

~~TOP SECRET~~ TALENT-F

HOLE/COMINT/

HANDLE VIA

BYEMAN

CONTROL SYSTEM S

Jointly

~~(S)~~ NATIONAL RECONNAISSANCE OFFICE

WASHINGTON, D.C.

THE NRO STAFF

12 September 1974

MEMORANDUM FOR DR. COOK

GENERAL KULPA

COLONEL WHEELER

MR. MURPHY

COLONEL BLANKENSHIP

SUBJECT: Report to the President's Foreign Intelligence
Advisory Board (President's PFIAB)

Recently we submitted an input to the DCI covering NRP
activities. This input will be included in the Annual DCI
Report to the PFIAB on the Intelligence Community.

Your copy of the report for the period July 1, 1973 to
June 30, 1974 is attached.

Keith S. Peyton
KEITH S. PEYTON
Captain, USAF

1 Attachment
PFIAB Report

GAMBIT HEXAGON KENNEN

EARPOP IDEALIST

/TALENT-KEYHOLE/COMINT

CLASSIFIED BY BYEMAN - 1 EXEMPT FROM
GENERAL DECLASSIFICATION SCHEDULE OF
EXECUTIVE ORDER 11652 EXEMPTION CATEGORY
S2 DECLASSIFY ON IMP DET.

~~TOP SECRET~~

HANDLE VIA
BYEMAN
CONTROL SYSTEM

Jointly

Approved for Release: 2025/07/25 C05127175

CONTROL NO. InternalCOPY OF COPIESPAGE 1 OF 1 PAGES

~~TOP SECRET~~

COMINT

BYEMAN-TALENT-KEYHOLE

CONTROL SYSTEMS JOINTLY

Secretary of Defense. Mr. Plummer succeeded Dr. John L. McLucas as Director of the NRO on December 21, 1973. Traditionally, the Under Secretary of the Air Force acts as the DNRO. Mr. Robert Singel is the Deputy Director (DDNRO) and is assigned by the Director of the Central Intelligence Agency. Dr. Charles W. Cook will become the Deputy Director on July 15, 1974.

The NRO Staff, directed by Brigadier General John E. Kulpa, Jr., is located in the Pentagon and provides covert staff assistance to the Director of the NRO and to the NRO Program Directors. The unclassified designation of the NRO Staff is the Office of Space Systems, Secretary of the Air Force (SAFSS). The Staff, numbering 43 professional people, includes personnel from the three military services, the Central Intelligence Agency, and the National Security Agency.

Brigadier General David D. Bradburn is the Director of Program A which has the unclassified designation as the Office of Special Projects, Office of the Secretary of the Air Force. Program A is staffed by 268 people. The NRP satellite payloads managed and operated by Program A include the GAMBIT and HEXAGON photographic systems and the and P-11 Signal Intelligence collection systems.

In addition, Program A is responsible for the booster vehicle procurement, payload integration, launch operations, and payload capsule recovery operations for all NRP satellites. Program A also manages the Air Force Special Projects Production Facility (AFSPPF) at Westover Air Force Base, a major processor of photographic reconnaissance products. With the closure of Westover AFB, the decision was made to phase out the AFSPPF and relocate certain functions of this facility to the 544th ARTW photo processing laboratory at Offutt AFB and other functions to the National Photographic Interpretation Center (NPIC) in Washington. The AFSPPF is expected to be closed

HANDLE VIA

BYEMAN-TALENT-KEYHOLE /COMINT

CONTROL SYSTEMS JOINTLY

~~TOP SECRET~~CLASSIFIED BY BYEMAN 1 EXEMPT FROM
GENERAL DECLASSIFICATION SCHEDULE OF
EXECUTIVE ORDER 11652 EXEMPTION CODE

Approved for Release: 2025/07/25 C05127175

CONTROL NO BYE13246-74

COPY OF COPIESPAGE 2 OF 23 PAGES

~~TOP SECRET~~

COMINT

BYEMAN-TALENT-KEYHOLE

CONTROL SYSTEMS JOINTLY

order to augment the capabilities of the Air Force Defense Support Program. [REDACTED]

[REDACTED]

The SIGINT and Imagery Systems Mix Studies examined the tradeoffs between the SIGINT and imaging systems respectively to determine which system will best satisfy future USIB requirements on the NRP.

Research and development groups both internal to the NRO and with NRO participation were formed to examine NRP technology as it applies to the R&D and intelligence community.

A strong interface with the JCS and the warning community was maintained to assure that full use of NRP systems was assessed in the light of WWMCCS and JCS requirements.

[REDACTED]

The NRP has managed to meet the USIB requirements for strategic intelligence while maintaining an extremely active interface with the remainder of the intelligence and warning community. The NRO has kept abreast of the times while retaining the basic management structure as directed by the President in November of 1971.

HANDLE VIA

BYEMAN-TALENT-KEYHOLE/COMINT

CONTROL SYSTEMS JOINTLY

~~TOP SECRET~~CLASSIFIED BY BYEMAN 1 EXEMPT FROM
GENERAL DECLASSIFICATION SCHEDULE OF
EXECUTIVE ORDER 11652 EXEMPTION CODE

Approved for Release: 2025/07/25 C05127175

CONTROL NO BYE13246-74

COPY ____ OF ____ COPIES

PAGE 3 OF 3 PAGES

~~TOP SECRET~~

COMINT,

BYEMAN-TALENT-KEYHOLE

CONTROL SYSTEMS JOINTLY

I. ORGANIZATION AND FUNCTIONS OF THE NATIONAL RECONNAISSANCE PROGRAM

A. Authority

The National Reconnaissance Program (NRP) is a covert intelligence program conducted under the terms of an August 11, 1965 Agreement signed by the Deputy Secretary of Defense and the Director of Central Intelligence. This Agreement charged the National Reconnaissance Program with the responsibility for the development, management, control and operation of all projects for the collection of intelligence and of mapping and geodetic information obtained through overflights of denied territory. In November 1971, the President directed the retention of the present management structure of the National Reconnaissance Office which manages and conducts the NRP. In May 1974, the PFIAB was directed by the President to review the structure of the NRP and recommend an appropriate structure for the future.

The National Reconnaissance Office (NRO) develops and commits its reconnaissance assets primarily against intelligence requirements and priorities established by the United States Intelligence Board (USIB). The NRO forwards plans and schedules for satellite and aircraft reconnaissance overflights directly to the 40 Committee for approval. The Director, NRO receives guidance in the form of policy and resource allocation decisions from the NRP Executive Committee (ExCom) which consists of the Director of Central Intelligence and a representative of the Secretary of Defense who is currently the Assistant Secretary of Defense for Intelligence. The President's Foreign Intelligence Advisory Board frequently reviews the plans and activities of the NRO.

B. The NRO Organization

The Director of the NRO is Mr. James W. Plummer, who serves in this covert capacity by the appointment of the

GAMBIT HEXAGON KENNEN

EARPOP IDEALIST

HANDLE VIA

BYEMAN-TALENT-KEYHOLE/COMINT

CONTROL SYSTEMS JOINTLY

~~TOP SECRET~~CLASSIFIED BY BYEMAN 1 EXEMPT FROM
GENERAL DECLASSIFICATION SCHEDULE OF
EXECUTIVE ORDER 11652 EXEMPTION DATE

CONTROL NO BYE13246-74

COPY OF COPIES

PAGE 1 OF 23 PAGES

following the transfer of U-2 assets. The satellite operations support activities of Program D will be coordinated by the NRO Staff. Significant personnel savings result from the phase out.

The Air Force Special Projects Production Facility, AFSPPF, is also being phased out. The photographic processing capabilities of the AFSPPF will be transferred to the 544th ARTW at Offutt AFB and the other functions will be transferred as appropriate. Additional personnel savings will be realized.

The relationship of the DNRO to the ExCom is similar to that of a corporate general manager and a board of directors. The stockholders, e.g., intelligence community representatives who advise the ExCom, are provided an opportunity to review and assess the DNRO's activities and programs. The ExCom makes the resource allocation decisions based upon the data and recommendations submitted by the DNRO.

Four NRP ExCom meetings were held during FY 1974. The ExCom meetings in October 1973 and April 1974 were held to review progress and discuss potential issues. During the July and November 1973 meetings the GAMBIT and HEXAGON launch strategy was adjusted to three GAMBIT and two HEXAGON launches per year. [REDACTED]

Throughout the reporting period, the NRO remained heavily involved with the intelligence community and also the warning and tactical community. Numerous studies were conducted by the NRO with community participation and by the community with NRO participation. [REDACTED]

HANDLE VIA
~~BYEMAN-TALENT-KEYHOLE~~ /COMINT
CONTROL SYSTEMS JOINTLY

~~TOP SECRET~~
CLASSIFIED BY BYEMAN-1 EXEMPT FROM
GENERAL DECLASSIFICATION SCHEDULE OF
EXECUTIVE ORDER 11652 EXEMPTION CODE
DORY 562 DECLASSIFY ON IMP DET

CONTROL NO ~~BYE13246-74~~
COPY ____ OF ____ COPIES
PAGE 2 OF 3 PAGES

~~TOP SECRET~~

COMINT

BYEMAN-TALENT-KEYHOLE

CONTROL SYSTEMS JOINTLY

in December 1976 and is now being phased down. On July 1, 1973, 309 people were assigned; on June 30, 1974, it was staffed by 229 people. Additionally, Program A supervises a number of advanced research programs intended to extend existing reconnaissance capabilities. In carrying out his mission, General Bradburn is supported by the Air Force Space and Missile Systems Organization as well as by the Aerospace Corporation.

The Director, CIA Reconnaissance Programs, Mr. Carl Duckett, has responsibilities for the development and operation of both aircraft and satellite reconnaissance systems. The CIA also conducts assigned research and development efforts for both aircraft and satellite reconnaissance projects. Through FY 1974, the Office of Special Activities, CIA, continued to operate four U-2R aircraft in the IDEALIST collection program. During the first quarter of FY 1975, these aircraft will be transferred to the Air Force. At that time, the Office of Special Activities, CIA, will be terminated. The CIA Office of Development and Engineering has the responsibility for the development of the [REDACTED]

[REDACTED]

The Director of Program C is Rear Admiral Robert K. Geiger. Admiral Geiger also manages the Navy Space Project Office which is part of the Naval Electronics Systems Command within the Naval Materiel Command. As Director of Program C, Admiral Geiger is responsible for the operation of the POPPY signal intelligence collection system. This was developed under the cognizance of Program C by the Naval Research Laboratory. Admiral Geiger is also responsible for the development of the [REDACTED]

[REDACTED] Admiral Geiger is supported by 363 people from the Naval Research Laboratory, the Naval Security Group and associated field operations.

Colonel Bernard L. Bailey is the Director of Program D. Colonel Bailey provides support to the CIA for the IDEALIST program and also furnishes selected depot support for the

HANDLE VIA

BYEMAN-TALENT-KEYHOLE /COMINT

CONTROL SYSTEMS JOINTLY

~~TOP SECRET~~CLASSIFIED BY BYEMAN-1 EXEMPT FROM
GENERAL DECLASSIFICATION SCHEDULE OF
EXECUTIVE ORDER 11652 EXEMPTION EATF

CONTROL NO BYE13246-74

COPY _____ OF _____ COPIES

PAGE 3 OF 23 PAGES

~~TOP SECRET~~

COMINT

BYEMAN-TALENT-KEYHOLE

CONTROL SYSTEMS JOINTLY

satellite programs. Colonel Bailey employs ten people on his Washington staff [REDACTED]

[REDACTED] With the transfer of the IDEALIST aircraft to the Air Force, Program D will be terminated at the end of the first quarter of FY 75. [REDACTED]

II. NATIONAL RECONNAISSANCE SYSTEMS AND OPERATIONS

The National Reconnaissance Program satellite systems designed and developed to meet USIB requirements continue to collect intelligence information requested and prioritized by the USIB and the USIB Committees.

A. Photographic Satellite Reconnaissance

The present operational philosophy is to employ the search system, HEXAGON, to locate targets of interest which will guide as well as complement the GAMBIT high resolution spotting system. We are pleased to report that a HEXAGON or GAMBIT was operational for a total of 316 days in FY 1974 during which time both systems were simultaneously operational for a total of 34 days. This was the highest number of days on orbit per year achieved to date.

HEXAGON. The HEXAGON (KH-9) is a low altitude photographic satellite principally designed to periodically acquire medium resolution coverage of large areas for intelligence search, general identification, and mapping and charting purposes. The primary HEXAGON payload consists of two 60-inch focal length panoramic cameras capable of imaging nearly 20 million square nautical miles per mission with a best resolution to date of 1.6 feet. The 220,000 feet of 6.6 inch film is returned in four recovery vehicles. The HEXAGON also carries a secondary 12-inch focal length mapping camera in support of DOD target positioning and mapping needs. A HEXAGON is also able to carry one or two P-11 type SIGINT subsatellites which are subsequently boosted into higher orbits. The coverage requirements for HEXAGON are outlined by USIB and require coverage

HANDLE VIA

BYEMAN-TALENT-KEYHOLE / COMINT
CONTROL SYSTEMS JOINTLY

~~TOP SECRET~~

CLASSIFIED BY BYEMAN 1 EXEMPT FROM
GENERAL DECLASSIFICATION SCHEDULE OF
EXECUTIVE ORDER 11652 EXEMPTION DATE

CONTROL NO BYE13246-74

COPY ____ OF ____ COPIES

PAGE 4 OF 23 PAGES

~~TOP SECRET~~

COMINT

BYEMAN-TALENT-KEYHOLE

CONTROL SYSTEMS JOINTLY

quarterly of specified target clusters, semiannually of built up areas and annually of remote areas.

Mission 1206 was launched on July 13, 1973. The operational lifetime was 74 days, although the vehicle remained in orbit for 91 days before being deboosted. The film payload included, in addition to black and white, over 20,000 feet of color film and almost 500 feet of IR film. USIB requirements were exceeded.

Mission 1207 was launched on November 10, 1973. The operational mission lasted for 102 days, although the vehicle was in orbit for 123 days. This is the longest a HEXAGON has remained on orbit. The film payload included over 5,000 feet of color and over 500 feet of IR film. During the mission,

[REDACTED] USIB requirements were exceeded.

Mission 1208 was launched on April 10, 1974, for a 105 day operational mission and four days solo operations. During the recovery attempt of the first bucket, the aircraft hooked the parachute target cone which caused a tear which precluded additional aerial recovery attempts. A water recovery was made. The film was not damaged. Included in the film supply was over 2,500 feet of color and over 3,000 feet of IR film. During the mission, [REDACTED]

[REDACTED]
Semiannual, annual and remote search area requirements were exceeded. Quarterly target cluster satisfaction was 80% vice an 85% requirement.

GAMBIT. The GAMBIT (KH-8) is a low altitude photographic satellite designed to acquire high resolution coverage of designated targets in support of precise photographic analysis and technical intelligence. The GAMBIT payload consists of a 44-inch aperture, 175-inch focal length stripping camera capable of monoscopic or stereo coverage of a given target area. The film payload consists of 10,800 feet of 9.5-inch wide ultra-thin base film which is returned in two reentry vehicles. A typical

HANDLE VIA
BYEMAN-TALENT-KEYHOLE /COMINT
CONTROL SYSTEMS JOINTLY

~~TOP SECRET~~
CLASSIFIED BY BYEMAN 1 EXEMPT FROM
GENERAL DECLASSIFICATION SCHEDULE OF
EXECUTIVE ORDER 11652 EXEMPTION CODE

CONTROL NO. BYE13246-74
COPY ____ OF ____ COPIES
PAGE 5 OF 23 PAGES

~~TOP SECRET~~

COMINT

BYEMAN-TALENT-KEYHOLE

CONTROL SYSTEMS JOINTLY

GAMBIT mission will attempt coverage of 10-15,000 COMIREX targets, depending on weather and seasonal lighting conditions. The requirements for GAMBIT photography are stated in the COMIREX Collection Requirements for Planning (CCRP), USIB Document.

GAMBIT Mission 4340 was launched on September 27, 1973, for a 30-day mission. At the outbreak of the Mid East conflict, GAMBIT had photographed some of the area prior to the hostilities. Responding to the USIB direction, the GAMBIT orbit was adjusted twice to optimize coverage of the Mid East during the time of conflict. During the mission, GAMBIT confirmed the introduction of SCUD missile equipment into Egypt. The GAMBIT quarterly USIB standing requirement was met.

GAMBIT Mission 4341 was launched on February 13, 1974, for a total of 30 days on orbit. The mission resulted in one new performance record--tri-bar ground resolved distance value

Mission 4342 was launched on June 6, 1974, for a planned 42 day mission. At the date of this report the USIB satisfaction percentage is not known, however, the mission was the longest GAMBIT mission to date (45 days). Mission 4342 had the highest number of COMIREX targets ever read out by NPIC (11,502) and the highest number of targets read out that were scored as excellent, good, fair, with complete coverage (8,035).

KENNEN. The KENNEN (KH-11) is the newest of the NRO photographic satellites and is being developed to satisfy the near-real-time collection of imagery for strategic warning and indication targets, and technical intelligence. It will also provide a continuous on-orbit photographic capability in support of crisis situations. To achieve this capability the

HANDLE VIA

BYEMAN-TALENT-KEYHOLE/COMINT

CONTROL SYSTEMS JOINTLY

~~TOP SECRET~~CLASSIFIED BY BYEMAN 1 EXEMPT FROM
GENERAL DECLASSIFICATION SCHEDULE OF
EXECUTIVE ORDER 11652 OF FEBRUARY 1976

Approved for Release: 2025/07/25 C05127175

CONTROL NO BYE13246-74

COPY ____ OF ____ COPIES

PAGE 6 OF 23 PAGES

~~TOP SECRET~~

COMINT

BYEMAN-TALENT-KEYHOLE

CONTROL SYSTEMS JOINTLY

The relay satellite is continuing to experience cost and scheduling problems and it is believed that close attention will be required during the coming year to maintain levels within the present budget estimates.

Photographic Satellite Contributions. The photographic systems continued to maintain a high level of satisfaction of requirements in search and surveillance and high resolution technical intelligence.

Some brief highlights from the HEXAGON missions are as follows. The entire Plesetsk target cluster was completely covered and the increased activity relating to the SS-X-16 and concealment efforts was monitored. Several Middle East ports were covered in August to determine if SCUD equipment that was observed at Nikolayev earlier in the mission has been shipped to the Middle East. Coverage of Tyuratam missile test center confirmed the techniques associated with loading the type III-F

HANDLE VIA
BYEMAN-TALENT-KEYHOLE /COMINT
CONTROL SYSTEMS JOINTLY

~~TOP SECRET~~
CLASSIFIED BY BYEMAN 1 EXEMPT FROM
GENERAL DECLASSIFICATION SCHEDULE OF
EXECUTIVE ORDER 11652 EXEMPTION CODE

CONTROL NO BYE13246-71
COPY ____ OF ____ COPIES
PAGE 7 OF 23 PAGES

~~TOP SECRET~~

COMINT

BYEMAN-TALENT-KEYHOLE

CONTROL SYSTEMS JOINTLY

EXECUTIVE SUMMARY

During the period from July 1, 1973 through June 30, 1974, the National Reconnaissance Program launched three HEXAGON and three GAMBIT photographic reconnaissance satellites. Mission lifetimes of these satellites have been extended to the point that photographic satellites were operational for a total of 316 days in FY 1974 during which time both a GAMBIT and a HEXAGON system were simultaneously operational for a period of 34 days. The longest HEXAGON mission totaled 102 days plus an additional 21 days after all film buckets were returned during which engineering tests were performed. At the outbreak of the Mid-East conflict, a GAMBIT system was on orbit and its orbit was adjusted twice to optimize Mid East coverage. During the mission, GAMBIT photography confirmed the introduction of SCUD missile equipment into Egypt. On GAMBIT mission 4341, a new performance record for resolution was set-[redacted]

[redacted] for tri-bar ground resolved distance. The 45 day mission of GAMBIT 4342 was the longest to date and had the highest number of COMIREX targets ever read out by NPIC (11,502) and the highest number of targets read out that were scored as excellent, good or fair, with complete coverage.

SIGINT satellites [redacted] P-11s, URSALA II and TOP HAT II, were launched during FY 1974 and are performing well. Additionally, the SIGINT satellites on orbit include

[redacted] POPPY 7, MABELI, URSALA I, and TOP HAT I (which was terminated June 7, 1974).

Aircraft operations are being terminated with the remainder of the IDEALIST U-2 aircraft turned over to the Air Force. As a result the CIA/OSA Office which managed IDEALIST operations is being phased out. NRO Program D will also be phased out

HANDLE VIA

BYEMAN-TALENT-KEYHOLE/COMINT

CONTROL SYSTEMS JOINTLY

~~TOP SECRET~~CLASSIFIED BY BYEMAN 1 EXEMPT FROM
GENERAL DECLASSIFICATION SCHEDULE OF
EXECUTIVE ORDER 11652 (EXEMPTION CASE)

Approved for Release: 2025/07/25 C05127175

C05127175-74
WORKING COPY
PAGE 1 OF 3 PAGES

~~TOP SECRET~~

COMINT

BYEMAN-TALENT-KEYHOLE
CONTROL SYSTEMS JOINTLY

silo with SS-X-18 canisters. Coverage of the Paracel Islands revealed the largest and southernmost deployment of major Chinese naval combatants. At Kartaly ICBM complex, probable preparation for convention of IIIC to IIIF launch sites was observed. The location of the first underground nuclear test in India was identified on photography on May 22. The launches of the 6, 7, and 8 D-class SSBNs at the Severodvinsk shipyards were detected.

Brief intelligence highlights of the GAMBIT system are as follows: Armored tanks at the Nikolayev port facilities were being loaded with ammunition and fuel before being shipped to the Middle East. SCUD mission equipment was first observed in Egypt on October 17, 1973 (at Cairo airfield). At Soviet airborne installations unusual activity was observed during the week following the Middle East War (parachutes on the ground, air droppable pallets laid out, etc). A 1,150 foot exhaust observed at the Krasnoarmeysk solid motor range, provided evidence of the static firing of a very large rocket motor. At the Lima, Peru, Headquarters First Armored Division, Soviet tanks and bridging equipment was observed for the first time. A new Chinese aircraft (amphibian type) was identified at Ha-Enh-Pin airframe plant. At Delice Space Center, French Guinea, the components of the Europa II space launch systems were seen for the first time. An inflatable dummy Y-class submarine was repeatedly observed at Severodvinsk shipyard in various positions and locations. Ten Backfire bombers were observed at Kazan airframe plant on June 29, 1974. At Najin, North Korea shipyard a new class patrol escort vessel and submarine were observed under construction. Five heavily camouflaged pieces of equipment were observed at Plesetsk, suspected to be mobile missile associated. Coverage of this area was exceptional by both systems on consecutive days, i.e., on the 22nd of June the area was covered twice in a six hour period by the GAMBIT and once by the HEXAGON.

B. SIGINT Satellite Reconnaissance

The National Reconnaissance Program employs SIGINT payloads which are designed to satisfy USIB requirements in

HANDLE VIA

BYEMAN-TALENT-KEYHOLE /COMINT
CONTROL SYSTEMS JOINTLY~~TOP SECRET~~CLASSIFIED BY: BYEMAN-1 EXEMPT FROM
GENERAL DECLASSIFICATION SCHEDULE OF
EXECUTIVE ORDER 11652 EXEMPTION CODE
GONY 502 DECLASSIFY ON IMPDET

CONTROL NO BYE13246-74

COPY ____ OF ____ COPIES

PAGE 8 OF 23 PAGES

~~TOP SECRET~~

COMINT

BYEMAN-TALENT-KEYHOLE

CONTROL SYSTEMS JOINTLY

the categories of ELINT, COMINT, foreign instrumentation signals, EMP, and non-imaging electro-optics [REDACTED] The primary requirement is collection against major Soviet and Chinese threat weapons systems.

SIGINT satellite collection is accomplished utilizing a mix of low earth orbiting satellites and the [REDACTED]

[REDACTED]

The following paragraphs contain summary descriptions of NRO SIGINT satellite operations and related activities which occurred during the reporting period:

POPPY. The POPPY system performs ELINT general search, technical intelligence and ocean surveillance using four three-axis gravity gradient stabilized spacecraft. POPPY intercepts the radar main beam and immediately transponds the signals to ground stations. The last of the POPPY series, Mission 7107, was launched on December 14, 1971.

[REDACTED]

P-11. P-11 payloads are relatively small subsatellites carried into low earth orbit aboard photographic satellites and

HANDLE VIA
BYEMAN-TALENT-KEYHOLE / COMINT
CONTROL SYSTEMS JOINTLY

~~TOP SECRET~~
CLASSIFIED BY BYEMAN 1 EXEMPT FROM
GENERAL DECLASSIFICATION SCHEDULE OF
EXECUTIVE ORDER 11652 EXEMPTION CODE

CONTROL NO BYE13246-74
COPY ____ OF ____ COPIES
PAGE 9 OF 23 PAGES

~~TOP SECRET~~

COMINT.

BYEMAN-TALENT-KEYHOLE

CONTROL SYSTEMS JOINTLY

then boosted to a nominal 275-nautical mile circular orbit. These payloads are normally intended for specific collection tasks which complement and supplement the higher altitude SIGINT Systems.

TOP HAT. TOP HAT is a COMINT collector which detects, samples, and locates troposcatter communications sites in the 450-1000 MHz frequency range. TOP HAT I was launched on November 18, 1970, and intelligence operations were terminated June 7, 1974. TOP HAT II was launched on April 10, 1974, as a replacement for TOP HAT I and is operating normally.

MABELI. MABELI was launched on January 20, 1972. MABELI is designed to collect ELINT main beam technical intelligence against ABM radars and other targets of opportunity in the Soviet Union and the Peoples' Republic of China. Early in May 1974 the one remaining operational tape recorder began experiencing anomalies. The system recovered and operations are now limited to approximately twenty minutes per day to maximize the remaining life.

URSALA. URSALA I was launched on July 7, 1972. URSALA provides ELINT search and operational ELINT information in the 2-12 GHz band. It currently provides location accuracy to six nautical miles. It has also detected and located communications links thereby functioning as a COMINT mapper. URSALA II was launched on November 10, 1973. The payload is currently performing time critical reporting and routine Electronic-Order-of-Battle information.

HANDLE VIA
BYEMAN-TALENT-KEYHOLE/COMINT
CONTROL SYSTEMS JOINTLY

~~TOP SECRET~~

CLASSIFIED BY BYEMAN-1 EXEMPT FROM
GENERAL DECLASSIFICATION SCHEDULE OF
EXEMPTIVE ORDER 11642 EXEMPTION DATE

Approved for Release: 2025/07/25 C05127175

CONTROL NO BYE13246-74
COPY 10 OF 23 COPIES
PAGE 10 OF 23 PAGES

Page Denied

Page Denied

~~TOP SECRET~~

COMINT/

BYEMAN-TALENT-KEYHOLE

CONTROL SYSTEMS JOINTLY

Low orbiting P-11 and POPPY have provided technical and operational intelligence information. The URSALAs are a major source of OPSELINT and EOB data supporting tactical commanders.

The Middle East War triggered extensive collection efforts by all systems and has proved an excellent and demanding test of the capability of overhead systems to support tactical operations. Valuable information concerning deployment of high threat weapons systems, particularly the SA-6 was provided by

C. Aircraft Operations

During the July 20, 1973 ExCom meeting, the DNRO recommended that the IDEALIST program be terminated and the IDEALIST aircraft be turned over to the Air Force. The two Taiwan based aircraft will be transferred to the Strategic Air Command during August 1974. Similarly the OLIVE HARVEST Mid-East operation based in Cyprus will be assumed by SAC during August 1974. The North Base Edwards AFB U-2 aircraft will be transferred to SAC by the end of July 1974. KOBOLD (ECM/ECCM) activities will remain with CIA until the end of FY 1975.

HANDLE VIA
BYEMAN-TALENT-KEYHOLE /COMINT
CONTROL SYSTEMS JOINTLY

~~TOP SECRET~~
CLASSIFIED BY: BYEMAN-1 EXEMPT FROM
GENERAL DECLASSIFICATION SCHEDULE OF
EXECUTIVE ORDER 11652 EXEMPTION CODE

Approved for Release: 2025/07/25 C05127175

CONTROL NO. BYE13246-74
COPY _____ OF _____ COPIES
PAGE 13 OF 23 PAGES

~~TOP SECRET~~

COMINT

BYEMAN-TALENT-KEYHOLE

CONTROL SYSTEMS JOINTLY

III. NATIONAL RECONNAISSANCE PROGRAM MANAGEMENT

In accordance with the August 11, 1965 Agreement for reorganization of the National Reconnaissance Program, the NRP Executive Committee was established to guide and participate in the formulation of the NRP through the DNRO. The relationships of the DNRO to the ExCom is analogous to that of a corporate general manager who is responsive to a board of directors. Resource allocation decisions are made by the board of directors based upon the recommendations made by the general manager. The intelligence community advisors to the ExCom act as corporate stockholders who review and assess the general manager's perceptions and recommendations. At the present time the NRP Executive Committee consists of the Director of Central Intelligence and a representative of the Secretary of Defense, currently the Assistant Secretary of Defense (Intelligence). Traditionally there are two ExCom meetings a year, one in July and the second in November. During this reporting period there were two additional meetings, one in October 1973 and one in April 1974. A review of the significant issues and decisions made during the ExCom meetings is presented below.

A. July 1973 ExCom

At the July 20, 1973 ExCom the members present included Lt General Walters, Acting DCI; Mr. Colby, DCI Designee; Mr. Clements, Deputy Secretary of Defense; and Dr. Hall, ASD(I). The issues addressed and the decisions made during the ExCom meeting were as follows:

GAMBIT/HEXAGON Launch Rates/Strategy. What are the appropriate launch rates and strategy?

The decision was that GAMBIT launches would be maintained at the current rate of three launches per year. The HEXAGON launches would be reduced to two launches per year. HEXAGON mission duration would be increased to ninety days and the NRO would investigate going to a 120 day mission.

HANDLE VIA
BYEMAN-TALENT-KEYHOLE/COMINT
CONTROL SYSTEMS JOINTLY

~~TOP SECRET~~
CLASSIFIED BY BYEMAN 1 EXEMPT FROM
GENERAL DECLASSIFICATION SCHEDULE OF
EXECUTIVE ORDER 11652 EXEMPTION DATE

CONTROL NO BYE13246-74
COPY 14 OF 23 COPIES
PAGE 14 OF 23 PAGES

Page Denied

~~TOP SECRET~~

COMINT

BYEMAN-TALENT-KEYHOLE

CONTROL SYSTEMS JOINTLY

B. October 1973 ExCom

The October ExCom was held on October 2, 1973, with Mr. Colby and Dr. Hall being the members present. During the October 1973 ExCom the decisions made during the July ExCom were summarized and additional data pertinent to future deliberations related to the total intelligence community budget were discussed. In addition, issues expected to be reviewed at the November 1973 ExCom were presented and discussed. Specific decisions on these items, however, were not required.

C. November 1973 ExCom

On November 21, 1973, the ExCom met with Mr. Colby and Dr. Hall present. The issues discussed and the decisions made during the meeting are as follows:

SIGINT Mix Configuration. In view of budget limitations and the SIGINT Mix Study results, what should be the appropriate SIGINT System Mix configuration?



HANDLE VIA

BYEMAN-TALENT-KEYHOLE/COMINT

CONTROL SYSTEMS JOINTLY

~~TOP SECRET~~CLASSIFIED BY BYEMAN-1 EXEMPT FROM
GENERAL DECLASSIFICATION SCHEDULES OF
EXECUTIVE ORDER 11652 EXEMPTION CATS

Approved for Release: 2025/07/25 C05127175

CONTROL NO. BYE13246-74
COPY OF COPIES
PAGE 16 OF 23 PAGES

HEXAGON Mapping Camera. How can DMA's mapping requirement be best satisfied? Who should provide the funding?

The decision was that procurement would be deferred on the follow-on buy and the possibility of transferring funding responsibility to Program 1 would be examined. Funding protection would be given for the first twelve mapping cameras.

Subsequent to the ExCom meeting, Mr. Colby and Dr. Hall provided additional guidance. It was decided to continue with GAMBIT improvement, the [] Program, and the [] program as currently scheduled and funded.

D. April 1974 ExCom

On April 9, 1974, Mr. Colby and Dr. Hall met for an ExCom meeting. The purpose of the meeting was to provide a preview of the issues and FYDP to be reviewed by the July 1974 ExCom. Specific decisions were neither required nor made.

IV. NATIONAL RECONNAISSANCE PROGRAM COMMUNITY INTERFACE

Throughout the reporting period the National Reconnaissance Office has been involved to a considerable extent with the intelligence community. This involvement has taken the form of studies on the future mix of both NRO imaging satellites and NRO SIGINT satellites. Other major studies and community interface involve the use of NRO satellites to support tactical situations, JCS operations, and surveillance and warning situations. Discussed below are some of the more significant studies and interface activities with the community which have occurred during the reporting period.

A. SIGINT Mix Study

As a result of the July 1973 ExCom meeting, the SIGINT Mix Study was initiated to evaluate the multi-mission operational and programmatic tradeoffs possible within the NRP

~~TOP SECRET~~

COMINT

BYEMAN-TALENT-KEYHOLE

CONTROL SYSTEMS JOINTLY

and to have the results available for the November 1973 ExCom. The NRO Staff structured the study so that community participation would be achieved. Separate studies performed by CIA, SAFSP, and NSA based on NRO direction were conducted. Based upon the study, the DNRO recommended to the ExCom the option for [REDACTED]

[REDACTED]

[REDACTED]

B. Imaging Systems Mix Study

Based upon the deliberations at the October 1973 ExCom, the DCI directed that a study be accomplished to assess the intelligence value, performance and cost of alternative mixes of the imaging systems available for operation in the 1976-80 time period. The study would evaluate the impact of new imagery collection systems and modifications of existing systems. The study would then define the optimum transition from the current operational schedule to promising system mix alternatives. The DCI requested that adequate information be available for discussion at the July [REDACTED] program decisions to be made at the November 1974 ExCom. The study group was chaired by the Chief, Collection and Processing Assessment Division of the IC Staff. Members of the study group included representatives from OASD(I), CIA, COMIREX, DIA, NRO Staff, and SAFSP. It was concluded that it appears prudent to maintain production bases and schedules for two HEXAGON's and two GAMBIT's annually until [REDACTED] system has demonstrated an adequate operational capability.

C. Weather Study

At the April 1974 ExCom meeting, the DCI requested that the NRO perform a study on the effects of weather. The study addressed the various weather phenomena such as clouds, precipitation, haze, smoke, etc. as they affect the [REDACTED]

[REDACTED]

HANDLE VIA
BYEMAN-TALENT-KEYHOLE/COMINT
CONTROL SYSTEMS JOINTLY

~~TOP SECRET~~
CLASSIFIED BY BYEMAN 1 EXEMPT FROM
GENERAL DECLASSIFICATION SCHEDULE OF
EXECUTIVE ORDER 11652 EXEMPTION DATE

CONTROL NO BYE13246-74
COPY ____ OF ____ COPIES
PAGE 18 OF 23 PAGES

~~TOP SECRET~~

COMINT

BYEMAN-TALENT-KEYHOLE
CONTROL SYSTEMS JOINTLY

to current photographic systems where there is a considerable delay from the time of imaging to the time the imagery is available to the analyst. Climatological data for eight selected target areas were examined to determine how long it would take to obtain a cloud-free image of the target. The study concluded that weather phenomena such as precipitation, clouds, haze, smoke, etc. can affect the imagery collected by a reconnaissance system and essentially lengthen the time required to image a target successfully.

D. NRO R&D Advisory Council

During the past year, the NRO Research and Development Advisory Council was established. The primary concern of the Council is the broad long-term direction of the NRO Support R&D Program. The purpose of the Support R&D Program is to maintain a viable technology base for future NRP options. Members bring together top-level estimates of the future directions of the NRP, the available national technology base, and out-year resources. The Council advises the DNRO on the overall management of the Support R&D Program, its trends and relative technology emphasis, and levels of future funding. The directors of the NRO Staff, SAF Special Projects, and the Office of Development and Engineering (CIA) comprise the R&D Advisory Council.

E. Intelligence Research and Development Council

The Intelligence Research and Development Council of the Intelligence Resources Advisory Committee was established during FY 1974. The Council is chaired by Dr. Currie, DDR&E, with members representing the Defense Advanced Research Projects Agency, Assistant Secretary of Defense for Intelligence, Assistant Secretary of the Navy (Research and Development), CIA/DDS&T, National Security Agency, Assistant Secretary of the Army (R&D), DNRO, and participation from members of the Intelligence Community Staff. The purpose of the Council is to review intelligence research and development to determine technological opportunities, identify technology gaps, and

HANDLE VIA

BYEMAN-TALENT-KEYHOLE/COMINT
CONTROL SYSTEMS JOINTLY~~TOP SECRET~~CLASSIFIED BY BYEMAN 1 EXEMPT FROM
GENERAL DECLASSIFICATION SCHEDULE OF
EXECUTIVE ORDER 11652 EXEMPTION CODE

CONTROL NO. BYE13246-74

COPY _____ OF _____ COPIES
PAGE 19 OF 23 PAGES

~~TOP SECRET~~

COMINT

BYEMAN-TALENT-KEYHOLE
CONTROL SYSTEMS JOINTLY

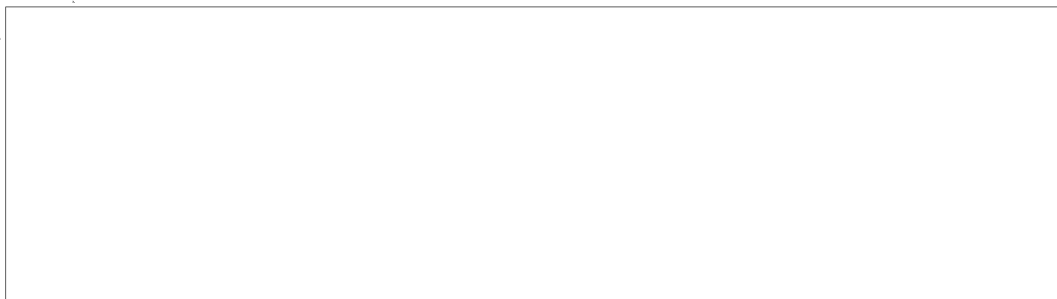
determine the responsiveness of the intelligence community research and development to intelligence objectives. During the reporting period, the NRO briefed the Council on NRO research and development programs.

F. WWMCCS Study

Based upon a decision made by the Secretary of Defense, a widely scoped study was initiated during the reporting period which would serve to architect a total Worldwide Military Command and Control System (WWMCCS). Included as an element of this study is the intelligence system and, as a sub-element, what information intelligence system satellite interfaces could provide as an input to the system. The study is under the overall cognizance of the Joint Chiefs of Staff Deputy Director for Operations (Command and Control). The NRO has provided the study group with information on the use of NRO reconnaissance satellite systems to provide the necessary data for the WWMCCS system.

G. Airborne/Mobile Data Access and Exploitation Technology

The DNRO has entered into an agreement with the Director, DARPA and the Director, J-3 OJCS, to develop a concept and conduct the research necessary to acquire the technological capability to receive satellite sensor data on board a mobile command platform and exploit the data to obtain certain desired information. A special technical advisory group consisting of members from ARPA, OJCS, and the NRO will periodically review the program and provide technical guidance to ARPA.



HANDLE VIA

BYEMAN-TALENT-KEYHOLE/COMINT
CONTROL SYSTEMS JOINTLY~~TOP SECRET~~CLASSIFIED BY BYEMAN 3 EXEMPT FROM
GENERAL DECLASSIFICATION SCHEDULE OF
EXECUTIVE ORDER 11652 EXEMPTION CODE

Approved for Release: 2025/07/25 C05127175

CONTROL NO BYE13246-74

COPY _____ OF _____ COPIES

PAGE 20 OF 23 PAGES

~~TOP SECRET~~

COMINT/

BYEMAN-TALENT-KEYHOLE

CONTROL SYSTEMS JOINTLY

Concurrent with the direction to the Air Force, the DIA was tasked by the JCS to investigate, in coordination with the services, the needs of the tactical/component commanders for electrically transmitted imagery. The DIA was also asked to review and refine the needs of the SIOP tasked U&S commanders. The results of the Air Force and DIA activities are to be provided to the ASD(I) by October 19, 1974, for development of program alternatives and recommendations leading to system definition and acquisition.

I. Non-Conventional Imaging Technology Program (NCIP)

The NRO has formed the NCIP to evaluate the intelligence utility of proposed non-conventional imaging technologies prior to ExCom system commitments. The imaging techniques examined under the NCIP are those which significantly and/or uniquely extend the reconnaissance coverage of current visual spectrum optical systems. The two keynotes of the NCIP are: 1) integral community participation in establishing selection criteria, interpretation of images and mission utility assessment; 2) realistic airborne tests duplicating as nearly as possible, anticipated space system performance against controlled mission indicative target sets as specified by the community.

Page Denied

~~TOP SECRET~~

~~COMINT~~

HANDLE VIA
BYEMAN-TALENT-KEYHOLE
CONTROL SYSTEMS JOINTLY



HANDLE VIA
BYEMAN-TALENT-KEYHOLE/COMINT
CONTROL SYSTEMS JOINTLY

~~TOP SECRET~~

CLASSIFIED BY: BYEMAN 1 EXEMPT FROM
GENERAL DECLASSIFICATION SCHEDULE OF
EXECUTIVE ORDER 11652 EXEMPTION CODE
GORY S82 DECLASSIFY ON IMP DET

CONTROL NO BYE13246-74
COPY OF COPIES
PAGE 23 OF 23 PAGES