

APPENDIX A

LOSS OF COMMUNICATIONS NAVIGATION PROCEDURES

1. Onboard Navigation after a Lift-off Plus 8-Hour Abort Maneuver From Translunar Coast
 - A. Perform the abort burn.
 - B. Reinitialize the W matrix. Use extended verb 67 and at the V06N99 display, load:
 - R1 + 80000 (80,000 feet)
 - R2 + 00070 (7.0 feet per second)
 - R3 + 00003 (Cislunar Navigation Code)
 - C. Determine the return trip time and look at the corresponding table for the sighting schedule to be followed. For all return trip times less than 20 hours, Schedule 1 (Table A-1)^a should be used. For all return trip times greater than 20 hours, Schedule 2 (Table A-2)^a should be used.
 - D. Times given for each batch of data are referenced to entry interface. (P37 may be used to determine the time reference.)
 - E. Start tracking with the first batch of data following the current time.
 - F. Calibrate optics at the beginning of each batch and every half hour while navigation sightings are in progress. The next sextant calibration will be repeated until agreement of at least two checks (not necessarily sequential ones) are within 1 bit (0.003 degree).
 - G. Large ΔR , ΔV values may be expected at the following times:
 1. At the initiation of tracking (the first mark on each star of the first batch of data taken).
 2. After a long period of no sightings.

^a These tables are typical of the ones carried by the crew; the data shown are not necessarily those for the H-2 mission.