

~~TOP SECRET~~  
CORONA



Copy [redacted]

7 JAN 1969

**MEMORANDUM FOR: Deputy Director for Science and Technology**  
**SUBJECT : Potential Need for Additional CORONA Systems**

1. In Fiscal Year 1969 NRO Program Cell and again in Fiscal Year 1970, we recommended the procurement of three additional CORONA systems. Rather than do so, however, the DNRO has stretched out the CORONA launch schedule to provide what he determined as a reasonable overlap with the [redacted] Program. In his determination, however, the DNRO did not provide for any launch failures or actual system failures en orbit. With the Program as postured in a "zero defects" mode, any anomaly or failure proportionately detracts from our ability to meet the search and surveillance requirements. You are well aware of events associated with the last three launches.

2. During the CORONA phase-out, we must anticipate a reduction in system reliability simply because of the sheer shelf life of the systems due to the program stretch-out, as well as human error associated with "phase-out blues." Additionally, the phase-over to [redacted] schedule-wise is extremely optimistic and requires a near-perfect developmental schedule for all aspects and subsystems of the [redacted] Program.

3. We can, and will, of course, insist on high reliability and quality in the CORONA effort. We submit that no risk, however large or small, should be accepted in the capability of this Nation to launch a search and surveillance reconnaissance system. Attached is a staff paper which highlights the need for procuring

Class 1  
Excluded from automatic  
downgrading and  
declassification  
by the NRO

CORONA [redacted]  
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HANDLE VIA [redacted]  
CONTROL SYSTEM ONLY

Declassified and Released

In Accordance with E.O. 12958

on NOV 26 1997

CORONA

**SUBJECT: Potential Need for Additional CORONA Systems**

three additional CORONA systems. We provide this to you as background in order that you might wish to discuss it with Dr. Flax should the opportunity present itself.

[REDACTED]  
Director of Special Projects

Attachment: a/s

Distribution:

[REDACTED]

DD/S&T/OD/OSP/JNMcMahon: [REDACTED] (6 January 1969)

[REDACTED]

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HANDLE VIA [REDACTED]  
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[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]



CORONA

[REDACTED]

5. For the CORONA Program, procurements have followed a policy of projecting thirteen launches for twelve desired successes. This policy was followed rigorously throughout the majority of the operational life of the CORONA Program, but the conservatism in the program no longer exists in the critical period of program phase-out. The projected CORONA launch requirements for 1969, 1970, and 1971 are six, six, and three, respectively. The adequacy of this launch rate is predicated upon extending the on-orbit life of the AGENA through the incorporation of new power systems (solar panels), incorporation of ultra thin base (UTB) film into the payload system (an area in which problems are known to exist), and several other modifications whose reliability has not been tested. In spite of these risks, however, a zero defects CORONA Program has been envisaged by the NRO for 1969 and 1970. From an intelligence standpoint, this planning is precarious. When considered in light of the minimum projected overlap between [REDACTED] and CORONA, the potential impact of this policy change on the intelligence collection capabilities of the U. S. Government cannot be overemphasized.

6. Even in the latest CORONA system modifications (e. g., development of the J-3), the NRO maintained a reasonable and conservative policy of requiring that six systems of the proven design be available coincident with the introduction of the new design. Even with the minimum level CORONA launch rate of six systems per year, a zero defects CORONA Program throughout the next two years, and no increase in requirements, there will be a maximum of four CORONA systems available to the U. S. Government in October 1970 [REDACTED]

7. It is unreal to assume that no problems will be experienced with CORONA in the next thirty months of operation. For example, the Program has experienced AGENA problems on the

Attachment to:

[REDACTED]

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[REDACTED]

last two launches; and the AGENA is perhaps the world's most reliable orbital vehicle. We have also experienced a camera/film handling problem.

8. The degree of conservatism that was used for changes internal to the CORONA Program should be adopted as the absolute minimum with regard to the overlap between CORONA and

[REDACTED]

9.

[REDACTED]

Schedule work-arounds and alternate sources have been necessitated. It is hoped that these work-arounds will regain the schedule, but it is not unreasonable to expect that additional delays rather than schedule improvement will occur.

10. To guard against the potential loss of adequate CORONA overlap with [REDACTED] for whatever reason, it is recommended that three additional CORONA systems be procured while the contractors and suppliers are prepared and able to respond.

Attachment to

[REDACTED]

Page Three

[REDACTED] **CORONA** [REDACTED]

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HANDLE VIA [REDACTED]  
CONTROL SYSTEM [REDACTED]

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Attachment to:

[REDACTED]

**COST DATA FOR REORDER OF  
THREE CORONA SYSTEMS  
ON 15 JANUARY 1969**

	<u>FY 69</u>	<u>FY 70</u>	<u>FY 71</u>	<u>FY 72</u>	<u>TOTAL</u>
<b>Itak</b>					
Camera systems with Project Management Quality Assurance Field SVC and Documentation	[REDACTED]	[REDACTED]	[REDACTED]		[REDACTED]
New Environmental Test Facility	[REDACTED]	[REDACTED]			[REDACTED]
<b>G. E.</b>					
Incl. SRV's (6), Pyros and System Support	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
<b>LMSC</b>					
System Hardware	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Increase in Level of Effort	—	—	[REDACTED]	[REDACTED]	[REDACTED]
<b>TOTALS</b>	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

[REDACTED]