

~~TOP SECRET~~

PROCESSED  
HANDLE VIA  
**BYEMAN**  
CONTROL SYSTEM

~~(S)~~ NATIONAL RECONNAISSANCE OFFICE  
WASHINGTON, D.C.

18

THE NRO STAFF

6 April 1971

MEMORANDUM FOR DR. McLUCAS

SUBJECT: Preparation of ExCom Issue on Interim Systems

The purpose of this paper is to outline a plan for presenting the Interim System Issue to the ExCom.

Based on your comments during the executive session at SAFSP on 31 March and consideration of various alternatives by the Staff, we recommend that the interim system alternatives be presented in a series of mix options which consider the total NRP imaging satellite mix.

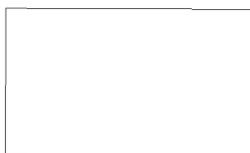
Mr. [ ] has stated that it is impractical to develop a mix analysis to the extent of complete fiscal year funding comparisons for the April ExCom. However, we will be able to prepare a description of each mix option, a thorough discussion of the pros and cons, funding details of the interim system portion of each mix and the FY-71 costs to implement each option. Mix option funding in fiscal year detail can be provided in July, to the extent necessary after April ExCom reaction.

The attached list of options with brief descriptions and discussions is forwarded to illustrate some of the options being considered. The list will undoubtedly grow and as indicated above, each option will be filled out with more detail.

Your approval of this general approach is requested.

*John D. Regenhart*  
JOHN D. REGENHARDT  
Major, USAF

Attachment  
Option Chart



HEXAGON GAMBIT CORONA [ ]

HANDLE VIA  
**BYEMAN**  
CONTROL SYSTEM.

~~TOP SECRET~~

EXCLUDED FROM AUTOMATIC REGRADING

Internal  
CONTROL NO. \_\_\_\_\_  
COPY 1 OF 2 COPIES  
PAGE 1 OF 1 PAGES

~~TOP SECRET~~HANDLE VIA  
**BYEMAN**  
CONTROL SYSTEMOption I - Buy more HEXAGONS and GAMBITS

This option will be based on six HEXAGON and six GAMBIT missions per year. It can provide 365-day per year continuity but it does not meet the requirement for 12-hour response, yielding at best one to two-day response and then at the possible cost of an early recovery.

Option IA - Option I phasing in GAMBIT through SRV modification

This option begins like Option I but phases from double-bucket to triple-bucket GAMBITS. This change alleviates to some extent the penalty associated with an early SRV recovery.

Option II - Immediate development of a crisis response dedicated system

This option will be based on one of the special purpose crisis response systems. [redacted] and multi-bucket CORONA will be considered. This option will provide an early crisis capability and may turn out to be sufficiently useful to merit retention after EOI becomes operational. This option will require a related reduction in EOI or [redacted] to fund.

Option III - Initiate development of FROG with subsequent reduction of HEXAGON and GAMBIT missions

Development and acquisition of Film Readout GAMBIT (FROG) would be initiated with the objective of reducing the number of HEXAGON and GAMBIT launches required. The reduced HEXAGON and GAMBIT launch rate would provide some off-setting funds after FROG IOC. However, the initial funding would have to come from EOI or [redacted]

In the long term, depending on EOI and FROG flight results, FROG could be terminated after EOI IOC or; EOI could grow toward an area capability (with the [redacted] and FROG could grow toward increased resolution.

HEXAGON GAMBIT CORONA [redacted]

HANDLE VIA  
**BYEMAN**  
CONTROL SYSTEM~~TOP SECRET~~EXCLUDED FROM AUTOMATIC REGRADING  
DOD DIRECTIVE 5200.10 DOES NOT APPLYCONTROL NO. Internal  
COPY 1 OF 2 COPIES  
PAGE 1 OF 2 PAGES

~~TOP SECRET~~HANDLE VIA  
**BYEMAN**  
CONTROL SYSTEMOption IV - Increase NRP by amount necessary to develop  
FROG in parallel with EOI

In this option, GAMBIT and HEXAGON will continue at their planned rates and EOI system acquisition would be initiated in January 1972. An additional amount would be added to the NRP for development and acquisition of FROG.

This option has the same long-term alternative described in Option III.

Option V - Initiate FROG development and delay EOI as  
required to fund

Initiate FROG development and acquisition and delay the EOI system as required to provide the FROG funding. The EOI funding impact and delay will depend on which FROG start option is exercised, May 71, August 71 or December 71.

EOI delay would permit thorough examination of EOI design alternatives, further development of laser data relay technology, better understanding of the tactical needs for near-real-time imagery, examination of the implications of tying-up such a large portion of our imagery capability in one or two complex and vulnerable vehicles and evaluation of fabrication techniques suitable for rates on the order of one vehicle per year.

This option has the same long-term alternative as described in Option III.

HANDLE VIA  
**BYEMAN**  
CONTROL SYSTEM~~TOP SECRET~~EXCLUDED FROM AUTOMATIC REGRADING  
DOD DIRECTIVE 5200.10 DOES NOT APPLYCONTROL NO Internal  
COPY 1 OF 2 COPIES  
PAGE 2 OF 2 PAGES