Copy No.

20 December 1967

MEMORANDUM TO HEADQUARTERS

TO:

INFO:

FROM:

SUBJECT: Program Managers' Meeting - 19 December 1967

1. The CORONA Payload Managers' Meeting was convened at 0900 on 19 December 1967 at AP. In attendance were Messrs. Madden and of of , and of Contractor; and of the Resident Office. and also of the Resident Office attended part time.

2. The first agenda item was a review of the program by The following topics were covered:

a. CR-2 flight results to date. Tebo indicated that the CR-2 first bucket produced excellent film results and that an MIP of 100 was assigned to this mission. Most of the anomalies that were present in the CR-1 flight were corrected in CR-2, however, there remained a few items that require correction for CR-3. These were:

(1) A few instances of missing time word rows and index rows on the binary data block. This problem appeared to be related to the SLP conditioner. Contractor is analyzing the SLP conditioner to see what corrective action is necessary.

(2) The stellar camera records are still showing flare. This flare seems to be concentrated on both long edges of the film. A meeting will be set up earliest between the Resident Office, and to determine the permanent fix for this problem.

b. The subject of a 20-day on-orbit flight was discussed. It was proposed that the H-timer would run at three-quarters speed. [redacted] indicated that there would be no problem in the cameras in operating on orbit for 20 days. [redacted] indicated that there was a 99.5 percent certainty that there would be no problem. [redacted] indicated that Colonel Murphy stated that the DISIC should have no problems in meeting this requirement. [redacted] was then requested to submit his cost and items to be accomplished prior to committing to a 20-day on-orbit flight. These figures were requested as soon as possible so that a reply could be made to [redacted] on [redacted]

c. The recommendation of [redacted] that tape recorders be contained in all CR flights was reviewed. [redacted] indicated that he would have a firm cost for accomplishing this recommendation at which time [redacted] would submit the details to [redacted] for possible submission and approval by [redacted]

d. [redacted] also indicated that the Resident Office J-3 requirement spec for follow-on systems would be issued as soon as possible. The only items holding up issuance at this time was a firm commitment for the 20-day on-orbit payload and the installation of tape recorders on all CR payloads.

3. [redacted] reported on the progress at [redacted] The items discussed were:

a. The back focal shift has now been firmly analyzed to be 0.0014 versus 0.0015. This has been corroborated by:

(1) The computer programs at [redacted]
(2) The results of Mission 1044.
(3) The studies being conducted at Vidya.

The impact of this additional .001 shift in back focus will be minimal in that it would only involve the reshimming of both CR-3 and one of the CR-4 instruments. The data furnished by [redacted] for shimming the J-1 instruments was made on the basis of the 0.0014 back focus, hence no additional changes would be required for the J-1's. All future instruments to be delivered by [redacted] will be shimmed in accordance with the new back focal shift.

b. The delivery of camera systems to AP was reviewed. It was determined that CR-5 will be delivered to AP on 18 January. CR-6

would be on schedule, however, CR-7 would be diverted for UTB tests at [redacted] CR-8 meanwhile would move up into CR-7's place. All of these deliveries will meet AP requirements. [redacted] will submit a proposal for further tests on UTB to be able to demonstrate that the tracking, Doctor "A" data, and data block reproduction will remain consistent and correct for all runs. At the present time the tests at [redacted] indicate that maybe one or two of these can be achieved at any one time but not all three of them. There was optimism expressed that CR-5 would be in good condition to handle the UTB.

c. The subject of the glass filter developments was next discussed. In view of the fact that [redacted] has more work to accomplish to demonstrate that the glass filters will function properly in an optical sense, CR-3 would probably be using gelatin filters. However, if the future tests at [redacted] prove that the glass filters (Wratten 21, 23, and 25) are acceptable, these would be substituted at a later date hopefully prior to CR-3 flight.

d. The preliminary results of the thermal analysis of a second generation lens was reviewed. It appeared that the thermal gradients were such as to not to affect the second generation focal shift. However, there might be as much as a .001 focal shift on the third generation lens due to the much finer focus peak that these lens are expected to achieve. The temperature data on CR-2 for both instruments with temperature sensors in the cone position and the cell position were reviewed. It was apparent from this data that more work had to be done on the part of [redacted] to provide consistent results.

4. Baker of [redacted] next reviewed his program. There were no major problems at [redacted] with the exception of the J-1 refurbishment schedule. This schedule was coordinated among the Resident Office, [redacted] and [redacted] was requested to review the spare parts, including field spares, for the J-1's to determine if sufficient number of the spares were already available in the system to handle any refurbishments for J-1 SRVs and to provide sufficient spares during the phase-out period of the 700 series SRVs.

5. [redacted] next reported on the status of the J-3 systems and indicated the following:

a. There was a failure of the DISIC take-ups in the chamber test for CR-3. As a result the DISIC was disabled and CR-3 main instruments continued to perform in the chamber. Upon removal of CR-3 from the chamber due on Wednesday the 20th this failure of the DISIC take-ups

would be reviewed and analyzed to determine cause. (It was preliminarily determined to be a hold-up of the terrain film in the cut and splice device.) Colonel Murphy was notified of this failure.

b. A pin was sheared on QR-2 while the rollers were being adjusted for UTB testing. The pin was replaced and testing will continue. There has been several personnel errors in conjunction with the UTB testing on QR-2--although frustrating these are considered part of the learning curve. At the present time QR-2 is scheduled to go into HIVOS for tests on or about 15 January.

c. The detents of J-46 had to be reworked in order to provide proper clearance of the plunger which interlocks the stove pipe and the rotating lens cell.

d. It appeared that the development of the shift register is about five weeks behind schedule but should be completed in time to meet the first flight of this new command system in CR-6 in November 1968.

e. In view of the fact that CR-5 was being readied for testing it was decided that the spare tape recorders would be installed in the SRVs of CR-5 and that this system would fly with tape recorders. There should be no additional costs attendent to this decision since tape recorders, analogue to digital converters and comutators were in stock to handle this system. Any other systems beyond CR-5 will require additional funding to accommodate tape recorder installation. A separate message will be submitted to [redacted] in this regard as soon as cost estimates are available from [redacted] Contractor.

6. [redacted] and [redacted] had been furnished copies separately of [redacted] Contractor, [redacted] and [redacted] Managers' Reports.

7. It was decided that the next Program Managers' Meeting would be held in February 1968 at a date and place to be designated by the Resident Office.

[redacted]