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WASHINGTON, D.C.

20 July 1971

THE NRO STAFF

Dr. McLucas has seen.

MEMORANDUM FOR DR. McLUCAS

SUBJECT: Chronology of HEXAGON Mission 1201 Anomalies
Through Fourth RV Recovery 16 July

The following represents a summary of Mission 1201 anomalies during its operational photographic life. SAFSP messages pertaining to each anomaly are at TABs indicated.

16 June - High temperature condition on two of the four main batteries. Camera ops were restricted to 17 minutes/4 rev span and later extended to 30 minutes/4 rev span (TAB A).

20 June - First RV recovered in the water. Chute damage precluded aerial recovery (TAB B).

26 June - Second RV evidenced some parachute damage but was successfully air recovered (TAB D).

5 July - A sensor subsystem emergency shut down (ESD) occurred on rev 314 due to the B camera looper reaching its mechanical stop. Photographic operations lost through rev 318. 30 degree scan operations prohibited as the possible cause of the looper overfilling (TAB E).

10 July - An ESD again occurred on the B camera on rev 402. Photographic operations resumed on 12 July with an initial 30 degree scan restriction which was later removed (TAB F).

10 July - Third RV lost. Only the drogue chute was sighted, RV followed near ballistic trajectory from 50,000 feet (TAB G).

13 July - A third ESD occurred on the B camera on rev 445 due to high film tension. Attempts through 14 July failed to clear the apparent jam. Monoscopic operation (A camera only) initiated 14 July (TAB H).

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14 July - Telemetry indicated deterioration of the pyrotechnic batteries which are essential to RV recovery. Early recovery of RV-4 likely (TAB I).

15 July - Continued pyro battery degradation dictated that the fourth RV be recovered on 16 July. A rewind operation cleared the B camera and stereo operation was restored for the final day's operation (TAB J).

The fourth RV was successfully air recovered on rev 502 on 16 July. A message summarizing current analysis and planned actions with regard to the parachute problem is at TAB K. The "solo" portion of the mission is continuing well. Successful experiments to date include orbit adjust, both down and up, fuel transfer between the attitude and propulsion systems and solar array reorientation.



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Attachments

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