~~TOP SECRET~~

HANDLE VIA
TALENT-KEYHOLE
CONTROL SYSTEM

~~IST~~ NATIONAL RECONNAISSANCE OFFICE
WASHINGTON, D.C.

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26 February 1969

MEMORANDUM FOR TCO/DOD

SUBJECT: Satellite Camera Manuals

Referencing item 6 of your January 15, 1969 Information Letter No. 10 to all DOD/TCOs, a serious misconception may develop regarding security (access) policies on satellite camera manuals.

With the support of DIA and NPIC, access to satellite camera manuals has been limited expressly to individuals having a very direct and specific "must know." Essentially, these manuals are for on-the-job PI's and analysts. Your information letter could give the impression that the documents are available to a larger audience than we intend.

We will not, of course, restrict access if a specific need exists, particularly within those organizations directly involved in satellite photographic interpretation and analysis. At the same time, it is essential that the manuals not be available as advertised within the overall TALENT-KEYHOLE system to personnel involved in the general field of strategic uses of earth sensors or interpretation.

We need your help in enforcing specific "must know" for these documents. Specifically, please ask your staff to take these actions:

1. Make sure that all access to KH Manuals continues to be handled on a registry basis, providing a permanent record of all persons granted access.

2. Make sure that any Manuals provided to the "community" on other than a very strict "must know" basis are recalled at once.

3. Publish a notice in your next information letter clarifying access policy for KH Manuals. It might be worded as follows:

> "Satellite camera manuals are available only to personnel authorized access after a specific "must know" has been validated. Must-know is restricted to those people who cannot work effectively in satellite analysis or interpretation without knowing camera system specifications. Essentially this means a limited group within the analyst/interpreter community. A permament record must be maintained of all personnel granted access to these manuals."

Paul E. Worthman
PAUL E. WORTHMAN
Colonel, USAF
Deputy Director
NRO Staff

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DEFENSE INTELLIGENCE AGENCY
WASHINGTON, D.C. 20301

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15 MAR 1969

DIAXX

MEMORANDUM FOR THE DEPUTY DIRECTOR, NRO STAFF (COLONEL WORTHMAN)

SUBJECT: Satellite Camera Manuals

1. Reference is made to your memorandum, TCS 37570-69, dated 26 February 1969, subject as above.

2. The Newsletter item was prompted by suggestions from your office to take positive action to have lower units realize that they have on hand sufficient information in the TALENT/KEYHOLE control system to accomplish their functions, and to reduce the proliferation of requests for BYEMAN clearances.

3. Please be assured that this office is taking every precaution to insure that Satellite Camera Manuals are not being indiscriminately distributed to organizations under Department of Defense. Due to the classification of and control procedures for the manuals, it goes without saying that all persons having access are recorded. We have no intention of providing the manuals to the community unless a specific need exists and has been fully substantiated.

[redacted]

Colonel, USAF
Chief, Special Activities Office

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BYEMAN-TALENT-KEYHOLE
CONTROL SYSTEMS JOINTLY

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ATTACHMENT

WORKING PAPER

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PART I: SYSTEM DESCRIPTION

INTRODUCTION

The KH-8 Dual Mode camera system, like its predecessors, is a satellite-borne photographic reconnaissance system designed to gather high resolution photography. The KH-8 was designed essentially for point target surveillance. The addition of Extended Altitude Capability (EAC) of the Dual Mode configuration allows operation at higher altitudes which results in wider swath coverage and scale commensurate with Search-Mode requirements. The versatility of the Dual Mode system allows the highest quality images of technical intelligence targets to be derived from a mission which also satisfies a large portion of the standing search task. The resultant imagery from a Dual Mode mission is returned to earth in two sequentially released recovery vehicles. Various system improvements and modifications have been incorporated, effective with Flight Model 52, to achieve this increase in flexibility and utility for the KH-8 camera system.

see ① attached

TABLE I

DUAL MODE IMPROVEMENTS

SYSTEM PERFORMANCE

- Extended altitude capability (68-470 nmi)
- Dual range film drive speed control
- 90-120 day lifetime
- Sense focus over complete slant range
- Expose ancillary data at all film drive speeds
  - Vehicle timing data tracks
  - Added smear slits for high mode
  - Higher thrust SRV rocket motors
  - SRV variable recovery sequence timers

ACQUISITION CAPABILITY

Increased area coverage at high altitude (17×10^6 nm^2 potential)

Crisis reaction capability

Benign orbital environment at high altitude enhances vehicle stability

Use of very high resolution films

Increased frame potential (to 25,000)

Sophisticated target conflicting and selection software

Flexible modes of operation (i.e. various mission scenarios)