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20 OCT 1969

MEMORANDUM FOR: Comptroller, DD/S&T

SUBJECT : NRO Cost Estimates,
Project CORONA, FY 70 - FY 73

REFERENCE : D/NRO Memorandum, Same Subject as Above, [redacted] 23 September 1969

Per referenced request, attached hereto is the CORONA estimate for forwarding to the D/NRO.

[redacted]

Attachment: a/s

Distribution:

[redacted] (20 Oct 69)

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CORONA

FY 1971 - FY 1974

CORONA is a satellite photographic search and surveillance system with two (2) recoverable capsules for retrieval of exposed film. The space vehicle, which includes the payload and Agena control vehicle, is launched from Vandenberg Air Force Base by a thrust augmented THORAD booster. The system is commanded and controlled by the Air Force worldwide tracking network. Recovery is generally by air snatch north of Hawaii.

The camera system contains 160 pounds of film (16,000 feet of thin base film, or about 24,000 feet of ultra thin base film, for each camera). The system achieves roughly 10,000,000 square miles of coverage per mission.

The J-3 version of the CORONA payload, operating at an altitude of approximately 85 nautical miles with about seven foot resolution, will be employed through FY 1972. All systems flown will incorporate the digital shift register stored command system and use ultra thin base film.

The Planning Estimate is based upon the following launch schedule options:

	FY 1970	FY 1971	FY 1972
Option I	5	5	2
Option II	5	5	5

All systems reflected under Option I are on contract. Work at Itek, Boston has been completed with the exception of a refurbishment of System CR-8, and the Systems Analysis. Deliveries at G.E. are complete except for certain life limited components and retest which may be required of CR-8 SRV's.

Option II provides for net additive cost for procurement of three (3) additional CORONA J-3 payloads for launch in FY 1972. The Planning Estimate is based on an affirmative decision being made in December 1969. The Planning Estimate is also based on phasing out of the CORONA Program in FY 1972.

The below figures reaffirm our previous FY 1970 through FY 1972 estimates; however, they do not include costs to move the AP Facility to LMSC, Sunnyvale. A study is currently under way to examine the feasibility and cost of such a move. At this point in time, it is estimated that this cost would be approximately [redacted]

[redacted]

CORONA (Option I)

($ millions)

	FY 1970	FY 1971	FY 1972	TOTAL
I. CAMERA - ITEK				
Field services, engineering support, refurbishment of CR-8, storage and program close-out.	[redacted]	[redacted]	[redacted]	[redacted]
II. SATELLITE RECOVERY VEHICLE - G.E.				
Field services, engineering support, refurbishment of CR-8, spares and program close-out.	[redacted]	[redacted]	[redacted]	[redacted]
III. PAYLOAD STRUCTURES & INTEGRATION - LMSC				
Development, fabrication, test, integration, refurbishment, engineering support, spares, operations and analysis, and program close-out.	[redacted]	[redacted]	[redacted]	[redacted]
IV. ENGINEERING CHANGES				
Corrective engineering changes mandatory for system flight reliability.	---	[redacted]	---	[redacted]
V. RELOCATION				
Consolidation of the CORONA integration facility into the LMSC Sunnyvale complex.	---	---	---	---
TOTAL, CORONA	[redacted]	[redacted]	[redacted]	[redacted]

[redacted]

[redacted]

CORONA (Option II)

($ millions - net additive above Option I)

	FY 1970	FY 1971	FY 1972	FY 1973	TOTAL
I. CAMERA - ITEK Development, fabrication, test and related services for three (3) additional camera systems for CORONA payloads; CR-17, CR-18, and CR-19.	[redacted]				
II. SATELLITE RECOVERY VEHICLES - G.E. Development, fabrication, test and related services for six (6) additional SRV's for CORONA payloads; CR-17, CR-18, and CR-19.	[redacted]				
III. PAYLOAD STRUCTURES & INTEGRATION - LMSC Development, fabrication, test, integration, refurbishment, engineering support, spares, operations and analysis for three (3) additional payload systems; CR-17, CR-18, and CR-19.	[redacted]				
TOTAL, DELTA	[redacted]				