C ~~TOP SECRET~~ [redacted]

[redacted]

Cy- [redacted]

[redacted]

Copy No. [redacted]

24 October 1967

MEMORANDUM TO HEADQUARTERS

TO: [redacted]

INFO: [redacted] J. McDonald

FROM: [redacted]

SUBJECT: Program Managers' Meeting - 16 October 1967

1. The CORONA Payload Managers' Meeting was convened at 0900 on 16 October 1967 at [redacted] In attendance were Messrs. [redacted] Madden, and [redacted] of [redacted] and [redacted] of [redacted] of LMSC Sunnyvale; [redacted] and [redacted] of [redacted] Contractor; [redacted] and [redacted] from the Resident Office; and McMahon, [redacted] McDonald, and [redacted] of [redacted]

2. The first agenda item was a brief discussion of the revised CORONA flight schedule. Because of calendar life problems, payloads J-43, J-45, and J-46 were moved to the end of the flight schedule. The age of these payloads would have dictated refurbishing even for near-future launches. By shifting their refurbishment and use to the end of the schedule, fresher J-1 payloads can be flown in near-future launches without refurbishing. The new schedule should enhance reliability and save money.

3. A new requirements specification has been prepared by the Resident Office to cover the four follow-on systems (CR-13 through CR-16). The new specification is a general up-dating that covers all changes since initial publication early in the J-3 program. The changes include:

a. Dynamic resolution increases from 110 to 130 lines/mm for second generation systems and from 110 to 150 lines/mm for third generation systems.

b. Backup recovery mode as a contractual item (this has not been a part of the contract nor has the RV contractor been covered for systems analysis studies involving backup recovery modes).

C ~~TOP SECRET~~ [redacted]

4. [redacted] and [redacted] Contractor presented the results of their analysis of CR-1 performance. The primary conclusions reached as a result of that analysis and the PET Meeting (17-18 October 1967) are:

a. The CR-1 system performed according to specifications. The best photography is equal to or better than any previous CORONA photography. The best frames were obtained with the forward looking camera during the second half of the mission, when perigee shift placed operations at the lowest altitudes. The best Corn targets observed yielded approximately six feet resolved distance along the line of flight (IMC direction) and ten feet across the line of flight (scan direction). The aft looking camera produced softer imagery than normally obtained with the CORONA system because of an out-of-focus condition.

b. Computed analysis of lens fabrication data shows a back focus shift of 0.001 less than anticipated for both cameras. In addition an ambient vs. altitude test has shown an added shift of approximately 0.0005. The focus position of the aft camera was such that these shifts significantly degraded focus; forward camera focus location permitted the shifts without serious degradation. A through focus test is being planned for CR-3 to help define the precise relationship between ground and flight focusing. In addition, the relationship between [redacted] and [redacted] dynamic resolution testing is being studied. The results of those investigations should help to insure optimum focus settings for CORONA flights.

c. The scan resolution loss was caused by a differential film velocity in the scan direction which in turn was caused by a film lift increase due to lower than nominal on-orbit temperatures. To help minimize this problem, the CR-2 thermal pattern is being modified to make vehicle temperatures higher; a test program is being run to determine optimum roller position; and a new higher speed film is being evaluated as part of the CR-2 payload.

5. The next Program Managers' Meeting will be held at [redacted] on 21 November 1967.

[redacted]