

116



# DIRECTOR'S REPORT

TO THE

## NRP EXECUTIVE COMMITTEE

ON THE

FY 1970 PROGRAM

ADDSY PROCESSED Initials Date -

August 8, 1969

EARPOP BYEMAN CONTROL SYSTEM

HEXAGON CORONA GAMBIT TAGBOARD



CONTROL NO BYE 13059-69 COF ٥F COPIES PAGE OF\_ PAGES 908-08-001



Page

1

1

2

3

3

4 5

6

6

8

8

# CONTENTS

Introduction

General

Organization

FY 1970 Program Issues

HEXAGON-CORONA GAMBIT STRAWMAN POPPY P-11

R&D (Satellite) U-2 Aircraft Advanced Aircraft





CONTROL NO		
COPY	OF	COPIES
PAGE	OF	PAGES



#### Introduction:

I have provided, separately, a report on the financial aspects of the FY 1970 program in which several issues were outlined for Executive Committee consideration on August 8. This report will address the highlights of NRP status and the FY 1970 program and present specific descriptions of those additional issues for Executive Committee consideration on August 15.

#### General:

ONTROL SYSTEM

I have submitted an FY 1970 base program which I believe can be accomplished within the present budget and which represents the best possible response to the collection needs expressed by USIB and to the guidance I have received from the Executive Committee. Included are a number of options which relate to the purchase of additional spacecraft for current programs

and other options which relate to the possible start of new programs (such as Readout and a MOL follow-on). Several of these options would require additional formunds. Through careful control, I believe I can manage satisfactorily the base program within my current authority and budgetary allocations. As is indicated pote al funding deficiencies, the budget for program

> CONTROL NO\_\_\_\_\_\_OF\_\_\_\_COPIES PAGE\_\_\_\_\_OF\_\_\_\_PAGES

Approved for Release: 2020/02/07 C05111506

FXCLUDED FROM AUTOMATIC REGRADING

DOD DIRECTIVE 5200 10 DOFS NOT APPLY



is tight; therefore, I intend to exert stringent budgetary controls on the program throughout the year. In those instances in which the program is not fully responsive to USIB requirements, I will call the deficiencies to your attention.

#### Organization:

There have been several recent key personnel changes in the NRO: Dr. Robert Naka is now my Deputy, having replaced Mr. Reber on July 1, 1969; Brigadier General William G. King, Jr., replaced Major General John L. Martin as Director of NRO Program A, headquartered in Los Angeles. Colonel Lew Allen was appointed Director of the NRO Staff on June 20, succeeding Brigadier General Berg. I intend to make other changes, specifically, as I discussed previously, the establishment of a systems analysis capability within the NRO Staff. For the present, I am satisfied with both the organization and manning of the NRO.

Mr. Laird's recent realignment of responsibilities for DOD intelligence program management will influence the NRO. The management of resource allocations among the CIF P and NRP by Bob Froehlke's office will probably result in the assumption of an additional administrative support workload by the NRO; however,

SYSTEM

CONTROL NO		-
COPY	0F	CGr.
page2	0F	PAC.

EXCLUDED FROM AUTOMATIC REGRADING



I am convinced that we can constructively provide the support necessary to achieve Mr. Laird's objective. I understand that my relations with the Executive Committee will remain unchanged.

#### FY 1970 Program Issues:

The issue papers which I provided for your review in preparation for the August 8 meeting outline the proposed allocation to specific programs. In the paragraphs which follow, I will comment on each of the major efforts.

I am concerned with cost growths in all our programs. A portion of this cost growth can be attributed to inflation but most, I believe, is due to the technical difficulties encountered in extremely advanced programs whose major subsystems are being developed concurrently.

Although many of the technical problems in our developmental systems are behind us, we will probably continue to be plagued by cost and schedule difficulties normally associated with major technical advancements in rather large sophisticated, concurrent subsystem developments.

Barring any unexpected major technical difficulties, I am convinced I can control these programs within the budget.

#### HEXAGON-CORONA

On June 20, I presented to you a special report on these programs.



CONTROL NO		
COPY	OF	COPIES
PAGE 3	OF	PAGES

Approved for Release: 2020/02/07 C05111506

EXCLUDED FROM AUTOMATIC REGRADING

DOD DIRECTIVE 5200.10 DOES NOT APPLY



I have continued my examination of HEXAGON management and plan to work with the program offices to improve cost control and schedule confidence. The recently revised 5-5-2 launch schedule for CORONA will provide a modest schedule protection for up to about a twelve month delay in satisfactory HEXAGON operations. The reduced CORONA launch schedule coupled with recent on-orbit technical difficulties will significantly reduce our percentage satisfaction of the stated USIB requirements for search coverage. The attached chart reflects our actual and projected CORONA performance against these requirements.

I believe, also, that we are seeing the effects of a waning interest and an inattention to detail often associated with the production closeout of a program. We have had a disturbing succession of difficulties with CORONA including one nearly complete failure (the March mission) and the current (July 23 launching) mission on which the aft camera has failed. We are taking every action possible to improve CORONA system reliability.

#### GAMBIT

The last mission of the first block on vehicles was by far the most successful in the series.

A total of 7057 targets was photographed. The first flight in the new

CONTROL N	٥	
COPY	0F	COPIES
PAGE	4 OF	PAGES

DOD DIRECTIVE 5200.10 DOES NOT APPLY

AUTOMATIC REGRADING

series is now on schedule for August 12 (double the film load and two recovery capsules). This new vehicle will have a number of new subsystems; however, as a result of a careful orbital checkout program we have a very high confidence in mission success. You will note a reduction in budget of approximately \$30 million for this pro-This decrease comes as a result of earlier launch rate regram. The GAMBIT system is currently satisfying 98% of the ductions. quarterly requirements contained in the CCRP. The requirement for quarterly coverage of the targets contained in the CCRP can probably be met with a reduced number of vehicles per year. I must note, however, that beginning in FY 1973, when the launch rate goes to 4 vehicles per year, the failure of a single GAMBIT vehicle will drive the quarterly satisfaction of requirements to zero in that quarter, and will significantly reduce the yearly average.

I have attached a chart which depicts for our photographic satellites the expected number of days on orbit through FY 1974.

#### STRAWMAN

The first mission of this series operated successfully for seven months. There were a number of defects which occurred during the mission. The second vehicle is now on orbit and appears to be operating quite successfully. A large increase in required funding

HANDLE VIA

Ť	<del>OP</del> -	<del>SE(</del>	R	ET-		
XCUIDED	ÊRÔM	AUTOMA	TIC	REGRA	DING	

DOD DIRECTIVE 5200.10 DOES NOT APP

CONTRO	L NO		
COPY		0F	COPIES
PAGE		0F	PAGES
PAGE	5	0F	PAG



vs. budget was submitted (\$48 million vs. \$28 million). This increase is caused by proposed vehicle improvements. The low band THRESHER payload has not provided emitter location accuracies which meet USIB stated needs for EOB. Consequently a modification was proposed. Since this modification would not be accomplished before vehicles 4 and 5 and

I have not recommended that modification or other related improvements. The program can continue within its budgeted amount.

#### POPPY

This program continues to operate successfully and is expected to be under budget based on a two-year launch separation.

#### P-11

Anticipated costs have increased significantly due to the marked increase in sophistication of the ELINT payloads. Development of these advanced payloads was initiated to meet specific USIB quick reaction requirements. . nave directed a re-examination of these payload developments and am now suggesting that the P-11 schedule for FY 1971 and beyond be 3 per year instead of 4 as previously planned. With these restrictions, I believe that the program can be



COPY		0.F	COPIES
PAGE	6	ÖF	PAGES

EXCLUDED FROM AUTOMATIC REGRADING DOD DIRECTIVE 5200.10 DOES NOT APPLY



accomplished for less than that indicated by the field submissions.





CONTROL NO		
COPY	OF	COPIES
page 7	OF	PAGES



## R&D (Satellite)

Several of the exploratory R&D activities are reduced compared to previous years but there is an increase approved for readout technology. The interest in readout has caused us to focus our applied research activities on the critical components required for that potential system.

#### U-2 Aircraft

Following our June 20 discussion, a study of the U-2 program is being initiated. I am convinced that the program should proceed without major change for FY 1970 but will prepare recommendations for the FY 1971 program.

#### Advanced Aircraft

I have recommended against initiation of an advanced aircraft program. (A separate issue paper on this subject has been provided.) I am also recommending no further TAGBOARD drone procurement consistent with Executive Committee guidance. I have under consideration the possible inclusion within the NRP of the Air Force studies of an advanced subsonic drone. I believe this drone should be con-

BYEMAN CONTROL SYSTEM

	OP-	SE	<del>CR</del>	<del>ET</del>	
CLUDED	FROM	AUTOM	ATIC	REGRADING	
DO DIREC	TIVE 52	00.10	DOES	NOT APPLY	

CONTRO	NO	4	
COPY		OF	COPIES
PAGE	8	OF	PAGES



sidered in competition with other NRP programs. I plan to make the appropriate recommendations at a later date.

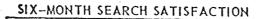
I recommend the approval of the FY 1970 base program as outlined in my paper for discussion on August 8. I have attached individual issue papers which discuss potential new and follow-on programs and a consolidated set of options for these programs.

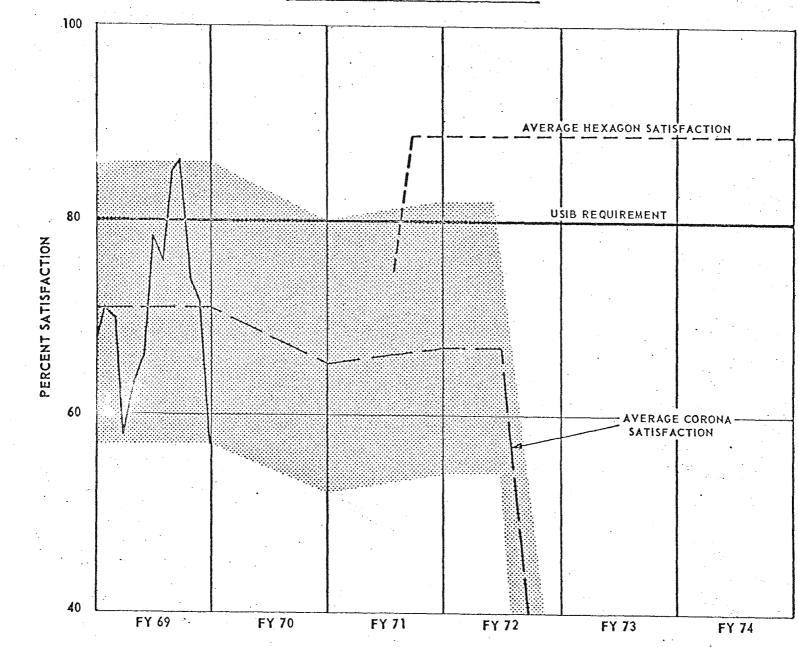
John L. McLucas



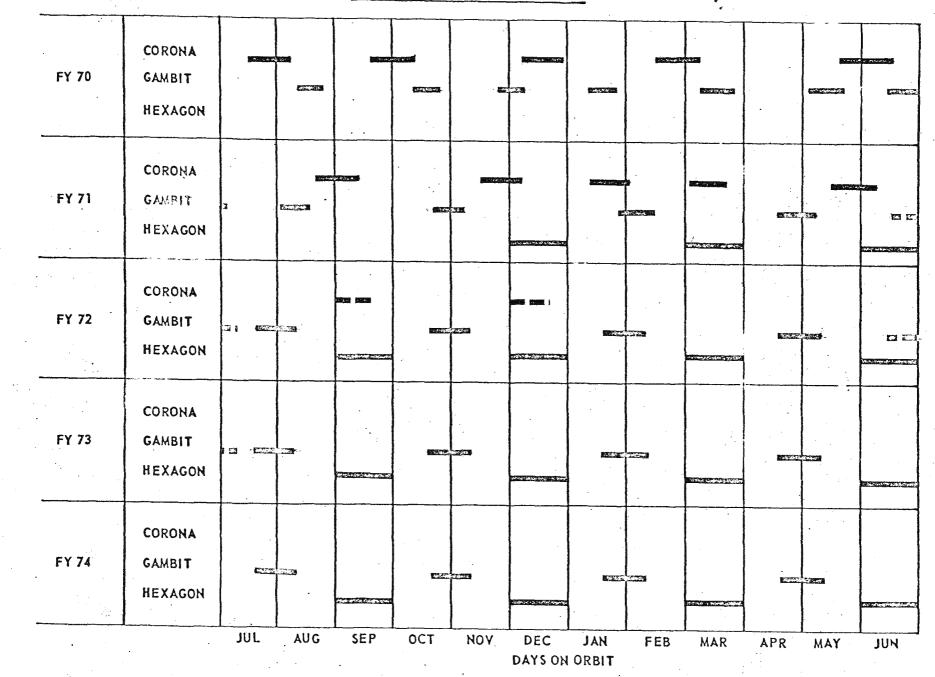


CONTROL NO		
COPY	0F	COPIES
page 9	OF	PAGES





# NRP PHOTOGRAPHIC SATELLITES





#### HST NATIONAL RECONNAISSANCE OFFICE

WASHINGTON, D.C.

THE NRO STAFF

7 July 1969

#### MEMORANDUM FOR DR. MCLUCAS

SUBJECT: Photographic Experiments on CORONA

#### BACKGROUND

Dr. Flax established an Ad Hoc Committee to monitor and report on a series of photographic flights and processing experiments performed on the J-3 improved CORONA systems. These are outlined briefly in the Introduction Section of the report attached at TAB D.

#### DISCUSSION

The Conclusions and Recommendations Section of TAB D provides a summary of the results of these tests, with detailed documentation making up the remainder of the report. The data presented is specifically reported for CORONA.

The major conclusions and recommendations in TAB D concern further testing of color materials and encourage COMIREX to establish a special subcommittee to interface with these activities. These are highly desirable objectives, and an indorsement from you will add a needed emphasis.

CIA has requested that the report at TAB D be approved for distribution as specified in TAB B. The Director of Defense Research and Engineering should be added to this distribution list.

CIA also requested that the Committee should be dissolved as it was intended that the group function only through the first five J-3 systems. The activities of the Committee have been assumed and actively pursued by the Staff and the community.

The overall problem in unconventional photographic techniques and equipment concerns not only CORONA but all areas of the photographic NRP. A proposed agenda for briefing you on this overall area is attached at TAB C and can be scheduled for one hour at your convenience.



TOP SECRET 947-07-014
EXCLUDED FROM AUTOMATIC REGRADING
DOD DIRECTIVE 5200.10 DOES NOT APPLY

ONTRO	L NO	Inte	rna	.1		
OPY	1	OF	2	COPIES		
AGE	1	OF	2	PAGES		





#### RECOMMENDATION

I recommend that you sign the message attached at TAB A and set a time for the proposed briefing.

SEIGEB Captain, USN

Atchs

TAB A, Proposed Message TAB B, BYE 7349-69 TAB C, Proposed Agenda TAB D, BYE 7180-69



 $\begin{array}{c} \begin{array}{c} \text{control no} & \text{Internal} \\ \begin{array}{c} \text{copy} & 1 & \text{of} & 2 \\ \begin{array}{c} \text{page} & 2 & \text{of} & 2 \\ \end{array} \end{array} \\ \begin{array}{c} \text{page} & \text{pages} \end{array}$ 

Approved for Release: 2020/02/07 C05111506

EXCLUDED FROM AUTOMATIC REGRADING

DOD DIRECTIVE 5200.10 DOES NOT APPLY

SECKET

IUP

• •	Approved for Ro		HAN		•	ige	_1_of	1
Originatory Col	DISTRIBUTION							
Originator: Col	SS+1	SS-4		SS-8	СОМР		FILE	7
	SS-2 EXEC	SS+5		SS-9	SA F SL			
Date: <u>1 Jul 69</u>	SS-2 ADM IN X	SS-6		SAFRD-1	AFRDR			
	SS-3	SS•7	x	SAFRD-2	RF	x		
ROUTINE   WHIG   SUBJ: J-3 AD HOC CON	Action: P Info: MMITTEE FINA		ORT					
FOR CAPT	F SUBIFOT D	FDORT /	NT)		I DONE			
2. THE COMMITTEE IS					-	$\mathrm{TH}$		
YOUR RECOMMENDATION.								
3. CONCUR IN YOUR M.	AJOR RECOMMI	ENDATIC	ONS	OUTLINED	IN PARA	2.2	,	
4. THE DISTRIBUTION LIST, AS ATTACHED TO THE SUBJ REPORT, IS APPROVED.								
REQUEST YOU ADD DDR&	Е.							

tion Arun	
Coordination	BYEMAN CONTROL CHANNELS ONLY Classification SFCRET

Releasing Officer

CENTRAL INTELLIGENCE AGENCY WASHINGTON, D.C. 20505

P.KO P.

BYE-7349-69 Copy /

24 JUN 1969

MEMORANDUM FOR: Director, National Reconnaissance Office

SUBJECT : J-3 Ad Hoc Committee Final Report

1. The J-3 Ad Hoc Committee was formed to guide, coordinate and evaluate a series of photographic experiments on the CORONA System. The purpose of these experiments was to evaluate the capabilities of the J-3 System with new photographic techniques. It was hoped that, ultimately, the intelligence productivity of the System as a whole could be improved by the ability to provide different types of information.

2. The Committee, as an aggregate, has put much effort into the task as is evidenced by the attached summary report. It has been my professional and personal pleasure to have worked with each member of the Committee; and I commend them for an excellent job, for their expertise, and for the team spirit which they evidenced.

3. I recommend that the Ad Hoc Committee be officially dissolved as having served its purpose. The capabilities of the J-3 payload are now well known; and the appropriate, special use of the System to fulfill intelligence requirements can be called out through normal channels.

4. A recommended distribution list for the summary report is attached. Distribution will be effected by the Agency upon your approval.

U. S. Navy (Ret.), Chairman CORONA Photographic Experiments (Ad Hoc) Committee

Attachment: A/S



906-24-006

HANDLE VIA BYEMAN-TALENT-KEYHOLE CONTROL SYSTEMS JOINTLY

GHOUP 1 Excluded from automatic downgroding and declassification



Attachment I BYE-7349-69

#### Distribution List

Ad Hoc Committee Members - 10 copies

Director CIA Director CIA/DD/S&T Director CIA/DD/S&T/OSP Director CIA/DD/S&T/OSI Director CIA/DD/S&T/OSA Director CIA/DD/S&T/ORD Director CIA/DD/S&T/FMSAC

Director CIA/DDI/OSR Director CIA/DDI/OER Director CIA/DDI/OSR Director CIA/DDI/IAS Chief CIA/DDI/IRS Director CIA/DDI/NPIC Chief CIA/DDI/NPIC/TSSG Chief CIA/DDI/NPIC/IEG Chief CIA/DDI/NPIC/PSG

Director NRO Director SOC Director DIA/AP - 9 Director DIA/AP - 10 Director DIA/XX

JRC TOPOCOM ACIC SAFSP SAFSL

Chairman, COMIREX Chairman, ICRS Chairman, EXRAND Chairman, EXSUBCOM Chairman, MC and G Working Group



HANDLE VIA BYEMAN-TALENT-KEYHOLE CONTROL SYSTEMS JOINTLY





#### PROPOSED AGENDA

ON

## UNCONVENTIONAL PHOTOGRAPHIC TECHNIQUES

- 1. Sensors and Techniques
- 2. Brief Background of Activities
  - a. Aircraft
  - b. Satellites
- 3. Color Photography
  - a. Requirements
  - b. Examples (Bi-Color, SO-121, SO-180)
  - c. Systems Capabilities and Limitations
  - d. Conclusions
- 4. Night Detection Photography
  - a. Requirements
  - b. Examples (U-2, KH-7)
  - c. Systems Capabilities and Limitations
  - d. Conclusions
- 5. Recommendations
- 6. Future Possibilities





CONTROL NO		
COPY	OF	COPIES
P A G E	OF	PAGES