A DSPSE status meeting was held at 1000 (EST) at the BATCAVE on 14 March 94 and chaired by Don Horan. This meeting discussed spacecraft activities from 1000 on 3/12/94 to 1000 on 3/14/94. This memorandum briefly summarizes the results of the meeting.

**Engineering**

All spacecraft systems are nominal at this time. A SSDR dump for orbit 107 was just completed and orbit 108 imaging is beginning. Battery depth of discharge is getting down to 330 psi, but is fully charged prior to entering the 63 minute shadow period. After leaving lunar orbit, there will be several longer shadow periods (approximately 2 hours) and we need to review the strategy for these periods. All SSDR dumps have gone well, RCS pressures and temperatures are good, and we are getting ranging data for approximately 1.5 hours per orbit.

A possible startracker A lens temperature problem (getting erroneous readings) is being investigated. One possible explanation is that the thermistor has debonded.

The HKP reset problem still is not understood. Engineering contacted the 5V power supply vendor and is now convinced that this was not the problem. With no software clues, the reason for the problem may not be able to be determined.

**Flight Software**

The loss of time during slews problem has been solved. The problem was with a path in the ADA code involving message passing that prevented interrupts to be turned back on resulting in the time not being updated. A small patch has been developed and is being tested on the test bed. It will be uploaded later this week after testing has been completed.

A page partition memory management problem occurred, which resulted in the need to re-load all the SCL scripts. This has happened two times before and engineering and software personnel have been trained to detect this problem and how to fix it. This problem had no effect on mapping operations.

**TAMP**

The spacecraft orbit is very stable (behaving as predicted). The spacecraft is experiencing a 35-36 minute RF blockage, and this time is decreasing. After 4 or 5 more days this
blockage will go away. The shadow traversals are now approximately 62 minutes in duration and will increase to approximately 70 minutes near the end of the month, and will then decrease.

The periselene rotation burn is scheduled for 26 March. The rotation is actually accomplished in two burns, one occurring at approximately 0228 GMT on orbit 163 and the other at approximately 1259 GMT on orbit 165. Orbit 164 will be an 8 hour orbit (rather than the normal 5 hours) and will result in a 75 minute shadow period.

Sensors

Sensor operation during lunar imaging continues to be nominal. Data from orbits 99 though 107 were transmitted and the orbit 108 mapping is in progress.

The HiRes imaging of Vega was performed to determine if any degradation in the HiRes camera is occurring. This attempt was not completely successful because the exposure setting being used during the imaging is not what it should be. They will be imaging Vega again today.

Mapping Results

Mapping and data transmission for orbits 99 though 107 has been accomplished and the orbit 108 mapping is in progress. The two gaps totaling 5 minutes from orbit 91 mapping data were located. They had been stored in another VAX.

The observation to image the Earth during orbit 102 was completed. Although a full Earth image with the lunar limb in the FOV could not be obtained without a loss of mapping data, a series of images were obtained beginning with the lunar surface and then panning up to get images of the full Earth. Good images of Africa were obtained with very few clouds.

A lunar horizon glow observation was attempted on orbit 104 using the startracker. The plan was to do a full moon scan showing the entire Earth lit lunar surface. The attempt was not entirely successful because of incorrect exposure settings. These settings will be fine tuned during orbits 108 and 109, and the full moon scan will be performed on orbit 110 with these settings.

Scheduling

DSN support has been very smooth. However, it was reported that when switching over to Madrid support, Madrid attempted to flow our data on a lower capacity data link (than what was scheduled) resulting in data drop outs. The reason for this switch was a conflict with Shuttle support. When they were notified of the problems, they switched back to the proper data link and the SSDR dump proceeded normally. The bad sections of the dump were repeated and no loss of data occurred.

Playbacks from the DSN will be scheduled later in the week on a non interference basis with DSN or DSPSE operations.