SSVEO IFA List

Date:02/27/2003

STS - 102, OV - 103, Discovery (29)

Time:03:48:PM

Tracking No	Time	Classification	Documentation		Subsystem
MER - 12	**MET:** 008:21:58	Problem	**FIAR**	**IFA** STS-102-V-01	Active Thermal Control
EECOM-04	**GMT:** 076:09:40		**SPR** 102RF06	**UA**	Subsytem
			IPR 105V-0007	**PR**	**Manager:** Son Nguyen
					714-372-5058
					Engineer: Carmelo
					Asuncion
					281-853-1635

Title: Degraded Freon Coolant Loop (FCL) 1 Due To Radiator Icing (ORB)

Summary: During a flash evaporator system (FES) water dump, Freon coolant loop (FCL) 1 apparently experienced a flow blockage due to freezing in the radiator with ice collecting in the port radiator flow controller inlet filter. This condition resulted in reduced flow rates in FCL 1. Automatic radiator bypass occurred when normal radiator temperature control was restarted and a radiator under-temperature condition occurred (< 33 deg F). The condition persisted and eventually the radiator bypass mode was switched to manual, equipment was powered on to increase the heat load on the loop, and the attitude was changed to increase the heat load on the radiator. These actions recovered nominal operation of FCL 1. KSC troubleshooting will consist of a Freon sample from loop 1. Also thermal analysis of the event is being performed.

Tracking No	Time	Classification	Documentation		Subsystem
MER - 16	**MET:** 011:19:44	Problem	**FIAR**	**IFA** STS-102-V-02	OMS/RCS
PROP-01	**GMT:** 079:07:27		**SPR** 102RF07	**UA**	**Manager:** Brian Werner
			IPR 105V-0005	**PR**	714-934-0542
					Engineer: Steve Arrieta
					281-853-1554

Title: Right OMS Vapor Isolation Valve #2 Did Not Indicate Open (ORB)

Summary: When the crew configured the OMS helium valves, the right OMS vapor isolation valve #2 did not indicate OPEN (V43X5158X). The valve also did not indicate OPEN at the start of the burn when the computer sent out OPEN commands. This could be either an actual valve failure, or a limit switch failure. There is no CLOSE indicator because the valves are spring loaded closed. Data review indicates the valve did not give an OPEN indication during the prior orbit adjust burn; the valve had worked all previous times it was commanded to open. This is the second flight for this particular valve; it is the replacement for a valve whose position indicator had been intermittent. KSC will troubleshoot the problem.