reconnaissance sensors.
(Tab 340)

22 April 1966

In a memorandum for the Executive Committee, Dr. Flax discussed the CORONA management problem and recommended several actions for its resolution.

Dr. Flax considered the several specific problems associated with CORONA management to have stemmed from the lack of clearly established and/or agreed-to management responsibilities and relationships. He viewed the most serious to be:

- 1. Other than the DNRO, there was no single person or NRP participant accepted by all concerned as clearly responsible for over-all system engineering, definition and specifications, integration, a master project plan, over-all system facilities, integrated funding requirements and on-orbit operations.
- 2. Since mid-1964, LMSC had worked without benefit of signed contracts in two areas: over-all systems integration and the qualification, test and integration of the ISIC.
- 3. The final phase of the CORONA Improvement Program had been extended because authorization had not been given to contract for all the elements.

Dr. Flax recommended:

- 1. The issuance of suitable management directives to SAFSP and CIA.
- 2. Directing CIA to sign the ISIC integration contract with LMSC from inception through completion (so that LMSC could bill the Government for services already rendered).

22 April 1966 (Continued)

- 3. Directing CIA to negotiate a new contract with LMSC for qualification testing and integration of the DISIC.
- 4. Directing CIA to amend appropriate contracts to enable Aerospace access to data and information.
- 5. Directing SAFSP to sign the system integration contract with LMSC from July 1964 through current date (so that LMSC could bill for services already rendered).
- 6. Directing SAFSP to negotiate a new contract with LMSC for system integration reflecting the new assignments of responsibility.
- 7. Authorizing CIA to negotiate new contracts for work on the remaining elements of the CORONA Improvement Program.

(Tab 341)

22 April 1966

Dr. Flax submitted for Executive Committee consideration a package proposal for the new general search and surveillance satellite system. The package included:

- a System Operational Requirement setting forth the desired and/or minimum technical and operational criteria for the entire system;
- 2. a Request for Proposal for the sensor subsystem to be issued to the two competing contractors as the basis for their proposals;
- a management plan for the development, production, and operation of the new system, including the assignment of responsibilities to CIA-OSP and SAFSP;

22 April 1966 (Continued)

- 4. a series of five papers which explained the rationale for the most significant portions of the SOR, RFP and management plan and which briefed requirements, system life considerations, recovery vehicles, the technique for measuring system effectiveness, and system management;
- 5. a schedule of planned NRO actions for the near term.

Specifically, Dr. Flax requested Executive Committee approval for the proposed management plan and for the system concepts and fundamental principles set forth in the SOR and RFP.

Dr. Flax noted the codeword designator HELIX which he had proposed for the new system, supplanting the old designators FULCRUM (in CIA) and S-2 (in SAFSP).

(Tab 342)

25 April 1966

In a separate memorandum to Mr. Vance, Dr. Flax

- advised of the reactions he had received on his package proposal to the Executive Committee for the new general search and surveillance system
- 2. discussed the issues likely to be brought up at the Executive Committee meeting.

(Tab 343)

26 April 1966

Dr. Flax recommended to the Executive Committee a specific plan for proceeding with the program.

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Dr. Flax explained that the criteria used in arriving at the recommended program were to direct the program toward the highest priority

Dr. Flax proposed that

- the System Project Director for designated within the CIA;
- all elements of the on-orbit vehicle, as well as over-all systems engineering, be assigned to CIA-OSP;
- 3. responsibility for booster procurement and launch operations, qualification, and operation of launch facilities, and on-pad system integration be assigned to SAFSP.

Dr. Flax assessed the program at (Tab 344)

26 April 1966

The NRP Executive Committee met to consider three items:

- 1. New Search and Surveillance Satellite System
- 2. CORONA Management
- 3. Status

Mr. Vance proposed at the outset that, after such discussion and briefing as was necessary, Admiral Raborn, Dr. Hornig and he meet in executive session to make the required decisions. Admiral Raborn and Dr. Hornig agreed.

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26 April 1966 (Continued)

On Item 1, Dr. Flax referred to his 22 April package proposal. Admiral Raborn stated he had only one major recommendation to make on the proposed management for the system -- that the subsystem definition be modified to assign to CIA the responsibility for the structure which enclosed the sensor subsystem, as well as the responsibility for development, production and integration of the stellar index camera.

Prior to closing discussion on Item 1, Mr. Sheldon suggested that there be further discussion of possible difficulties which CIA felt might result from the proposed procedure for handling security in this program, namely, that both the SAFSP and CIA project offices were authorized to grant HEXAGON clearances and each was bound to honor need-to-know determinations on the part of the other. (HEXAGON was the newly proposed BYEMAN codeword for the program. The original selection -- HELIX -- was found to have been assigned in the past to another intelligence effort) Mr. Sheldon and Dr. Flax were asked to pursue further the question of security clearances.

Subsequent to the meeting of the three principals in executive session, Mr. Vance advised Dr. Flax that the Executive Committee had approved his HEXAGON program proposal as submitted.

On Item 2, the Executive Committee approved Dr. Flax's proposed (22 April 1966) CORONA management arrangement and assignments of system responsibilities with the understanding that the assignment of the DISIC procurement responsibility to the SAFSP would carry with it the instruction that there be no change in the specifications without the concurrence of the CIA Payload Subassembly Project Office.

26 April 1966 (Continued)

On Item 3, Dr. Flax distributed his draft memorandum (see Tab 344) for Executive Committee study and action. He explained that his proposal would limit (at least, initially) the project to a primary objective, namely.

and thus would increase
the probability of success, decrease the probability
of schedule slippage and reduce program cost. He
explained further that he had provisionally included
the but recommended an
early joint CIA-NSA study on the

Pending consideration of the proposal, the Executive Committee agreed that a revised project plan should be prepared and costed in line with Dr. Flax'x recommendation. The Executive Committee also agreed to the recommended CIA-NSA study and suggested it be completed within six to eight weeks.

As an additional item, Admiral Raborn expressed his feeling that it was very important to the success of the NRP that CIA people be assigned to SAFSP and to the NRO Staff. Mr. Vance concurred in his views.

Other than the principals and ex officio members, the following were in attendance:

(Tab 345)

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26 April 1966

Admiral Raborn departed the CIA. Mr. Richard McG. Helms was appointed Director of Central Intelligence. Vice Admiral Rufus Taylor was appointed Deputy Director of Central Intelligence.

22 June 1966

In a memorandum for Mr. Sheldon and General Martin, Dr. Flax set forth the CORONA management arrangements and assignments of system responsibilities which were approved by the NRP Executive Committee on 26 April 1966. Key arrangements and assignments were:

- 1. The Director, SAFSP, was designated as the CORONA System Project Director (SPD). He would establish a CORONA System Project Office (SPO).
- 2. The Director of Reconnaissance, CIA, would direct and supervise the development and production of the CORONA Payload Sub-Assembly, reporting directly to the DNRO. He would establish a CORONA Payload Sub-Assembly Project Office (PSAPO) and designate a Director thereof.
- 3. The Director, SAFSP, as SPD would be responsible for: over-all system engineering and system integration; over-all system master planning, programming and budgeting; assembly and checkout of the system at the launch pad; launch and mission operations; capsule recovery; and delivery of film to DNRO-designated processing facilities.
- The Director, PSAPO, would be responsible through the Director of Reconnaissance, CIA, to the DNRO for the total payload sub-assembly development, production, assembly and test; operation of the LMSC-A/P Facility; for adherence to master system specifications, interface specifications and master project plans; and

22 June 1966 (Continued)

the provision of software support to the NRO SOC before, during and after missions.

- 5. The SPD would operate a CORONA Operations
 Command Post at the STC, Sunnyvale. The PSAPO
 would station appropriate personnel and contractor
 representatives there and at the LMSC A/P Facility.
 The SOC would deal principally with the CORONA
 Command Post and the LMSC A/P Facility, as
 appropriate.
- 6. The SPD would be the final field authority during a mission operation from launch through recovery.
- 7. The SPD would utilize Aerospace in a general systems engineering role.

(Tab 346)

17 August 1966

The NRP Executive Committee met to review the FY 1967 NRO Financial Program.

Key actions:

- 1. U-2R Program: A buy of eight was authorized with the understanding that in approximately six months a decision and fund authorization by the Executive Committee would be required for any additional buy.
- 2. FY 1967 funds were deferred. The DCI was to consult the USIB on whether the program should be continued.
- 3. ISINGLASS: The DNRO would recommend to the Executive Committee a course of action on this program.

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- The Executive
 Committee agreed that the NRO should proceed
 with development and approved the program as
 presented.
- 5. Readout: The Executive Committee concurred in the DNRO's decision to carry the CBS and BTL teams until January, 1967 unless an earlier decision were made to terminate the effort or undertake system development.
- 6. GAMBIT-CUBED: The Executive Committee agreed with the addition of a second recovery vehicle as well as other changes toward increased on-orbit lifetime.
- 7. The Executive Committee authorized
 CIA to
 DNRO had concluded that

 A final DNRO recommendation for full program approval was awaiting completion of costing studies on various program options.

The FY 1967 NRO Financial Program was approved as modified by the above actions.

GAMBIT and GAMBIT-CUBED launchings for FY 1967 were discussed.

Mr. Helms raised the question of the continuation of TAGBOARD. Dr. Flax proposed to report his findings to the Executive Committee for its examination.

In addition to the principals and ex-officio members, the following were in attendance:

Dr. Foster

DDR&E

Mr. Sheldon

CIA

Mr. Bross

CIA

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Dr. Steininger Mr. Fischer

General Stewart

CIA

PSAC Staff

BOB

NRO Comptroller

Director, NRO

Staff

(Tab 347)

1 September 1966

Dr. Flax advised Mr. Vance that he had received the latest and most detailed CIA estimate for and that, although it considerably exceeded his 26 April tentative proposal to the Executive Committee, he had recommended going ahead with the revised program.

(Tab 348)

2 September 1966

Dr. Flax presented to the NRP Executive Committee, a tabulation of comparable costs by fiseal year for the program as originally proposed, as proposed by Dr. Flax on 26 April, and as revised by the CIA on 1 September.

Dr. Flax considered the revised CIA estimate to represent as realistic an assessment of the cost of a program (over a five year period) as could be arrived at at that time.

Dr. Flax recommended the approval of the program on the basis of for the total program cost, with an FY 67 allocation of (Tab 349)

2 September 1966

The Executive Committee approved Dr. Flav's 2 September recommendation on the program. (Tab 350)

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20 September 1966

In a memorandum for Mr. Vance, Dr. Flax summarized his FY68 budget proposals for the NRP.

Major open decision items included:

- 1. Procurement of eight additional U-2Rs
- 2. Development of a readout system
- 3. TAGBOARD (decision to proceed with conversion to B-52 launch)
- 4. Flight test of vulnerability reduction devices

Significant increases in on-going programs and new initiations included:

1.

2.

- 4. GAMBIT-CUBED -- cost increases and modification for longer life

(Tab 351)

10 October 1966

Dr. Flax granted initial program approval on the HEXAGON sensor subsystem:

- 1. Perkin-Elmer was the selected source for the sensor.
- 2. Launch schedule planning was to be on the basis of two in FY 1969 and five per year in FY 1970 through 1973.

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- 3. Planning for reserve systems was to be on the basis of one delivery in FY 1970 and a second in FY 1971.
- 4. Approval of TRW systems engineering tasks was withheld pending further study and delineation of responsibilities.

(Tab 352)

31 October 1966

Referring to the initial program approval for the HEXAGON sensor, Dr. Flax furnished Mr. Sheldon his reactions to the TRW systems engineering and technical support tasks, specifically on MTS. (Tab 353)

3 November 1966

Mr. Sheldon responded to Dr. Flax's 31 October memorandum on TRW tasks for HEXAGON stating that "certain aspects (of the memo) cause us serious concern." Mr. Sheldon indicated he would like to meet as soon as possible with Dr. Flax on the matter. (Tab 354)

21 November 1966

In a letter to Dr. Flax, Mr. Tidwell stated that he had been directed to inform him that, pending completion of COMOR tasks in a review of requirements, Dr. Flax should use for planning purposes a level of seven successful search and seven successful high resolution (either KH-7 or KH-8) missions per year to satisfy requirements.

(Tab 355)

23 November 1966

The NRP Executive Committee met to consider the FY 1968 NRO Budget.

Key actions taken:

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23 November 1966 (Continued)

- 1. A-12 OXCART: Consideration postponed in light of BOB requested study.
- 2. Purchase of Eight U-2Rs: Approved purchase of four additional (total of twelve) with due consideration to keeping production line "hot."
- 3. TAGBOARD: Final consideration postponed pending review of DNRO paper by Dr. Hornig.

CORONA and HEXAGON: Budgets approved.

GAMBIT and GAMBIT-CUBED: Approved for purposes of President's Budget.

Approved as presented recognizing probable need for additional funds for activity.

R&D: Approved as presented with the exception of GAMBIT-CUBED Readout.

GAMBIT-CUBED Readout: Disapproved.

(Tab 356)

28 November 1966

In a memorandum for the record, General Stewart summarized an incredible series of events and actions attendant to Mr. Tidwell's letter of 21 November. (Tab 357)

30 November 1966

In a memo for Dr. Flax, Mr. Sheldon expressed his concern over the "new set of problems and potential advantages to the intelligence consumer" posed by the possibility of obtaining high resolution satellite photography on a continuous and real time basis. He indicated that, since this question had never been examined comprehensively, the DCI had recently directed a study to

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30 November 1966 (Continued)

- determine if, in fact, an intelligence requirement existed for the development of a real time readout system for overhead photography
- 2. evaluate the impact which such a system might have on the exploitation resources of the intelligence community

Mr. Sheldon considered it desirable to push forward with certain engineering studies and systems analyses on the technical state of the art of real time readout, concurrent with the study of intelligence factors. He added that this approach seemed particularly appropriate in light of the NRP Executive Committee decision to drop development of near real time readout.

Mr. Sheldon suggested that Dr. Flax hear a briefing by Mr. Crowley on "the present status of the project as well as...certain proposals for technical and engineering studies" which CIA felt should be pursued at the time. (Tab 358)

20 December 1966

Mr. Helms advised Mr. Schultze of two significant findings in CIA's review of the A-12 to SR-71 transition problems:

- 1. SR-71 altitude and range performance when compared to the proven capability of the A-12 was of real concern to Mr. Helms in attempting to relate the performance of the SR-71 to the CIA missions.
- 2. Mr. Helms indicated he had misgivings about the electronic warfare systems situation.

20 December 1966 (Continued)

In view of these findings, Mr. Helms was reconsidering his previous position and asked that he have until 1 January 1967 to examine the matter in more detail. (Tab 359)

22 December 1966

In a response to Mr. Sheldon's memo of 30 November, Dr. Flax assured that he did not intend to place an overly restrictive interpretation on the Executive Committee decision regarding readout systems. Dr. Flax regarded the decision as one of not proceeding with an operational readout system for GAMBIT-CUBED.

Dr. Flax remarked on the apparent lack of appreciation in the intelligence community as to the benefits that could be derived from such a system, and, in this light, indicated that the NRO should not move in the direction of further or enlarged system oriented efforts pending clarification of the objectives and requirements.

Dr. Flax did not consider related studies and advanced technology efforts to be affected by the Executive Committee's action, except for an overall limitation on the fraction of NRO resources which could be allocated to such effort. (Tab 360)