| | | |
|---|---|---|
| 3 AFSLT | Apprv | Captain Goolsby (USN) |
| SAFSS | Coord | General Stewart |
| SAFSL | Sign | General Evans |

Lt Colonel Loret SAF-SLT 50945 cmr

NPIC Support for the DORIAN Program January 13, 1967

PROBLEM:

1. Participation by NPIC in MOL astronaut indoctrination and training, and preparation of target cue material, requires approval by DNRO and DCI. The attached proposed letter to Dr. Flax requests his approval for NPIC assistance in the cited areas (attachment 1), and includes as an attachment for his signature a letter on the subject to Mr. Helms.

DISCUSSION:

2. The three areas in which NPIC assistance is required are: an initial indoctrination of the astronauts to the subject of photographic intelligence, astronaut training at NPIC to prepare them as subjects for Active Target Indicator Mode simulations, and in assisting in design and preparation of manned mission target cue material.

a. The initial indoctrination is to be sponsored by the Program Office, to be presented in the MOL Program Office briefing room, and involves primarily NPIC briefers. This is to be scheduled as soon as possible after DNRO and DCI approval is received.

b. Training of the astronauts at NPIC will follow, under carefully controlled security arrangements.

c. Timing of NPIC participation in providing target cue material will be established by the Systems Office and NPIC, working together.

3. The letter to Dr. Flax outlines the requirement for NPIC participation. His approval and signature on the letter to Mr. Helms is requested.

DORIAN

Page 1 of 2 pages
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4. The letter from Dr. Flax to Mr. Helms outlines the requirement for NPIC participation, and extends an invitation for Mr. Helms to personally participate in the indoctrination here in the Pentagon. Mr. Helms' approval for NPIC support of MOL is requested.

5. The indoctrination program (attachment 2 to letter to Dr. Flax), in addition to briefings given by NPIC, includes provision for Mr. Helms, Dr. Flax, General Ferguson, and you to make some introductory remarks. It also contemplates a luncheon in the Secretary's Mess on the first day of the program. Upon your approval of content of the program, we will forward an advanced copy to [redacted] (NPIC) and will work out the details of the program with him.

6. A proposed attendance list for the indoctrination program will be submitted for your consideration in the near future.

RECOMMENDATION:

7. That the attached proposed letter to Dr. Flax be signed.

8. That you approve the agenda for the proposed indoctrination program.

BENJAMIN J. LORET
Lt Colonel, USAF
MOL Program Office

1 Atch:
Proposed Ltr to Dr. Flax w/3 atchs:
1. Proposed Ltr to Mr. Helms - BYE 21011-67
2. Proposed Prog Agenda - BYE 21012-67
3. Security Considerations & Proposed Security Arrangements - BYE 21013-67

DORIAN

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FEB 20 1967

MEMORANDUM FOR DR. FLAX

SUBJECT: National Photographic Interpretation Center (NPIC) Support of the MOL Program

We see an early need for NPIC support in conduct of the MOL Program in two areas: an original astronaut indoctrination into the DORIAN mission area, and astronaut familiarization with T/KH material preparatory to their participation in the Active Target Indicator Mode simulations. The purpose of this memorandum is to request your approval for conduct of a brief indoctrination program for the astronauts which will involve NPIC participation, and subsequent visits of the astronauts to NPIC for a two week familiarization program. As NPIC support for MOL requires DCI approval, it is also requested you sign the attached letter on the subject to Mr. Helms (Attachment 1).

Informal discussions between personnel of NPIC and this office have led to the formulation of a two-day indoctrination program which we propose be given the astronauts on 9 and 10 March here at the MOL Program Office. The purpose of this indoctrination is two-fold. First, we would like to acquaint the astronauts with the intelligence process, the vital role of photographic intelligence in preparation of National Intelligence Estimates, and how their own individual efforts in the DORIAN program will fit into the overall national intelligence collection system. The indoctrination thus will provide them a general background within which to orient subsequent mission-related training. Second, the briefings will serve to motivate them to dedicate themselves to the vitally important tasks they must perform during the lengthy period before any of them achieve the final goal of participating in space flight. In short, the indoctrination program will serve this second objective by providing the astronauts a "pep talk," conducted at high Government level. It is hoped that both you and Mr. Helms will be able to participate as introductory speakers. A copy of the proposed program agenda is attached (Attachment 2). You will note that we plan to have a luncheon in the Secretary's Mess on the first day for the astronauts and various high-ranking dignitaries.

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HANDLE VIA
BYEMAN-TALENT-KEYHOLE
CONTROL SYSTEMS JOINTLY

We propose to follow up the indoctrination program starting March 13 with familiarization training of the astronauts at NPIC, to be devoted to giving them a familiarity, using T/KH product material, with the decision and judgment factors associated with the visual identification of signatures associated with specific target classes.

The program consists of one day of general information followed on succeeding days with coverage of Deployed Missile Sites, Missile Development Facilities, Nuclear Test and Production, Air Order of Battle - Electronics - BW/CW, Military Production, and Weapons Storage and Camouflage. In each case, treatment of the topic will be from the general to the specific with emphasis on use of photographic material relating specific sites to the system being considered. The final three days will include intensive participation and practice by the astronauts in identifying signatures of targets in each of the various target systems. An outline of the 10 day program is attached for your review (Attachment 3). As indicated in the briefings at the Program Management Review on January 5, 1967, this training will be in direct support of the Active Target Indicator Mode simulation effort. I am sure you agree that we will obtain more valid results if properly trained MOL astronauts are used as subjects for the simulation program.

A careful analysis has been made of the security risk involved in having the astronauts physically visit the NPIC facility. NRO and NPIC security representatives are agreed, and I concur, that the security risk is minimal and acceptable. Security considerations and proposed security arrangements for astronaut training at NPIC are covered in detail in Attachment 4. In accordance with the "Policy on MOL Astronauts," your approval is requested for astronaut visits to NPIC for this training.

The proposed letter to Mr. Helms requests his approval for NPIC to provide the support outlined above. We have received informal information that NPIC participation in the astronaut indoctrination and training program has been discussed at DDCI (Admiral Taylor) level and that he enthusiastically supports conduct of the program. NPIC officials themselves have expressed unbridled enthusiasm in offering to provide us whatever assistance we need. On this basis, I anticipate that the proposed letter to Mr. Helms will be very favorably considered.

I consider these efforts to be vital to successful prosecution of the MOL Program. It is requested that the proposed actions be given early approval, since the Active Target Indicator simulations with astronauts as subjects is scheduled to commence in mid-March.

L/C Loret/SAF-SLT/50945/20Feb67/jdk

SIGNED

Copies: #2- SAF-SLT Official
#3- SAF-SL Read
#4- SCG Read
DORIAN #5- SAF-SS

HARRY L. EVANS
Major General, USAF
Vice Director, MOL Program

4 Atchs
a/s



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Handle via BYEMAN
Control System

[redacted]

Mr. Richard Helms
Director
Central Intelligence Agency
Washington, D.C. 20505

Dear Dick:

The DORIAN Program is progressing at a rate which allows me to make a preliminary statement of requirements for support of a nature which can be provided to best advantage by the National Photographic Interpretation Center (NPIC). This support focuses on man's role in conduct of the DORIAN mission, and specifically, provision for astronaut indoctrination and familiarization.

Our initial assessment is that NPIC can be of assistance in two areas:

a. We see an immediate need to provide the MOL astronauts with indoctrination briefings. These will provide them an overall picture of the intelligence process, the importance of reconnaissance photography to preparation of National Intelligence Estimates, and an appreciation of the importance of their individual roles as crewmembers in conduct of the DORIAN mission. NPIC personnel, working informally with personnel of the MOL Program Office, have prepared an excellent two-day indoctrination program to accomplish these objectives. With your approval we plan to have these briefings, which will involve NPIC personnel, presented in the Pentagon at the MOL Program Office on March 9 and 10. Your personal participation as one of the introductory speakers would, of course, be most welcome.

b. The second, near-term support requirement involves the participation of NPIC in providing astronaut familiarization in the area of target recognition. Such training will be invaluable in preparing the astronauts to participate as subjects in the on-going simulation program devoted to investigation of MOL system capability with man operating in an Active Target Indicator Mode. NPIC has assisted in formulating the content of this training. We plan to conduct the training for small groups of astronauts at the NPIC facility, under carefully controlled security arrangements, starting March 13.

I am sure you agree that NPIC can make very vital contributions to the DORIAN effort in the above-listed areas, as well as in possibly others. Accordingly, I request your early approval for NPIC's participation.

Sincerely,

Alexander H. Flax
Director

Copies to:
SAF-SL Official
SAF-SL Read
SCG Read
SAF-SS

L/C Loret/SAF-SLT/50945/20 Feb 67/jdk

[redacted]

# PHOTOGRAPHIC INTELLIGENCE INDOCTRINATION PROGRAM FOR MOL AEROSPACE RESEARCH PILOTS



OBJECTIVE: The objective of the indoctrination program outlined below is to develop in the trainees an understanding and appreciation of the role of photographic intelligence in national affairs. In order to meet this objective it will be necessary to provide a general context of intelligence activities in which to place photographic intelligence in particular, and then to describe briefly some of the national policy decisions based wholly or in part on photographic intelligence.

TENTATIVE SCHEDULE:

## FIRST DAY

### INTRODUCTION

| | | |
|---|---|---|
| 0900 - 0905 | Personal Introduction of Astronauts to DOD, USAF, and CIA Officials | |
| 0905 - 0915 | Program Purpose and Preview of Schedule | Gen Ferguson or Gen Evans |
| 0915 - 0930 | Importance of Man's Role in MOL Program | Dr. Flax |

### NPIC PROGRAM

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| 0930 - 0950 | Keynote Remarks: Importance of Photographic Reconnaissance to National Security | Mr. Helms |







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| 0950 - 1000 | Coffee Break |
| 1000 - 1130 | Intelligence Process and Concepts [redacted]<br><br>To introduce the major areas of intelligence interest (as indicated by Priority National Intelligence Objectives), the concepts of raw versus finished intelligence, the flow and treatment of information from its original acquisition to its ultimate consumer, a comparison of human and technical sources, a contrasting of encyclopedic and estimative intelligence, and concluding with an assessment of photography as an intelligence medium. |
| 1130 - 1300 | Lunch in Secretary of the Air Force Mess |
| 1300 - 1400 | Introduction to Reconnaissance Systems<br><br>To identify and appraise the capabilities and applications of aircraft and drones, satellites, multiple sensor systems, ground photography, and the exploitation equipment used in read-out. |
| 1400 - 1510 | Films: "The Inquisitive Angel"<br>"From Jennies to Satellites" |
| 1510 - 1530 | Coffee Break |

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1530 - 1700 The U-2 Story [redacted]

A continuation in greater detail of some of the events and developments in the ongoing saga of the U-2 aircraft as a collection vehicle.

SECOND DAY

The following international crises or incidents will be presented as illustrations of the role photographic intelligence has played in national policy decisions.

0900 - 1030 Suez, The Congo, Cyprus, Lebanon — Brugioni

To demonstrate how photographic intelligence afforded U.S. policy makers an accurate assessment of each situation as it developed.

1030 - 1045 Coffee Break

1045 - 1130 Film: "Inside Vietnam"

1130 - 1230 Photographic Intelligence on Vietnam [redacted]

To review recent developments and current status of photographic intelligence in tactical military situation of strategic significance.

1230 - 1400 Lunch

1400 - 1500 The Cuban Missile Crisis — Lundahl

This subject speaks for itself; a case in which the national security was clearly

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| | at stake, and in which decisions were based almost solely on photography. | |
| 1500 - 1630 | Modern History of Photo Reconnaissance<br><br>To describe the development of photographic acquisition and interpretation capabilities since 1955; a description of current systems and updating procedures now in effect. | Lundahl |
| 1630 | Concluding Remarks | General Evans |

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PHOTOGRAPHIC TARGET FAMILIARIZATION

1st Day — Background Information

2 hrs — Geography of the Soviet Union (+ film) — Brugioni

A discussion of the geographical belts and areas, cities resources transportation and communications facilities of the USSR.

1 hr — Geography of China — [redacted]

Coverage similar to that above, for China.

½ hr — Climatography of the Eurasian Land Mass — [redacted]

Seasonal distribution of cloud cover, and the appearance of major climate areas from overhead photography.

½ hr — Mensuration in Photographic Intelligence — [redacted]

A definition of detection and identification, ground resolution, technical intelligence, and some of the modern developments in support of technical intelligence.

1½ hrs — Target Positioning in Photographic Intelligence — [redacted]

A discussion of geodetic and orbital parameter methods, the requirements for acquisition, and some problems and solutions.

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2nd Day DEPLOYED MISSILE SITES

½ hr Film: "Rockets in Defense of Peace"

3 hrs ICBMs, MR and IRBMs [redacted]

The history of the Soviet rocket forces, deployment of SS-3, -4, -5, -6, -7, and -8 systems, prototypes, abandoned systems, fixed field sites, single silo deployment (SS-9 and -11), and trends and range indicators.

1 ½ hrs AMM/ABMs [redacted]

Significance and characteristics of the system, current deployment, components, recognition features of deployed sites under varying conditions

1 hr SAMs [redacted]

The site configuration, deployment, capabilities, support and recycle facilities for SA-1, SA-2, and SA-3 systems; a brief discussion of the GANEF system, also.

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3rd Day — MISSILE DEVELOPMENT FACILITIES

1½ hrs — Tyura Tam [redacted]

The test center's mission, location, size and orientation, down-range facilities, coverage history, developmental history, and the moves to space programs.

2 hrs — Kapustin Yar/Vladimirovka [redacted]

The test center's overall importance, location and identification, history, facilities, systems developed and developing there, and trends for the future.

2 hrs — Sary Shagan [redacted]

The significance of this center's role in Soviet defensive systems development, location, characteristics and associated features, its comparison to the US land mass, currently active facilities and their significance.

1 hr — Shuang-Cheng-Tzu [redacted]

This center's location, importance to China, early construction and identification, layout of facilities and range locations, and indications of future uses.

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4th Day NUCLEAR TEST AND PRODUCTION

½ hr Introduction to Atomic Energy Briefings [redacted]

A discussion of the requirements for AE intelligence, some historical background, and an introduction to the scope of the topics to be covered.

1½ hrs Nuclear Research and Materials Production [redacted]

A description of plutonium and uranium, Soviet production techniques and sites, Chinese production and progress in the field.

½ hr Nuclear Weapons Fabrication and Testing [redacted]

Background information on weapons fabrication facilities generally (including identification keys), location and description of Soviet and Chinese sites.

1 hr Semipalatinsk Weapons Proving Ground [redacted]

Location and description of the facility, its main support, facility no. 2, ground zero 24, new underground test site, a cratering event, the Shagan River site, and the primary underground test facility.

1 hr Novaya Zemlya Underground Test Site [redacted]

Location, type of activity, resupply, and significance of the site.

1 hr Lop Nor Test Site, China [redacted]

Coverage similar to those above.

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5th Day — AIR ORDER OF BATTLE, ELECTRONICS, BW/CW

1 hr — Naval Facilities and Vessels

The Soviet and Chinese submarine fleets; their composition, capabilities, support facilities, missions, and locations.

1 hr — Soviet Long Range Air Capabilities

Airfields and associated facilities, nuclear facilities, ASM facilities, model identification of aircraft

1½ hrs — Soviet and Chinese Tactical Air

A brief history of Soviet and Chinese tactical and fighter defense airfields and facilities, locations of these fields, and of flight test and research sites.

1 hr — Soviet and Chinese Electronics

Developments and uses of electronics in determining the function of an installation, and of the state of the art in a nation.

1½ hrs — Biological and Chemical Warfare

Field testing sites in the Soviet Union, locations, sizes, and characteristics.

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6th Day MILITARY PRODUCTION AND ORDER OF BATTLE

1 hr Ground Forces Order of Battle [redacted]

The role of photograph in providing deployment information, and in determining strengths and activities.

1 hr Missile Production [redacted]

2 hrs Aircraft Production [redacted]

A general description of the aircraft industry, engine production, airframe production, flight testing, and new developments in China and the Soviet Union.

1 hr Naval Production: Shipyards [redacted]

The locations, characteristics, capabilities, and activities of submarine construction facilities in the Soviet Union and China.

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7th Day — WEAPONS STORAGE AND CAMOUFLAGE

1 hr — Soviet Nuclear Weapons Storage [redacted]

A description of national stockpiles, airfield storage sites, regional sites, MR/IRBM warhead storage sites, ICBM warhead sites, Tactical SSM and naval nuclear warhead storage.

1 hr — Tactical Missile Storage (SSMs) [redacted]

A rundown of the family of missiles, a review of their deployment with emphasis on associated and support facilities and identification keys.

1 hr — Strategic Missile Storage [redacted]

The same or similar coverage as for SSMs, above.

1 hr — Naval Missile Storage [redacted]

The two kinds of naval missiles, special handling equipment for them, location of storage sites, cratology for these missiles, site characteristics.

1 hr — Sensitive Operations Complexes [redacted]

Definition, why sensitive, locations, operations areas, rail facilities, and supporting facilities.

1 hr — Camouflage and Deception [redacted]

Definitions, objectives of deception, methods of camouflage, advances since WW II, and Soviet and Chinese capabilities and intentions.

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8th, 9th and 10th Days TARGET FAMILIARIZATION

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| 20 hrs | Practical application of information presented during program, i.e., astronaut practice in target recognition using photographic material. | All |
| 4 hrs | Questions, Review, and Critique | All |

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# SECURITY CONSIDERATIONS AND PROPOSED SECURITY ARRANGEMENTS FOR MOL ASTRONAUTS TRAINING AT NPIC



Astronaut identification at NPIC facility by uncleared personnel would reveal the intelligence nature of the MOL Program. With this underlying postulate in mind, the building access procedure and general milieu at NPIC was surveyed by an NRO security representative.

NPIC building access procedures are conducive to covert access by persons where specific identities in relation to NPIC would be sensitive. The building environment is similarly satisfactory.

According to NPIC officials, up to 50 visitors come to NPIC daily---some in small groups. The appearance of a small number (4 or 5) of strange faces for building access is not unusual and will not draw any special attention.

Recognition of astronauts at NPIC is considered extremely remote. Special security arrangements are set forth below:

1. The fact of astronaut-NPIC association will be DORIAN.

2. Astronauts will visit and/or participate in activity at NPIC in civilian attire only.

3. To preclude inadvertent identification to unwitting persons of astronauts, now or in the future, as having visited NPIC, arrangements will be made to preclude astronauts' names from appearing in the building access register.

4. The tentative plan is to schedule astronauts for the NPIC orientation in groups of 4 or 5.

5. For directing transportation conveyances and presenting travel vouchers, NPIC will be described as "Navy Yard, Building 213, corner of M and 1st Street, S.E."



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