

SSVEO IFA List

Date:02/27/2003

STS - 84, OV - 104, Atlantis (19)

Time:04:02:PM

<u>Tracking No</u>	<u>Time</u>	<u>Classification</u>		<u>Documentation</u>	<u>Subsystem</u>
MER - 9	MET: 02:08:31	Problem	FIAR	IFA STS-84-V-01	CCTV
INCO-03	GMT: 137:16:39		SPR	UA	Manager: Bernie Embrey
			IPR	PR COM-4-20-0233	x30184
					Engineer: Wendell Rowan x30177

Title: Camera C Blurred Image (GFE)

Summary: There was a circular-shaped blurred-area at the center of the camera C (CTVC s/n 202) image. The blur was not evident early in the mission. The blurred area became larger and smaller as the camera was zoomed, indicating that the problem was on the lens. TV lab analysis of the video confirmed that material on the lens was the cause of the problem. The material could be from outgassing within the lens assembly or foreign material on the external surface of the lens. The mission impact was degraded camera C video images.

KSC removed this camera from the vehicle and sent it to the Boeing FCE facility at KSC for analysis. It was determined that there was material on the inside surface of the lens. The camera was sent to the vendor for evaluation and repair.

<u>Tracking No</u>	<u>Time</u>	<u>Classification</u>		<u>Documentation</u>	<u>Subsystem</u>
MER - 11	MET: 06:16:56	Problem	FIAR	IFA STS-84-V-02	RCS
	GMT: 142:01:04		SPR	UA	Manager: Samuel Jones
			IPR	PR FRC4-A0036	x39031
					Engineer: Steve Arrieta x36435

Title: Low FRCS Oxidizer Tank Ullage Pressure on the B-Leg Regulator (ORB)

Summary: During separation from the Mir, a period of high FRCS utilization (approximately 80 scfm), the forward RCS oxidizer ullage pressure dropped into the 233 to

234 psia range on several occasions. The ullage pressure should be maintained in the 239 to 259 psia range (the test flow rate is 140 to 150 scfm). The FRCS oxidizer tank was configured to the B-leg regulator at the time of the occurrence. Low regulation pressure with this regulator is a known condition, having been seen during previous flights and on the ground. Waiver WK 03613 was taken during the STS-84 flow for this condition (CAR KB3730). Under similar high flow rate conditions during the previous flight of OV-104 (STS-81), the lowest regulated pressure was 238 psia, 5 psia higher than that seen during this mission.

This regulator was tested post flight to determine if corrective action prior to STS-86 was required. Note that the intent going into the STS-84 mission was to consider removal and replacement of the regulator at OMDP (post STS-86). Testing during the STS-86 flow determined that the regulator performance was the same as it had been prior to the STS-84 mission. Therefore, the waiver (WK 03613) written prior to STS-84 that was effective until OMDP will be applicable for STS-86. No additional KSC action was required during the STS-86 flow.

<u>Tracking No</u>	<u>Time</u>	<u>Classification</u>		<u>Documentation</u>	<u>Subsystem</u>
MER - 13	MET: 07:04:22	Problem	FIAR	IFA STS-84-V-03	CCTV
INCO-06	GMT: 142:12:30		SPR	UA	Manager: Bernie Embrey
			IPR	PR COM-4-20-0234	x30184
					Engineer: Wendell Rowan
					x30177

Title: Camera A Blurred Image (GFE)

Summary: There was a circular-shaped blurred-area at the center of the camera A (CTVC s/n 216) image. The blur was not evident early in the mission. The blurred area became larger and smaller as the camera was zoomed, indicating that the problem was on the lens. This anomaly is similar to the camera C blurred image identified in MER-09.

KSC removed this camera from the vehicle and sent it to the Boeing FCE facility at KSC for analysis. It was determined that there was material on the inside surface of the lens. The camera was sent to the vendor for evaluation and repair.

<u>Tracking No</u>	<u>Time</u>	<u>Classification</u>		<u>Documentation</u>	<u>Subsystem</u>
MER - 15	MET: 08:23:14	Problem	FIAR	IFA STS-84-V-04	FCE,MECH
MMACS-02	GMT: 144:07:22		SPR	UA	Manager: James Ragan
			IPR	PR FCS-4-19-0507	x33646

Engineer: Anselmo
Lozano
x36339

Title: MS4 Seat Interference with the A-Hatch Handhold (ORB)

Summary: During deorbit preparations, the crew noted that there was an interference between the A-hatch handhold and the mission specialist 4 lightweight seat (seat 6 position). During ascent, the seat back is inclined two degrees forward and there is no interference. However, the seat back is rotated ten degrees aft for entry and the interference exists. The handhold was unbolted and removed to provide clearance for the seat. This was the first flight of a lightweight seat on a vehicle with an internal airlock. This interference was a known problem, but at the time it was understood that a lightweight seat would not fly on a vehicle with an internal airlock.

The decision has been made to fly STS-86 (the next flight of OV-104) without the handhold. MCR 18755 was approved to remove the handhold when a lightweight seat is installed in position 6. The crew can open the hatch by using the structural ribs.
