

## MSG 065 - RED FD06 PAYLOAD SUMMARY

1 FREESTAR

2

3 MEIDEX Sprite observations continue to go well. The MEIDEX team has confirmed they  
4 have obtained an image of one ELVE and one image containing two Sprites. Several other  
5 candidates are being evaluated. SOLSE completed Science Set 1 (4 Limb Views and 1  
6 Earth View). Data from Science Set 1 has yet to be analyzed. The second CVX-2 critical  
7 period is scheduled to start at 5/12:00 MET. LPT operations are nominal. The first GPS  
8 period successfully converged on an orbital solution by continually tracking 4 satellites.  
9 SOLCON operations continue and the instrument is performing nominally.

10

11

12 SPACEHAB

13

14 SPACEHAB subsystem operations over the past 24 hours have been marred by problems  
15 with the Water Separator Assemblies, and an associated rise in cabin temperatures. Cabin  
16 temperatures have been brought under control, and an IFM to attempt recovery of the WSA  
17 is being formulated. Data subsystem performance remains marginal, but good payload  
18 science is still being achieved by most payloads using the system.

19

20 SPACEHAB payloads generally continue to perform well, with the exception of MSTRS,  
21 which is still experiencing commanding and telemetry difficulties, and CM2 which has had  
22 some difficulties that have resulted in being behind schedule by two LSP runs.

23

24 Specific payload highlights so far include:

25

26 CM2 has successfully completed LSP runs through run 8, although it has taken a great deal  
27 of effort, and they are behind by two runs at this time. The CM2 team reports that LSP run 8  
28 produced a very nice flame, so the effort has definitely been worthwhile. Thanks again to  
29 the entire crew for their hard work in making LSP a success!

30

31 MSTRS is still working through the troubleshooting plan for their Commanding/Telemetry  
32 problem. Yesterday's troubleshooting activities provided some clues, but additional data is  
33 required.

34

35 COM2PLEX reports that the 40 hour long duration run of the first two-phase loop experiment  
36 has been successfully completed. Preliminary evaluation of downlink telemetry data  
37 indicates that the loop performed beyond expectations.

38

39 Biopack experienced two unexpected power downs while experiment containers were  
40 transferred to the freezer. The cause of this behavior is not fully understood but it is  
41 suspected that the delta pressure sensor near the fan of this compartment may be set at a  
42 level lower than defined and that this may trigger the power down by the increase of the  
43 pressure delta every time that the drawer is pulled. Investigations are being performed in an  
44 attempt to fully understand this situation. At the present, the freezer is switched off and the  
45 Experiment Containers are being transferred directly to the PTCU's to avoid opening of this  
46 drawer. On the positive side, however, the incubation of two experiments is progressing  
47 properly and one experiment has been successfully completed.

48

49 STARS experienced a power shutdown today, believed to have been triggered by higher  
50 than normal module temperatures. Thanks to quick action from the crew, power cycling the  
51 unit restored power and the payload is now operating normally

END OF PAGE 1 OF 1, MSG 065