SSVEO IFA List

Date:02/27/2003

STS - 77, OV - 105, Endeavour (11)

Time:04:04:PM

Tracking No	Time	Classification	Documentation		Subsystem
MER - 3	**MET:** 01:01:02:46	Problem	**FIAR**	**IFA** STS-77-V-01	RCS
PROP-01	**GMT:** 141:11:32:46		**SPR**	**UA**	**Manager:** C. Budahl
			IPR	**PR** FRCS-5-A0010	x34561
					Engineer: W. Manha

Title: RCS Thruster F2F Failed Leak (ORB)

Summary: During the post-SPARTAN deploy (SEP 1-S) -X maneuver at 141:11:31:21 G.m.t. (001:01:01:21 MET) thruster F2F successfully completed its first firing. The thruster was deselected by the redundancy management (RM) software one minute 25 seconds later when the oxidizer temperature dropped below the 30 ?F leak detect limit. About 15 minutes later the crew reported that they thought the leaking thruster was causing perturbations to the stationkeeping and requested concurrence to close forward manifold 2. The manifold was closed at 141:12:06:49 G.m.t. (001:01:36:49 MET). Liquid leakage apparently stopped, as indicated by Ox=Fu temperature, around 141:15:40 G.m.t. (001:05:10 MET).

The manifold was subsequently reopened at 149:10:24 G.m.t. (08:23:54 MET), and the leaking condition resumed. The manifold was isolated prior to crew sleep at 149:17:54 G.m.t. (09:07:24 MET) for the remainder of the mission. The FRCS module will be removed for OMDP this flow. F2F will be removed from it at the HMF.

Tracking No	Time	Classification	Documentation		Subsystem
MER - 6	**MET:** 02:13:00:00	Problem	**FIAR**	**IFA** STS-77-V-02	RCS
PROP-02	**GMT:** 142:23:30:00		**SPR**	**UA**	**Manager:** C. Budahl
			IPR 88V-0001	**PR**	x34561
					Engineer: W. Manha

Title: Primary Thruster R3A Heater Failed Off (ORB)

Summary: The heater on primary thruster R3A failed off at approximately 142:23:30 G.m.t. (002:13:00 MET). Primary thruster R3A was hot-fired several times on a non-interference basis with payload activities to maintain the valve temperature above 40 deg F due to the failure of its heater. The first of these firings was performed at

approximately 143:06:20 G.m.t. (002:19:50 MET). The orbiter attitude during crew sleep was modified to keep the temperature above 40 deg F. The right pod is next scheduled to be installed on OV-102. The heater failure will be investigated in the HMF.