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Copy No. [redacted]
1 May 1968

Rec'd 16 May 68

MEMORANDUM TO HEADQUARTERS

TO: [redacted]

INFO: [redacted]

FROM: [redacted]

SUBJECT: Monthly Activity Report - April 1968

1. The following activity report is a summation of important events in the CORONA Program which occurred during the month of April 1968.

2. CR-3 - During the month of April, CR-3 completed pre-flight preparations. This system was the first unit to have the special thermal tape layers on both the main instruments. These tape layers should reduce the thermal gradient across the lens and thus provide more stable focusing. A tag end (1500 feet) of SO-380 (UTB) was loaded in CR-3 with 3404 filling the remainder of the roll. Filter types Wratten 12, 21, 25 and SF05 were installed in CR-3 for flight, with the Wratten 25 and SF05 giving this system bi-spectral photographic capability. CR-3 was successfully launched on 1 May 1968.

3. CR-4 - During April CR-4 completed HIVOS and block tests. The evaluation of the various films used during HIVOS test showed no corona markings in the range between 12 and 20 microns for the 3400, 3401, and SO-180 type films. However, the SO-340 exhibited considerable marking over the full range (from less than 1 micron to 190 microns). At this time, it is planned that CR-4 will fly with a split load to 3404/SO-180 and with bi-spectral capability.

4. CR-5 - During April CR-5 started tracking tests. During this period, modifications were made on the T/U motor to produce a more favorable tension for the UTB film. Testing is continuing to verify these modifications. This system is scheduled to operate with 23,000 feet of SO-380 (UTB) and a tag end of 500 feet of SO-121 providing ground tests prove the compatibility of a major amount of UTB and some STB being used in the same system.

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Film tensioning in such a mixed load is the main doubt at this time. The use of the SO-380 will provide approximately a 50% increase in the payload compared with past CORONA systems of 16,000 feet.

5. CR-6 - This system was received at AP during April. Acceptance and tracking tests have been completed with no major anomalies reported.

6. DISIC Sub-System Status - DISIC units S/N 5, 6, 7, 8, 9 are in various stages of testing at AP. The present plan for the next five flight units is as follows:

S/N 5 flown with CR-3
S/N 6 to fly with CR-6
S/N 7 to fly with CR-5
S/N 8 to fly with CR-7
S/N 9 to fly with CR-4

7. Digital Command System - During the month of April the qual box unit started testing at AP. To date it has successfully completed vibration tests, chamber tests, and shock tests. The first shift register flight unit was delivered to AP on 5 April and is scheduled to begin system tests with CR-6 on 15 May. The manufacturing was completed on the AGE consoles. They are now in the checkout phase of development and should be ready for system tests by mid-May. The flight boards have been completed for the first two units. These are at AP holding for system tests. It appears at this time that the digital shift register command system will be ready to meet the scheduled December flight date of CR-6.