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JUN 20 1968

MEMORANDUM FOR MAJOR GENERAL JOHN MARTIN, DIRECTOR, PROGRAM A

SUBJECT: Initial Program Approvals, FY 1969

Initial approvals for program year 1969 are furnished in the attachments. These cover all SAPSP programs except ABM/AES, which will be addressed separately.

While the launch schedule planning basis for FY 1970 and subsequent years, as related to FY 1969 funding approvals, is reflected against applicable programs, these are in some cases subject to optional considerations, which will be addressed in FY 1970 budget guidance.

The initial program approvals herein are on a gross funding basis. To the extent that unobligated FY 1968 and prior year balances exist as of 30 June 1968, the NRO Comptroller will conduct an evaluation with your personnel, to ascertain any appropriate amounts to be applied against the P.Y. 1969 gross approvals.

Signed

ALEXANDER H. FLAX  
Director

Attachments

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FINANCIAL RECAP. DNRO INITIAL APPROVALS

FY 1969

(Thousand Dollars)

	<u>Missile</u> <u>White</u>	<u>Missile</u> <u>Black</u>	<u>RDTE&amp;E</u> <u>White</u>	<u>RDTE&amp;E</u> <u>Black</u>	<u>Total</u>
CORONA	\$35,057	\$ 650	\$ 750		\$ 36,457
HEXAGON	26,129	5,704	67,147	15,867	114,847
GAMBIT	122,424	45,477	1,200	9,345	178,446
SIGINT 770	19,918	25,030			44,948
SIGINT POPPY	12,595				12,595
SIGINT P-11	6,110	14,250			20,360
<div></div>					
Satellite Control					
Facilities	77,134				77,134
AFSPPF	1,384	1,292	2,416		5,092
Vulnerability			3,676	500	4,176
Applied Research/ Advanced Technology			4,498	7,175	11,673
Advanced Development			2,900		2,900
Miscellaneous Development			2,087	3,000	5,087
Miscellaneous Operating	<u>663</u>	<u>2.3</u>	<u></u>	<u></u>	<u>665.3</u>
TOTAL	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>

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CORONA Initial Approval, FY 1969SAFSP Portion (Thousand Dollars)

The DNRO initial approvals are based on the following planned launch schedule:

	<u>FY1968</u>	<u>FY1969</u>	<u>FY1970</u>	<u>FY1971</u>
Launch	8	7	6	4
Reserves	6	6	6	2

FY 1969 Costs:RDT&E - White:

SCF Compatibility	\$ 750
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Missile Procurement - White:

Spacecraft	2,800
Spacecraft Testing, Recycling, Reserves and Launch Support	6,000
C&C Peculiars	600
Thorad Booster	5,782
Agana	1,100
BTL Guidance	1,440
Vulnerability:	(a)
Mod present Attack Alarm Reporter	150
Booster Launch	7,721
Agana Launch	8,800
Support Services	480
Aerospace (4 MTS)	<u>184</u> (b)
Sub-total	35,057

Missile Procurement - Black:

DISIC	0 (c)
Systems Engineering	0 (d)
Bit Boxes	<u>650</u>
Sub-total	650

SAFSP Total	36,457
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(a) SAFSP recommendations for Coiled Foil Chaff (\$1,500K) and systems integrating contractor effort for Corona survivability aid (\$1,200K) deferred from approval, pending report results and conclusions.

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(b) Based on Aerospace allocations for FY 1968 in as of 31 May 68 monthly financial report, Corona is 4 MTS equivalent, and there is no known reason for an increase to 6 in FY 1969. However, see statements under separate sheet on over-all Aerospace.

(c) Note at bottom of SAPSP sheet on DISIC options that "\$.644 million of FY68 funds have been initiated against above requirements and should be deducted from each option for budgeting purposes." Initial approval effort is based on not flying DISIC on two missions in FY 1969, nor on one or two in FY 1970.

(d) Systems Engineering at zero new funding, based on SAPSP statement 10 in submission.

The initial approval is based on extended life for both the J-1 and J-3 systems, in lieu of additional system procurement as in Options 2 and 3. The approval inherently includes employing a solar array on J-3 systems, and battery removals. Specific funding approvals for these modifications are deferred, pending an early refinement of development and hardware costs as applicable to FY 1969. Further details on these approaches will be issued.

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# HEXAGON Initial Approvals, FY 1969 (Thousand Dollars)

The DNRO initial approvals are based on the following planned launch schedule:

Launch	<u>FY 1971</u> 4	<u>FY 1972</u> 5	<u>FY 1973</u> 5
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This is one launch less in FY 1971 than the SAFSP submission, and is based on an October 1970 first launch.

## FY 1969 Costs:

### RDTE - White:

Spacecraft	\$31,553
Recovery Vehicle	7,090 (a)
Command Sub-system	1,809
AGE and Pad Activation	22,895
Booster SE/TD	1,500
Aerospace	<u>2,300</u>
Sub-total	67,147

### RDTE - Black:

Spacecraft	2,827
Recovery Vehicle	1,840 (a)
SI Camera	2,000
SI Integration	5,300
Special Test Equipment	3,100
Bit Box Design and Integration	800 (b)
Precision Attitude Measuring	<u>0</u> (c)
Sub-total	15,867

### Missile Procurement - White:

Spacecraft	17,166 (d)
Recovery Vehicle	1,890 (a)
Booster Propellants	1,000
Command Subsystem	4,073
Support Services	1,000
Mission Planning	<u>1,000</u> (e)
Sub-total	26,129

### Missile Procurement - Black:

Spacecraft	3,844
Recovery Vehicle	1,260 (a)
Bit Boxes	600 (b)
Precision Attitude Measuring	<u>0</u> (c)
Sub-total	5,704

SAFSP Total

114,847

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- (a) Initial submission was adjusted by SAFSP to these figures in CHARGE 1867.
- (b) Bit Box development reduced on the assumption that the SBA can provide a telemetry link and probably the tape recorder, and that the more sophisticated Bit Box configuration must be better defined before approval. Bit Box hardware reduced for the latter reason.
- (c) Precision Attitude Measuring deferred from initial approval, pending study results, a specific proposal, and evaluation of requirements.
- (d) Spacecraft reduced \$1,000K in accordance with CHARGE 1963.
- (e) Mission Planning at \$1,400K in FY 1969 is considered excessive, and is reduced to \$1,000K.

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The DNRO initial approvals are based on 8 launches in FY 1969, and either 5 or 6 successful launches in each of fiscal years 1970 thru 1972 (to be determined). WHIG 7760 is also applicable.

FY 1969 Costs:RDT&E - White:

DACS	\$700
SGLS	500
Sub-total	1,200

RDT&E - Black:

DFM	5,320
R-5' Lens	4,025
Sub-total	9,345

Missile Procurement - White:

Spacecraft	48,304
Titan IIIB Booster	42,900
Command Subsystem	10,831
Industrial Facilities	235
Recovery Vehicle	6,670
Booster Launch	4,500
Agena Launch	3,024
Support Services	500
Mission Planning	2,700
Aerospace	2,760
Sub-total	122,424

Missile Procurement - Black:

Payload	37,005
Recovery Vehicle	2,900
Cervit	2,668
Glass Polishing	1,281
Bit Boxes	650
Movement of Equipment	973
Sub-total	45,477

GAMBIT Total	178,446
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SIGINT 770 Initial Approvals, FY 1969 (Thousand Dollars)

The initial approval is based on the following launch schedule:

	<u>FY 1969</u>	<u>FY 1970</u>	<u>FY 1971</u>
STRAWMAN Launches	2	2	1

Note that this is a change from the financial program guidance and the SAFSP cost submission. The approved schedule plans six month separations between launches. No approval for a 6th Strawman is granted at this time; a reassessment of the Sigint 770 program will be made.

FY 1969 Costs:Missile Procurement - White:

Spacecraft	\$10,080
Satellite Control Peculiars	1,000
ETL Guidance	360
Agens Hardware	1,100
Booster Launch	2,520
Agens Launch	3,300
Support Services	500
Command Generation	250
Trajectory/Motor Drop	200
Aerospace	608
Sub-total	19,918

Missile Procurement - Black:

Spacecraft	11,100
Payloads	8,080
MADS	4,450
Mission Planning	1,400
Special Payload	*
Sub-total	25,030

SIGINT 770 TOTAL	44,948
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\* Specific FY 1969 funding amount to be resubmitted, considering FY 1968 funding applied. The effort, in itself, is approved.

The Trajectory/Motor Drop initial approval is \$500K less than the submission, resulting from discussions with SAFSP.

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SIGINT POPPY Initial Approvals, FY 1969 (Thousand Dollars)

The initial approval is based on an anticipated launch slip of vehicle 7106 from November 1968 to about January 1969, vehicle 7107 to be launched 18 months after 7106, 4 Balls and 1 aft-rack P-11 to be carried per POPPY, and launch on Thorad/Agena. This is Option 5 except for timing of launch, and would involve one launch in FY 1969 and one in FY 1971.

FY 1969 Costs:Missile Procurement - White:

NRL Payload	\$6,238
Thorad Booster	2,217
Agena	1,100
BTI Guidance	180
Integration	500
Thorad Launch	1,260
Agena Launch	1,100

POPPY TOTAL 12,595

The NRL submitted costs (\$7,165K) have been reduced by \$500K anticipated FY 1968 carryover, and by \$427K related to analog-to-digital conversion at Adak, deferred for further examination. Costs otherwise were accepted.

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SIGINT P-11 Initial Approvals, FY 1969 (Thousand Dollars)

The DNRO initial approvals are based on the following schedule:

<u>Ride Source</u>	<u>FY69</u>	<u>FY70</u>	<u>FY71</u>	<u>FY72</u>	<u>FY73</u>
Corona J-1	3 }	4 }		0	0
Corona J-3	0 }		3	0	0
Poppy	1	0	1	1	0
Hexagon	<u>0</u>	<u>0</u>	<u>0</u>	<u>3</u>	<u>1</u>
Total	4	4	4	4	4

The Corona J-3 rides are on the basis of an extended life, solar array program. The combination of J-1's and J-3's in FY 1970 and FY 1971 is dependent on the planned J-1 and J-3 launch schedules to be established. This approach is in lieu of Thorad Senior, Castor or TAT-Burner II options.

FY 1969 Costs:

RDT&E

0 (a)

Missile Procurement - White:

Spacecraft	\$5,290
Satellite Control Peculiars	500
Command Generation	100
Aerospace	<u>220</u>
Sub-total	6,110

Missile Procurement - Black:

Payload	12,500
MADS	<u>1,750</u>
Sub-total	14,250

P-11 TOTAL

20,360

(a) \$100K R&D was recommended by SAFSP for preliminary design on Hexagon, based on 1 ride in FY 1971. Inasmuch as the approved schedule basis defers Hexagon rides to FY 1972, the \$100K has not been initially approved. However, if it is still required in FY 1969 funding, the NRO Comptroller is to be notified. Development costs for solar array modifications for Corona will be charged to Corona.

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Satellite Control Facilities Initial Approvals, FY 1969 (Thousand Dollars)Missile Procurement - White:

Contractor Manning	\$26,104
Logistic Support	3,814
ECP/MOD's	3,400
Standard	8,000
Computer Lease/Buy	16,000
Computer Programming Integration	7,865
Computer Programming	5,235
Miscellaneous Support	<u>3,450</u>
Sub-total	73,868
Aerospace	<u>3,266</u>

SCF TOTAL	77,134
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1. Contractor Manning is approved as submitted.

2. Logistics Support and Depot Level Maintenance is reduced \$717K from the submission for the following reasons:

a. Line Repairable Units for SOLS and new receivers at \$567K disapproved as a charge to this account. Logistic support is not to cover deficiencies in equipment provisioning.

b. \$150K for Increased STC-ADS deferred, pending ADS decisions.

3. ECP/MODs is reduced \$600K from the submission, on the basis that average experience for the last four years has been at about a \$3,400K rate.

4. Standard is reduced \$3,500K from the submission on the following approval basis:

Advanced Planning	\$500K
Configuration and Data Management	1,000
Integration and Test Support	4,000
Management Support	1,000
Maintainability	300
Reliability	200
Training	450
Operational Procedures	100
Operational Evaluation	0
Personnel Subsystem	<u>450</u>
Total	8,000

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This approval basis is reflected to indicate cause for concern in the "Standard" entry, rather than being a restriction on each effort in the \$8,000K approval. In the event contractual commitments are such that this reduction can not be absorbed entirely, a partial reclama will be considered, but there must also be evidence that actions will be taken in FY 1969 and FY 1970 to reduce the "Standard" effort.

5. Computer Lease/Buy is reduced \$1,578K from the submission for the following reasons:

a. \$230K for Philco C&D procurement is deferred pending ADS decisions.

b. Maintenance is approved at the \$1,900K shown in the narrative, rather than the \$2,500K shown in the cost table.

c. The contingency item of \$387K is disapproved at this time. If contingencies materialize, and can not be otherwise covered, additional funding will be considered later.

d. The following items are deferred for further consideration: Off-Line Data System \$50K, 11th UNIVAC computer \$162K, Simulation Equipment \$150K.

6. Computer Program Integration is reduced \$1,600K from the submission. This is on the basis of accepting the SCF stated minimum support level of \$8,365K less \$500K advance-financed in FY1968 based on a recent reprogramming approval.

7. Computer Programming is reduced \$565K from the submission. This is on the basis of accepting the SCF stated minimum level, less \$140K deferred pending ADS decisions.

8. Miscellaneous Support is reduced \$1,350K from the submissions, based on past experience. The proposed magnetic tape certification and rehabilitation center is specifically not approved at this time, pending submission of costs, advantages, and cost effects on annual tape purchases.

9. Aerospace is reduced \$334K from the submission. It is recognized that some increase over FY 1968 is appropriate in view of new equipments. However, an increase of 16 MTS over FY 1968 is unacceptable. The approval is based on 71 MTS at \$46K, altho the MTS cost data reflected several different costs.

10. Concern is expressed about several indications that 2 year contracts are in effect. In the face of Special Activities and over-all DOD funding problems and requirements changes, commitments to two year contracts can not be sanctioned. No future contracts for more than one year are to be let without the approval of the DNRO. In fact, those contracts which are to be reviewed or initiated during FY 1969 are to extend thru September 30, 1969

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only, which will then accommodate to an annual October thru September cycle.

11. Funding approvals herein for computer leases or procurements do not obviate the necessity to obtain approvals thru established channels, as appropriate.

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AFSPPF Initial Approvals, FY 1969 (Thousand Dollars)RDP&E - White:

R&D	\$1,410
Corn	<u>1,006</u>
Sub-total	2,416

The R&D portion is \$750K below the submission. Image Analysis at \$200K is deferred, pending assessment of SPPF proposed effort vs. that of others in this area. Development of a compact black-and-white spray processor under Processing is deferred at \$250K pending evaluation as to whether this is an NRP requirement. \$75K for Viscous Developer studies under Photochemistry is deferred, pending evaluation of need. \$125K for development of an Advanced viewer-printer under Film Inspection/Viewing is deferred, pending clarification as to NRP need. \$100K for facility support is deferred pending clarification of requirements and appropriate charges (whether some are minor construction).

Missile Procurement - White:

Equipment	1,174
Film and Chemicals	<u>210</u>
Sub-total	1,384

\$85K for rental of an IBM 1800 Process Control Computer is deferred, pending approval of the computer thru USAF channels.

Missile Procurement - Black:

Film and Chemicals	1,292
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AFSPPF Total	5,092
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These funds are approved for the stated purposes furnished in the supporting material. They are not available for O&M deficiencies, minor construction deficiencies, nor new or changing computer requirements properly chargeable elsewhere.

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EXCLUDED FROM AUTOMATIC DOWNGRADING AND DECLASSIFICATIONAPPLIED RESEARCH/ADVANCED TECHNOLOGY Initial Approvals, FY 1969  
(Thousand Dollars) (SAFSP Portion)RDTE - White:

Critical Components	\$2,540 (a)
Applied Technology	570
Exploratory Studies	100 (a)
Aerospace (28 MTS)	1,288
Sub-total	4,498

RDTE - Black:

Optical Material and Design	1,900
Optical Fabrication and Test	500
Atmospheric Limit Studies	200
Critical Components	1,850 (a)
Optical Processing	500
System Studies	275 (b)
Readout	1,400 (a)
Exploratory	550 (a)
Sub-total	7,175

## APPLIED RESEARCH TOTAL

11,673

(a) Approved at less than the SAFSP recommendation, pending examination as to whether further increases are appropriate.

(b) The Technical Intelligence Systems Study is specifically disapproved for FY 1969.

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CONTROLADVANCED DEVELOPMENT Initial Approvals, FY 1969 (Thousand Dollars)RDT&E - White:

Horizon Sensor	\$ 800
Fuel Cell and Cryo Tankage	2,100
Sub-total	2,900

RDT&E - Black:

SIGINT Microelectronic Payload	0 (a)
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ADVANCED DEVELOPMENT Total	2,900
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(a) Deferred for further examination.

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MISCELLANEOUS DEVELOPMENT Initial Approvals, FY 1969 (Thousand Dollars)RDT&E - White:

Mission Optimization	\$1,535 (a)
Mission Optimization Aerospace (12 MTS)	<u>552</u>
Sub-total	2,087

RDT&E - Black:

Photographic R&D	<u>3,000</u>
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## MISCELLANEOUS DEVELOPMENT TOTAL

5,087

(a) Specific approval of the computer costs at \$335K, plus \$1,200K for TRW and General Electric. Evaluation will continue of the appropriate funding for FY 1969. In the meantime, no additional contractor personnel are to be hired nor the level of effort otherwise increased.

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SOC Support	\$653
SOC Aerospace	0
Miscellaneous Communication	<u>10</u>
Sub-total	663

Missile Procurement - Black:

Petty Cash	<u>2.3</u>
Miscellaneous Operating Total	665.3

First Destination Transportation will be handled between the  
NRO Comptroller and Hq AFSC as in the past.

SOC Aerospace is deleted in accordance with WAOO 2592.

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Aerospace Initial Approvals, FY 1969 (Thousand Dollars)

These initial approvals are included under the appropriate programs. This summary is to reflect both MTS and funding.

	<u>SAFSP Recommend</u>		<u>DNRO Initial</u>	
	<u>MTS</u>	<u>Cost</u>	<u>MTS</u>	<u>Cost</u>
Corona (P200)	6	\$ 276	4	\$ 184
Hexagon (P600)	50	2,300	50	2,300
Gambit (P200)	60	2,760	60	2,760
Sigint 770 (P200)	13	608	13	608
Sigint P-11 (P200)	5	220	5	220
<hr/>				
ABM/AES (P600)	36	1,656	Defer	
Vulnerability (P600)	7	322	6	276
Applied Research (P600)	33	1,518	28	1,288
Mission Optimization (P600)	13	598	12	552
SOC Support (P200)	5	230	0	0
SAFSP Sub-total	246	11,316	190*	8,766*
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Satellite Control Facilities	71	3,600	71	3,266

Total

\* For purposes of discussions and agreements with SAMSO, the deferral for ABM/AES can be added to the initially-approved SAFSP total, resulting in 226 MTS at \$10,422K.

While the approvals have been identified with specific programs as submitted, SAFSP has authority to transfer MTS and costs between programs as it deems appropriate within the 190 MTS and \$8,766K cost initial approvals.

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Agency Approvals, FY 1969 (Thousand Dollars)

For SAFSP information, the Agency is being given FY 1969 initial approvals as follows:

CORONA:

Camera	\$4,570
Satellite Recovery Vehicles	2,518
Payload Structures	5,600
Software Development	75
Contingency for Engineering Changes	200
Total	12,963

HEXAGON:

Sensor Subsystem	69,245
P.E. Facilities	3,600
TRW SETS	4,113
P.E. Additional Test Equipment	1,166
Total	78,124

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