

STS-107 MISSION MANAGEMENT TEAM (MMT) MINUTES

Thursday, January 30, 2003

The MMT was convened by the chairman, Ms. Linda Ham at 8:00 a.m. CST. All members were in attendance at JSC or via teleconference.

Mr. Phil Engelauf of the Mission Operations Directorate (MOD) reported that the Orbiter was doing well and the crew was on track with the timeline. The End of Mission (EOM) Thermal Attitude Timeline (ATL) had been completed and +XVV thermal conditioning attitudes were planned. The post wave-off ATL is also in work. Propulsive consumables margins remain at approximately 500 lbs. for the Forward Reaction Control System (FRCS) and 900 lbs. for the Aft RCS (ARCS). The non-propulsive cryogenic margin is projected at 2 days, 13 hours. The current EOM downweight is projected to be 234,011 lbs. with the weight increase attributed to turning off rotary equipment.

An In Flight Maintenance (IFM) procedure is planned later today to inspect and clean up any residual water from the Water Separator anomaly with the Orbiter DC vacuum cleaner. The crew has been performing periodic inspections and no other water spills were noted.

Mr. Don McCormack, Shuttle MER Manager, reported that in preparation for troubleshooting the ICOM B anomaly, the crew reported that the hardware probably was not configured correctly when the anomaly occurred early in the mission.

Ms. Vanessa Ellerbe, STS-107 Flight Manager, reported continued degradation of the RDM Water Pump Package 1 (WPP1). The total flow rate is currently 390 lb/hr. vs. the nominal 500 lb/hr. and that the pressure differential is also dropping. A current Flight Rule A18-551 documents that the minimum water flow required to reject orbit heat loads is 140 lb/hr, however the total water flow transducer is biased 60 lb/hr low. A CHIT will be submitted to document the limit factoring in both the flow meter bias and actual heat load. Ms. Ellerbe noted that the WPP1 water flow was 320 lb/hr prior to the swap over to WPP2 at MET 1/21:21. The chairman requested to be informed prior to any WPP swap decision.

The Combustion Module-2 (CM-2)/WATERMIST experiment experienced activation problems that resulted in the loss of 1 of 3 atomizer test points but was now operating successfully. The MEIDEX experiment reported large dust storm observations and all the other payloads were doing very well.

Mr. Dave Ladrach, representing Space Shuttle Systems Integration, reported that the Structures Working Group (SWG) would verify the 234,011 lb. projected down weight was acceptable for cargo interface loads.

Mr. Bob Page, representing KSC Launch Integration noted that handheld cameras and ET films would be expedited to Marshall Space Flight Center via Shuttle Training Aircraft for post-flight ET foam debris imagery analysis.

The Spaceflight Meteorology Group provided a weather briefing and indicated that the weather at the KSC primary and Edwards secondary landing sites was acceptable through EOM + 2. The Northrop landing site weather also looked good for these opportunities except on EOM + 1 because of crosswind violations.

Mr. Leroy Cain, the Entry Flight Director reported that consumables support de-orbit opportunities through EOM + 4 days with LiOH the limiting consumable. Two landing opportunities can be supported at the primary and alternate landing sites through EOM + 4. Two daylight landings are available at KSC through EOM + 4, and for Edwards through EOM + 2. There is at least one daylight landing opportunity at Northrop through EOM + 4. Mr. Cain recommended and the chairman concurred that Edwards activation is not required through EOM + 2. The time for the first KSC landing opportunity is projected for 8:16 CST.

Ms. Ham closed the meeting and announced that this was the last scheduled MMT meeting in support of the STS-107 mission.

Original signed by: Frank Moreno

Mr. Frank Moreno
STS-107 Lead Payload Integration Manager

Original signed by: Linda Ham

Ms. Linda Ham
Chairman, Mission Management Team