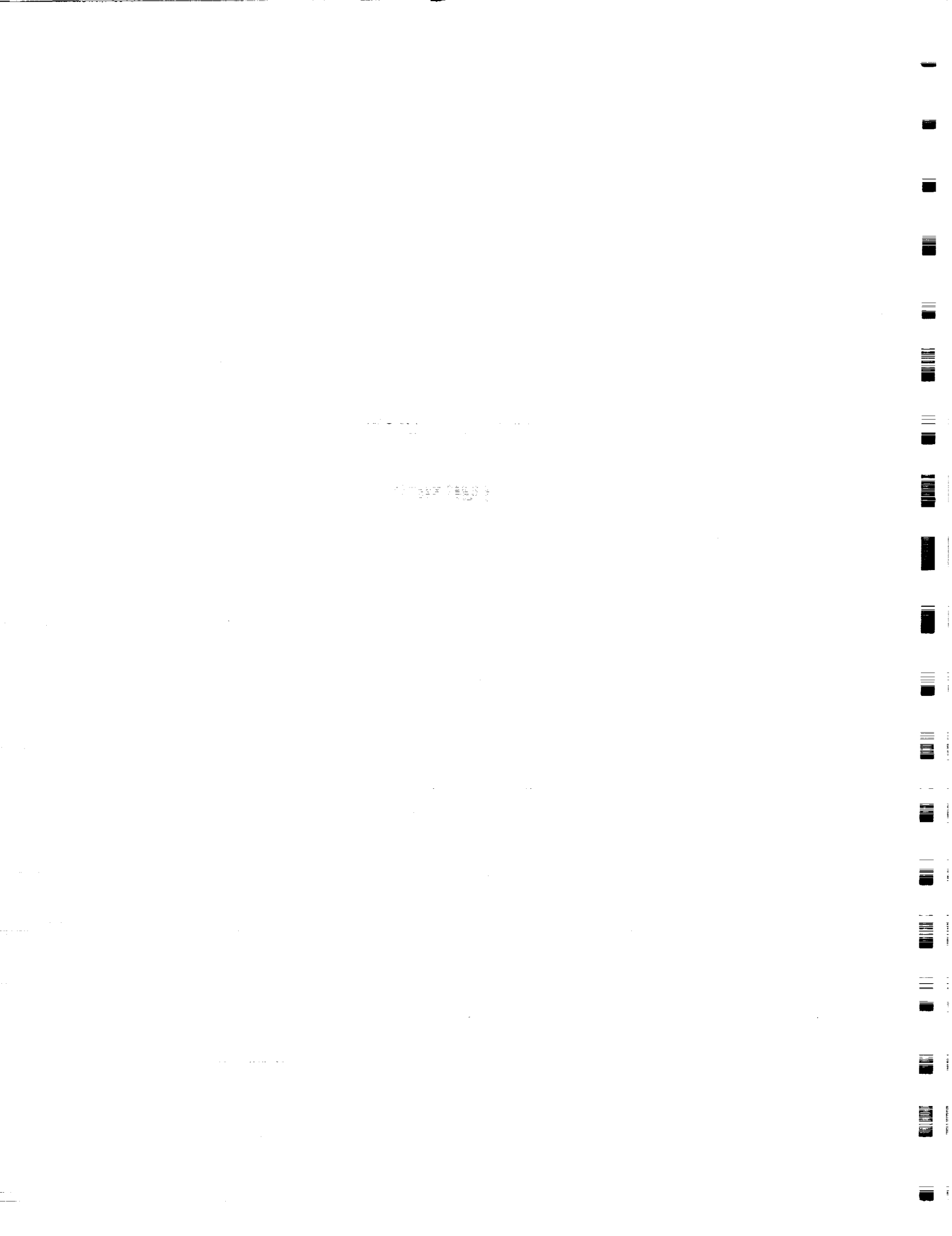


INDEPENDENT ORBITER ASSESSMENT

**ASSESSMENT OF THE
MAIN PROPULSION
SUBSYSTEM
FMEA/CIL
VOLUME 2 OF 4**

26 FEBRUARY 1988



APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/20/88
 ASSESSMENT ID: MPS-1012
 NASA FMEA #: 0518-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 1012
 ITEM: LO2 TANK PRE-PRESS CHECK VALVE (CV16)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[F]	[X] *
IOA	[3 /2R]	[P]	[F]	[P]	[X]
COMPARE	[N /N]	[]	[]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

IF THIS CHECK VALVE FAILS TO CLOSE THE LO2 PRE-PRESS DISCONNECT VALVE WOULD ADD REDUNDANCY. SINCE THE ACCELERATION ACTS STRONGLY ON THE HEAVY LO2, LOSS OF LO2 AND LPOT PUMP CAVITATION ARE UNLIKELY. HOWEVER, LOSS OF GO2 ULLAGE PRESSURE COULD CAUSE THE LO2 TANK TO BUCKLE DUE TO ATMOSPHERIC FORCES ON AN UNPRESSURIZED TANK. CONTAMINATION CAN CAUSE LOSS OF ALL REDUNDANCY. NASA INFORMATION IS BASED ON THE RI/NASA CRITICAL ITEMS LIST OF 12-23-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/20/88
 ASSESSMENT ID: MPS-1014
 NASA FMEA #: N/A

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 1014
 ITEM: LO2 TANK PRE-PRESS CHECK VALVE (CV16)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[/]	[]	[]	[]	[] *
IOA	[1 / 1]	[NA]	[NA]	[NA]	[X]
COMPARE	[N / N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[1 / 1] [NA] [NA] [NA] [A]
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

THIS WORKSHEET SHOULD BE COMBINED WITH MPS-1013.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/20/88
ASSESSMENT ID: MPS-1021
NASA FMEA #: 0451-1

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 1021
ITEM: LO2 BLEED CHECK VALVE (CV31, 33, 35)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[F]	[F]	[P]	[X] *
IOA	[1 /1]	[NA]	[NA]	[NA]	[X]
COMPARE	[N /N]	[N]	[N]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[2 /1R] [P] [F] [F] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

IF THIS CHECK VALVE FAILS TO OPEN, LO2 WILL ACCUMULATE INSIDE THE POGO ACCUMULATOR PUSHING THE GO2 OUT THROUGH THE PRESSURE ISOLATION VALVE. THIS WOULD NEUTRALIZE THE POGO SUPPRESSION SYSTEM CAUSING LOW-FREQUENCY VIBRATIONS TO BE ADDED TO THE SHUTTLES DYNAMICS IN THE FORM OF VARYING THRUST. THESE ADDITIONAL DYNAMICS COULD CAUSE THE LOSS OF THE VEHICLE. SINCE THE VALVE IS REALLY TWO CHECK VALVES IN PARALLEL, TWO FAILURES ARE REQUIRED FOR THE DESCRIBED EFFECTS TO OCCUR. NASA INFORMATION IS BASED ON THE RI/NASA CRITICAL ITEMS LIST OF 12-23-87 AND THE 0451-1 CIL WORKSHEET OF 9-16-87. THIS WORKSHEET SHOULD BE COMBINED WITH MPS-1023.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/20/88
ASSESSMENT ID: MPS-1022
NASA FMEA #: 0451-1

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 1022
ITEM: LO2 BLEED CHECK VALVE (CV31, 33, 35)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[F]	[F]	[P]	[X] *
IOA	[2 /1R]	[P]	[F]	[P]	[X]
COMPARE	[/]	[N]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[2 /1R] [F] [F] [F] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

GROUND CHECKOUT WILL NOT INDICATE THAT BOTH DUAL REDUNDANT CHECK VALVES ARE OPERATING PROPERLY. NASA INFORMATION IS BASED ON THE RI/NASA CRITICAL ITEMS LIST OF 12-23-87 AND THE CIL WORKSHEET DATED 9-16-87. THIS IOA WORKSHEET SHOULD BE COMBINED WITH MPS-1023.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/20/88
 ASSESSMENT ID: MPS-1023
 NASA FMEA #: 0451-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 1023
 ITEM: LO2 BLEED CHECK VALVE (CV31, 33, 35)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[F]	[F]	[P]	[X] *
IOA	[3 /2R]	[P]	[F]	[P]	[X]
COMPARE	[N /N]	[N]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[2 /1R] [F] [F] [F] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

IF THIS CHECK VALVE FAILS TO OPEN THE STANDPIPE DOES NOT GIVE THE GO2 AN OVERFLOW CAPABILITY IF THE LO2 LEVEL IN THE POGO ACCUMULATOR LEVEL LOWER. THIS MIGHT ALLOW GO2 INTO THE HPOTP CAUSING UNCONTAINED ENGINE DAMAGE. GROUND CHECKOUT CANNOT RELIABLY INDICATE THAT BOTH DUAL REDUNDANT CHECK VALVES ARE OPERATING PROPERLY. BOTH DUAL REDUNDANT CHECK VLAVES CAN FAIL TO OPEN BECAUSE OF CONTAMINATION. NASA INFORMATION IS BASED ON THE RI/NASA CRITICAL ITEMS LIST OF 12-23-87 AND THE RI/NASA CIL WORKSHEET OF 9-16-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/20/88
ASSESSMENT ID: MPS-1025
NASA FMEA #: 0451-2

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 1025
ITEM: LO2 BLEED CHECK VALVE (CV31, 33, 35)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 /3]	[NA]	[NA]	[NA]	[X] *
IOA	[/NA]	[NA]	[NA]	[NA]	[]
COMPARE	[N /N]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[3 /3] [P] [F] [P] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

THE RI/NASA CRITICAL ITEMS LIST (12-23-87) INDICATES 3/3A, MEANING 3/3 FOR NOMINAL FLIGHT AND 1/1 FOR ABORT. THE RI/NASA CIL WORKSHEET (DATED 9-16-87) DESCRIBES A FAILURE SEQUENCE THAT CONFORMS TO A CRITICALITY OF 2/1R FOR ABORT. IOA RECOMMENDS 3/3 FOR NOMINAL AND 2/1R FOR ABORT, WITH THE MAIN OXIDIZER VALVE AS THE REDUNDANT ITEM WHOSE FAILURE WOULD ALLOW LOSS OF PROPELLANT.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/20/88
ASSESSMENT ID: MPS-1026
NASA FMEA #: 0451-1

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 1026
ITEM: LO2 BLEED CHECK VALVE (CV31, 33, 35)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[F]	[F]	[P]	[X] *
IOA	[2 /1R]	[P]	[F]	[P]	[X]
COMPARE	[/]	[N]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

THE IOA WORKSHEET ADDRESSES ONLY THE PERIOD BETWEEN MECO AND MPS DUMP, WHICH IS NOT ADDRESSED ON 0451-1. GROUND CHECKOUT CANNOT RELIABLY CERTIFY THAT THE DUAL REDUNDANT CHECK VALVES ARE BOTH OPERATING PROPERLY. IOA WORKSHEET 1026 SHOULD BE COMBINED WITH 1023. NASA INFORMATION IS BASED ON THE RI/NASA CRITICAL ITEMS LIST OF 12-23-87 AND THE RI/NASA WORKSHEET DATED 9-16-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/20/88
 ASSESSMENT ID: MPS-1028
 NASA FMEA #: 0451-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 1028
 ITEM: LO2 BLEED CHECK VALVE (CV31, 33, 35)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[F]	[F]	[P]	[X] *
IOA	[3 /3]	[NA]	[NA]	[NA]	[]
COMPARE	[N /N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[2 /1R] [F] [F] [F] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

THIS IOA WORKSHEET APPLIES ONLY TO THE PRELAUNCH PHASE. LOSS OF TEMPERATURE CONDITIONING FOR ONE ENGINE MAY CAUSE LAUNCH DELAY. NASA INFORMATION IS BASED ON THE RI/NASA CRITICAL ITEMS LIST (12-12-87) AND RI/NASA CIL WORKSHEET 0451-1 DATED 9-16-87. THIS IOA WORKSHEET SHOULD BE COMBINED WITH #1023.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/20/88
ASSESSMENT ID: MPS-1031
NASA FMEA #: 0519-3

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 1031
ITEM: GO2 PRESSURE FLOW CONTROL VALVE (LV53, 54, 55)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[F]	[P]	[P]	[X] *
IOA	[3 /2R]	[P]	[F]	[P]	[X]
COMPARE	[N /N]	[N]	[N]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] [] (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

FAILURE OF TWO FLOW CONTROL VALVES MAY CAUSE VIOLATION OF SAFETY LIMITS ON O2 ULLAGE PRESSURE. LOSS OF ALL REDUNDANCY WILL CAUSE ULLAGE PRESSURE TO FALL BELOW ITS MINIMUM ALLOWABLE VALVE. THIS IS MONITORED AND WILL BE INDICATED TO THE CREW.

REF: RI/NASA CIL, NASA FMEA/CIL REVIEW MEETING NOTES (J.E. BORCHES).

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/20/88
ASSESSMENT ID: MPS-1032
NASA FMEA #: 0519-1

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 1032
ITEM: GO2 PRESSURE FLOW CONTROL VALVE (LV53, 54, 55)
LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[F]	[P]	[F]	[X] *
IOA	[3 /2R]	[P]	[F]	[P]	[X]
COMPARE	[N /N]	[N]	[N]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] [] (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

LOSS OF A SECOND FLOW CONTROL VALVE MAY CAUSE ULLAGE PRESSURE TO FALL BELOW THE MINIMUM LEVEL REQUIRED FOR SAFETY.
REF: RI/NASA CIL 12-23-87, NASA FMEA/CIL REVIEW MEETING (J.E. BORCHES).

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/20/88
ASSESSMENT ID: MPS-1033
NASA FMEA #: 0519-2

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 1033
ITEM: GO2 PRESSURE FLOW CONTROL VALVE (LV53, 54, 55)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[F]	[P]	[F]	[X] *
IOA	[3 /1R]	[P]	[F]	[P]	[X]
COMPARE	[N /]	[N]	[N]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[2 /1R] [P] [P] [P] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

SECOND FAILURE MAY CAUSE OVERPRESSURIZATION OF THE O2 TANK AND VENTING OF O2. GROUND CHECKOUT SHOULD DETECT THE FAILURE TO CLOSE. LOSS OF REDUNDANCY IS DETECTABLE BY INDICATIONS OF HIGH ULLAGE PRESSURE. ALL REDUNDANCY CANNOT BE LOST BY A SINGLE EVENT.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/21/88
ASSESSMENT ID: MPS-1035
NASA FMEA #: 0519-4

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 1035
ITEM: GO2 PRESSURE FLOW CONTROL VALVE (LV53, 54, 55)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 / 1]	[NA]	[NA]	[NA]	[X] *
IOA	[1 / 1]	[NA]	[NA]	[NA]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

THIS IOA WORKSHEET SHOULD BE COMBINED WITH 1034. REF: RI/NASA
CIL OF 12-23-87 AND NASA FMEA/CIL REVIEW MEETING NOTES (J.E.
BORCHES).

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/21/88
 ASSESSMENT ID: MPS-1041
 NASA FMEA #: 0408-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 1041
 ITEM: LO2 FEED (ORB/ET) DISCONNECT (PD1)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 / 1]	[NA]	[NA]	[NA]	[X] *
IOA	[1 / 1]	[NA]	[NA]	[NA]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

THIS IOA WORKSHEET SHOULD BE COMBINED WITH 1043. REF: RI/NASA
 CIL OF 12-23-87 AND CIL WORKSHEET DATED 12-15-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/21/88
ASSESSMENT ID: MPS-1041A
NASA FMEA #: 0408-1

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 1041
ITEM: LO2 FEED (ORB/ET) DISCONNECT (PD1)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 / 3]	[NA]	[NA]	[NA]	[] *
IOA	[1 / 1]	[NA]	[NA]	[NA]	[]
COMPARE	[N / N]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

THE 1/1 CRITICALITY ON IOA WORKSHEET 1041 WAS NOT DRIVEN BY THE FAILURE TO OPEN. FAILURE TO OPEN WILL CAUSE LAUNCH DELAY.
REF: NASA FMEA/CIL REVIEW MEETING NOTES (J.E. BORCHES).

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/21/88
 ASSESSMENT ID: MPS-1042
 NASA FMEA #: 0408-4

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 1042
 ITEM: LO2 FEED (ORB/ET) DISCONNECT (PD1)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 / 1]	[NA]	[NA]	[NA]	[X] *
IOA	[1 / 1]	[NA]	[NA]	[NA]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND CIL WORKSHEET DATED 12-15-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/21/88
 ASSESSMENT ID: MPS-1042A
 NASA FMEA #: 0408-11

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 1042
 ITEM: LO2 FEED (ORB/ET) DISCONNECT (PD1)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 / 1]	[NA]	[NA]	[NA]	[X] *
IOA	[1 / 1]	[NA]	[NA]	[NA]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12/23/87 AND RI/NASA CIL WORKSHEET OF 12-15-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/21/88
 ASSESSMENT ID: MPS-1043
 NASA FMEA #: 0408-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 1043
 ITEM: LO2 FEED (ORB/ET) DISCONNECT (PD1)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 /1]	[NA]	[NA]	[NA]	[X] *
IOA	[1 /1]	[NA]	[NA]	[NA]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND CIL WORKSHEET DATED 12-15-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/21/88
ASSESSMENT ID: MPS-1044
NASA FMEA #: 0408-7

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 1044
ITEM: LO2 FEED (ORB/ET) DISCONNECT (PD1)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 / 1]	[NA]	[NA]	[NA]	[X] *
IOA	[2 / 2]	[NA]	[NA]	[NA]	[X]
COMPARE	[N / N]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

PROPULSIVE VENTING OF RESIDUAL O2 MAY CAUSE ORBITER/ET RECONTACT
AND POSSIBLE DESTRUCTION OF THE VEHICLE.
REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-
15-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/21/88
 ASSESSMENT ID: MPS-1045
 NASA FMEA #: 0408-4

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 1045
 ITEM: LO2 FEED (ORB/ET) DISCONNECT (PD1)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 / 1]	[NA]	[NA]	[NA]	[X] *
IOA	[1 / 1]	[NA]	[NA]	[NA]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] [] (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-15-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/21/88
 ASSESSMENT ID: MPS-1046
 NASA FMEA #: 0408-6

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 1046
 ITEM: LO2 FEED (ORB/ET) DISCONNECT (PD1)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 / 1]	[NA]	[NA]	[NA]	[X] *
IOA	[2 / 2]	[NA]	[NA]	[NA]	[X]
COMPARE	[N / N]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

DAMAGE TO TPS TILES FROM CRYO EXPOSURE AND/OR LOSS OF HELIUM DURING REPRESS CAUSING LOSS OF AFT COMPARTMENT PURGE CAPABILITY CAN LEAD TO LOSS OF VEHICLE.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/21/88
ASSESSMENT ID: MPS-1051
NASA FMEA #: 0513-4

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 1051
ITEM: GO2 PRESSURIZATION (ORB/ET) DISCONNECT (PD4)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 / 3]	[NA]	[NA]	[NA]	[] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] [] (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

REF: RI/NASA FMEA/CIL REVIEW MEETING NOTES (J.E. BORCHES).

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/21/88
 ASSESSMENT ID: MPS-1052
 NASA FMEA #: 0513-3

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 1052
 ITEM: GO2 PRESSURIZATION (ORB/ET) DISCONNECT (PD4)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 /1]	[NA]	[NA]	[NA]	[X] *
IOA	[2 /2]	[NA]	[NA]	[NA]	[X]
COMPARE	[N /N]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

THE POSSIBILITY OF PRESSURIZATION LINE RUPTURE JUSTIFIES A
 CRITICALITY OF 1/1.

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING
 NOTES (J.E. BORCHES).

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/21/88
 ASSESSMENT ID: MPS-1053
 NASA FMEA #: 0513-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 1053
 ITEM: GO2 PRESSURIZATION (ORB/ET) DISCONNECT (PD4)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 / 1]	[NA]	[NA]	[NA]	[X] *
IOA	[1 / 1]	[NA]	[NA]	[NA]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING
 NOTES (J.E. BORCHES).

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/21/88
ASSESSMENT ID: MPS-1053A
NASA FMEA #: 0513-5

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 1053
ITEM: GO2 PRESSURIZATION (ORB/ET) DISCONNECT (PD4)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 / 1]	[NA]	[NA]	[NA]	[X] *
IOA	[1 / 1]	[NA]	[NA]	[NA]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND NASA FMEA/CIL REVIEW MEETING
NOTES (J.E. BORCHES).

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/21/88
 ASSESSMENT ID: MPS-1054
 NASA FMEA #: NA

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 1054
 ITEM: GO2 PRESSURIZATION (ORB/ET) DISCONNECT (PD4)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[/]	[]	[]	[]	[] *
IOA	[2 / 2]	[NA]	[NA]	[NA]	[X]
COMPARE	[N / N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

THIS IOA WORKSHEET SHOULD BE COMBINED WITH NO LOSS. COMBUSTION
 OF COMPONENT MATERIAL WILL ALLOW ESCAPE OF GO2.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/21/88
ASSESSMENT ID: MPS-1055
NASA FMEA #: NA

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 1055
ITEM: GO2 PRESSURIZATION (ORB/ET) DISCONNECT (PD4)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[/]	[]	[]	[]	[] *
IOA	[1 / 1]	[NA]	[NA]	[NA]	[X]
COMPARE	[N / N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[1 / 1] [NA] [NA] [NA] [A]
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/21/88
ASSESSMENT ID: MPS-1056
NASA FMEA #: 0513-2

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 1056
ITEM: GO2 PRESSURIZATION (ORB/ET) DISCONNECT (PD4)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY	REDUNDANCY SCREENS			CIL ITEM
	FLIGHT HDW/FUNC	A	B	C	
NASA	[3 / 3]	[NA]	[NA]	[NA]	[X] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

THE RI/NASA CIL INDICATES A 1/1 CRITICALITY DURING ABORTS FOR THIS FAILURE MODE. IOA CONCURS.

REF: NASA FMEA/CIL REVIEW MEETING NOTES (J.E. BORCHES).

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/21/88
 ASSESSMENT ID: MPS-1061
 NASA FMEA #: 0517-3

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 1061
 ITEM: LO2 TANK PRE-PRESS (ORB/GND) DISC (PD9)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 / 3]	[NA]	[NA]	[NA]	[] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: NASA FMEA/CIL REVIEW MEETING NOTES (J.E. BORCHES).

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/21/88
 ASSESSMENT ID: MPS-1062
 NASA FMEA #: 0517-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 1062
 ITEM: LO2 TANK PRE-PRESS (ORB/GND) DISC (PD9)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[F]	[X] *
IOA	[3 /3]	[NA]	[NA]	[NA]	[]
COMPARE	[N /N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] [] (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

THIS IOA WORKSHEET APPLIES ONLY TO THE PRELAUNCH PHASE. IT SHOULD BE COMBINED WITH 1063.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/21/88
ASSESSMENT ID: MPS-1063
NASA FMEA #: 0517-1

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 1063
ITEM: LO2 TANK PRE-PRESS (ORB/GND) DISC (PD9)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[F]	[X] *
IOA	[3 /2R]	[P]	[F]	[P]	[X]
COMPARE	[N /N]	[]	[]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[2 /1R] [P] [F] [P] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

LOSS OF REDUNDANCY WILL ALLOW LOSS OF ULLAGE PRESSURE AND POSSIBLE ET STRUCTURAL FAILURE. ALL REDUNDANCY CANNOT BE LOST BY A SINGLE EVENT.

REF: RI/NASA CIL OF 12-23-87 AND NASA FMEA/CIL REVIEW MEETING NOTES (J.E. BORCHES).

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/21/88
 ASSESSMENT ID: MPS-1064
 NASA FMEA #: 0517-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 1064
 ITEM: LO2 TANK PRE-PRESS (ORB/GND) DISC (PD9)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 / 3]	[NA]	[NA]	[NA]	[] *
IOA	[2 / 1R]	[P]	[F]	[P]	[X]
COMPARE	[N / N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] [] (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

THIS RI/NASA ANALYSIS APPLIES ONLY TO EXTERNAL LEAKAGE OF HELIUM.
 REF: RI/NASA FMEA/CIL REVIEW MEETING NOTES (J.E. BORCHES).

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/21/88
 ASSESSMENT ID: MPS-1071
 NASA FMEA #: NA

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 1071
 ITEM: LO2 GROUND FILL & DRAIN (ORB/GND) DISCONNECT -
 (PD12)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[/]	[]	[]	[]	* []
IOA	[3 / 3]	[NA]	[NA]	[NA]	
COMPARE	[N / N]	[N]	[N]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:
 FAILURE MODE NOT CREDIBLE.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/21/88
 ASSESSMENT ID: MPS-1072
 NASA FMEA #: 0303-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 1072
 ITEM: LO2 GROUND FILL & DRAIN (ORB/GND) DISCONNECT
 (PD12)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 / 1]	[NA]	[NA]	[NA]	[X] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[N / N]	[]	[]	[]	[N]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

LEAKAGE OF LO2 IS DECLARED BY NSTS 22206 TO BE A CRITICALITY 1/1
 ITEM. IOA WORKSHEET 1072 SHOULD BE COMBINED WITH 1073.
 REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-14-
 87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/22/88
 ASSESSMENT ID: MPS-1073
 NASA FMEA #: 0303-6

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 1073
 ITEM: LO2 GROUND FILL & DRAIN (ORB/GND) DISCONNECT
 (PD12)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 / 1]	[NA]	[NA]	[NA]	[X] *
IOA	[1 / 1]	[NA]	[NA]	[NA]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-14-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/22/88
 ASSESSMENT ID: MPS-1081
 NASA FMEA #: 0406-4

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 1081
 ITEM: LO2 OVERBOARD BLEED (ORB/GND) DISCONNECT (PD13)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 / 3]	[NA]	[NA]	[NA]	[] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA FMEA/CIL REVIEW MEETING NOTES (J.E. BORCHES).

**APPENDIX C
ASSESSMENT WORKSHEET**

ASSESSMENT DATE: 1/22/88
 ASSESSMENT ID: MPS-1081A
 NASA FMEA #: 0406-3

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 1081
 ITEM: LO2 OVERBOARD BLEED (ORB/GND) DISCONNECT (PD13)
 LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 / 1]	[NA]	[NA]	[NA]	[X] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[N / N]	[]	[]	[]	[N]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 11-17-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/22/88
 ASSESSMENT ID: MPS-1082
 NASA FMEA #: 0406-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 1082
 ITEM: LO2 OVERBOARD BLEED (ORB/GND) DISCONNECT (PD13)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 /1]	[NA]	[NA]	[NA]	[X] *
IOA	[3 /3]	[NA]	[NA]	[NA]	[]
COMPARE	[N /N]	[]	[]	[]	[N]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 11-17-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/22/88
 ASSESSMENT ID: MPS-1083
 NASA FMEA #: 0406-5

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 1083
 ITEM: LO2 OVERBOARD BLEED (ORB/GND) DISCONNECT (PD13)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 / 1]	[NA]	[NA]	[NA]	[X] *
IOA	[1 / 1]	[NA]	[NA]	[NA]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 11-17-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/22/88
 ASSESSMENT ID: MPS-1084
 NASA FMEA #: 0406-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 1084
 ITEM: LO2 OVERBOARD BLEED (ORB/GND) DISCONNECT (PD13)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[P]	[X] *
IOA	[3 /2R]	[P]	[P]	[P]	[]
COMPARE	[N /N]	[]	[N]	[]	[N]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 11-17-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/22/88
 ASSESSMENT ID: MPS-1085
 NASA FMEA #: 0406-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 1085
 ITEM: LO2 OVERBOARD BLEED (ORB/GND) DISCONNECT (PD13)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[P]	[X] *
IOA	[2 /1R]	[P]	[P]	[P]	[X]
COMPARE	[/]	[]	[N]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] [] (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

THIS IOA WORKSHEET SHOULD BE COMBINED WITH 1084. REF: RI/NASA
 CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 11-17-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/22/88
 ASSESSMENT ID: MPS-1091
 NASA FMEA #: 0516-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 1091
 ITEM: GO2 PRESSURIZATION MANIFOLD TEST POINT COUPLING
 (PD15)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 / 1]	[NA]	[NA]	[NA]	[X] *
IOA	[1 / 1]	[NA]	[NA]	[NA]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA FMEA/CIL REVIEW MEETING NOTES (J.E. BORCHES).

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/22/88
ASSESSMENT ID: MPS-1092
NASA FMEA #: 0516-1

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 1092
ITEM: GO2 PRESSURIZATION MANIFOLD TEST POINT COUPLING
(PD15)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[F]	[F]	[F]	[X] *
IOA	[1 /1]	[NA]	[NA]	[NA]	[X]
COMPARE	[N /N]	[N]	[N]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[1 /1] [NA] [NA] [NA] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

FAILURE MODE IS EXTERNAL LEAKAGE OF THE COUPLING, NOT INTERNAL SEAL LEAKAGE. THIS FMEA SHOULD BE DROPPED, OR ITS FAILURE MODE REVISED TO REFLECT THE SCENARIO DESCRIBED.
REF: RI/NASA CIL OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING NOTES (J.E. BORCHES).

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/22/88
 ASSESSMENT ID: MPS-1093
 NASA FMEA #: NA

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 1093
 ITEM: GO2 PRESSURIZATION MANIFOLD TEST POINT COUPLING
 (PD15)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[/]	[]	[]	[]	[] *
IOA	[2 / 2]	[NA]	[NA]	[NA]	[X]
COMPARE	[N / N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[1 / 1] [NA] [NA] [NA] [A]
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

COMBUSTION OF THE COMPONENT WILL ALLOW ESCAPE OF O2, CREATING A
 FIRE/EXPLOSION HAZARD THAT CAN DESTROY THE VEHICLE.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/22/88
 ASSESSMENT ID: MPS-1094
 NASA FMEA #: NA

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 1094
 ITEM: GO2 PRESSURIZATION MANIFOLD TEST POINT COUPLING
 (PD15)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[/]	[]	[]	[]	[] *
IOA	[1 / 1]	[NA]	[NA]	[NA]	[X]
COMPARE	[N / N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:
 THIS IOA WORKSHEET SHOULD BE COMBINED WITH 1093.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/22/88
 ASSESSMENT ID: MPS-1101
 NASA FMEA #: NA

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 1101
 ITEM: LO2 PREVALVE (PV1, 2, 3)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[/]	[]	[]	[]	* []
IOA	[3 / 3]	[NA]	[NA]	[NA]	
COMPARE	[N / N]	[N]	[N]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[3 / 3] [NA] [NA] [NA] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

THIS IOA ANALYSIS ADDRESSES A PRELAUNCH FAILURE TO OPEN.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/22/88
ASSESSMENT ID: MPS-1102
NASA FMEA #: 0401-3

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 1102
ITEM: LO2 PREVALVE (PV1, 2, 3)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 / 1]	[NA]	[NA]	[NA]	[X] *
IOA	[2 / 2]	[NA]	[NA]	[NA]	[X]
COMPARE	[N / N]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-15-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/22/88
ASSESSMENT ID: MPS-1103
NASA FMEA #: 0401-9

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 1103
ITEM: LO2 PREVALVE (PV1, 2, 3)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 / 1]	[NA]	[NA]	[NA]	[X] *
IOA	[1 / 1]	[NA]	[NA]	[NA]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-15-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/22/88
ASSESSMENT ID: MPS-1104
NASA FMEA #: 0401-7

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 1104
ITEM: LO2 PREVALVE (PV1, 2, 3)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 /1R]	[P]	[NA]	[P]	[] *
IOA	[2 /1R]	[P]	[P]	[P]	[X]
COMPARE	[N /]	[]	[N]	[]	[N]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

THE PREVALVE HAS A BYPASS RELIEF VALVE AS WELL AS VISOR RELIEF.
ADDITIONAL RELIEF CAPABILITY IS PROVIDED BY THE HPOT SEALS. RELIEF
FUNCTION IS CONSIDERED STANDBY REDUNDANT.
REF: RI/NASA CIL WORKSHEET OF 10-22-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/22/88
 ASSESSMENT ID: MPS-1105
 NASA FMEA #: 0401-5

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 1105
 ITEM: LO2 PREVALVE (PV1, 2, 3)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 /1R]	[P]	[F]	[P]	[X] *
IOA	[3 /1R]	[P]	[P]	[P]	[]
COMPARE	[/]	[]	[N]	[]	[N]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

POSITION SWITCH INDICATORS MAY FALSELY INDICATE OPEN IF THE FAILURE IS CAUSED BY A PIECE PART STRUCTURAL FAILURE. THEREFORE, SCREEN B SHOULD FAIL.

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-15-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/25/88
ASSESSMENT ID: MPS-1106
NASA FMEA #: 0401-4

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 1106
ITEM: LO2 PREVALVE (PV1, 2, 3)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 / 1]	[NA]	[NA]	[NA]	[X] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[N / N]	[]	[]	[]	[N]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

IOA ANALYSIS ADDRESSED FAILURE TO CLOSE FOLLOWING MPS DUMP ONLY.
THIS WORKSHEET SHOULD BE COMBINED WITH 1108.
REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-15-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/25/88
 ASSESSMENT ID: MPS-1107
 NASA FMEA #: 0401-3

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 1107
 ITEM: LO2 PREVALVE (PV1, 2, 3)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 / 1]	[NA]	[NA]	[NA]	[X] *
IOA	[1 / 1]	[NA]	[NA]	[NA]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-15-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/25/88
 ASSESSMENT ID: MPS-1108
 NASA FMEA #: 0401-4

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 1108
 ITEM: LO2 PREVALVE (PV1, 2, 3)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 / 1]	[NA]	[NA]	[NA]	[X] *
IOA	[1 / 1]	[NA]	[NA]	[NA]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-15-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/25/88
 ASSESSMENT ID: MPS-1121
 NASA FMEA #: 0414-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 1121
 ITEM: LO2 FEEDLINE RELIEF SHUTOFF VALVE (PV7)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 / 3]	[NA]	[NA]	[NA]	[] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/25/88
 ASSESSMENT ID: MPS-1122
 NASA FMEA #: 0414-3

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 1122
 ITEM: LO2 FEEDLINE RELIEF SHUTOFF VALVE (PV7)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[P]	[X] *
IOA	[3 /2R]	[P]	[P]	[P]	[]
COMPARE	[N /N]	[]	[N]	[]	[N]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

ESCAPING LO2 IS CONSIDERED A CRITICALITY 1 SITUATION.
 REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 8-23-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/25/88
 ASSESSMENT ID: MPS-1123
 NASA FMEA #: 0414-7

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 1123
 ITEM: LO2 FEEDLINE RELIEF SHUTOFF VALVE (PV7)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 / 1]	[NA]	[NA]	[NA]	[X] *
IOA	[1 / 1]	[NA]	[NA]	[NA]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: R/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 8-23-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/25/88
ASSESSMENT ID: MPS-1124
NASA FMEA #: 0414-1

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 1124
ITEM: LO2 FEEDLINE RELIEF SHUTOFF VALVE (PV7)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 /1R]	[P]	[P]	[P]	[] *
IOA	[1 /1]	[NA]	[NA]	[NA]	[X]
COMPARE	[N /N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] [] (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

REDUNDANCY EXISTS TO RELIEVE THE MANIFOLD IF THIS FAILURE OCCURS.
MANIFOLD PRESSURE INDICATORS SUPPORT PASSAGE OF SCREEN B.
REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 8-23-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/25/88
 ASSESSMENT ID: MPS-1131A
 NASA FMEA #: 0311-5

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 1131
 ITEM: LO2 OUTBOARD FILL AND DRAIN VALVE (PV9)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 / 1]	[NA]	[NA]	[NA]	[X] *
IOA	[1 / 1]	[NA]	[NA]	[NA]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-14-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/25/88
 ASSESSMENT ID: MPS-1132
 NASA FMEA #: 0311-9

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 1132
 ITEM: LO2 OUTBOARD FILL AND DRAIN VALVE (PV9)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 /1]	[NA]	[NA]	[NA]	[X] *
IOA	[1 /1]	[NA]	[NA]	[NA]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-14-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/25/88
 ASSESSMENT ID: MPS-1133
 NASA FMEA #: 0311-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 1133
 ITEM: LO2 OUTBOARD FILL AND DRAIN VALVE (PV9)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 / 3]	[NA]	[NA]	[NA]	[X] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

THE RI/NASA ANALYSIS IDENTIFIED A 1/1 CRITICALITY FOR RTLS AND TAL ABORTS. IOA CONCURS WITH THIS RESULT.

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-10-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/25/88
 ASSESSMENT ID: MPS-1135
 NASA FMEA #: 0311-9

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 1135
 ITEM: LO2 OUTBOARD FILL AND DRAIN VALVE (PV9)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 /1]	[NA]	[NA]	[NA]	[X] *
IOA	[2 /1R]	[P]	[P]	[P]	[X]
COMPARE	[N /N]	[N]	[N]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

LOSS OF VEHICLE CAN OCCUR UPON FIRST FAILURE DURING LOADING OR DUMP.

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-14-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/25/88
 ASSESSMENT ID: MPS-1137
 NASA FMEA #: 0311-4

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 1137
 ITEM: LO2 OUTBOARD FILL AND DRAIN VALVE (PV9)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[P]	[X] *
IOA	[3 /3]	[NA]	[NA]	[NA]	[]
COMPARE	[N /N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-10-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/25/88
 ASSESSMENT ID: MPS-1151
 NASA FMEA #: 0310-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 1151
 ITEM: LO2 INBOARD FILL AND DRAIN VALVE (PV10)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 /1R]	[P]	[P]	[P]	[] *
IOA	[1 /1]	[NA]	[NA]	[NA]	[X]
COMPARE	[N /N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

THIS IOA ANALYSIS ADDRESSED PRELAUNCH FAILURES ONLY. THE 1/1 CRITICALITY WAS DRIVEN BY THE FAILURE TO REMAIN OPEN, WHILE THE NASA FAILURE MODE WAS FAIL TO OPEN. FAILURE TO OPEN FOR MPS INERT HAS NO EFFECT. LOSS OF ALL REDUNDANCY MAY CAUSE MANIFOLD RUPTURE. REF: RI/NASA CIL WORKSHEET OF 12-10-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/25/88
 ASSESSMENT ID: MPS-1151A
 NASA FMEA #: 0310-6

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 1151
 ITEM: LO2 INBOARD FILL AND DRAIN VALVE (PV10)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 / 1]	[NA]	[NA]	[NA]	[X] *
IOA	[1 / 1]	[NA]	[NA]	[NA]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-14-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/25/88
 ASSESSMENT ID: MPS-1152
 NASA FMEA #: 0310-10

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 1152
 ITEM: LO2 INBOARD FILL AND DRAIN VALVE (PV10)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 /1]	[NA]	[NA]	[NA]	[X] *
IOA	[1 /1]	[NA]	[NA]	[NA]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] [] (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-14-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/25/88
 ASSESSMENT ID: MPS-1153
 NASA FMEA #: 0310-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 1153
 ITEM: LO2 INBOARD FILL AND DRAIN VALVE (PV10)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 / 3]	[NA]	[NA]	[NA]	[] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/25/88
 ASSESSMENT ID: MPS-1155
 NASA FMEA #: 0310-4

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 1155
 ITEM: LO2 INBOARD FILL AND DRAIN VALVE (PV10)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 / 1]	[NA]	[NA]	[NA]	[X] *
IOA	[1 / 1]	[NA]	[NA]	[NA]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-9-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/25/88
ASSESSMENT ID: MPS-1157
NASA FMEA #: 0310-10

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 1157
ITEM: LO2 INBOARD FILL AND DRAIN VALVE (PV10)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 / 1]	[NA]	[NA]	[NA]	[X] *
IOA	[1 / 1]	[NA]	[NA]	[NA]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-14-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/25/88
 ASSESSMENT ID: MPS-1171
 NASA FMEA #: 0452-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 1171
 ITEM: LO2 BLEED SHUTOFF VALVE (PV19)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 / 3]	[NA]	[NA]	[NA]	[X] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

THE RI/NASA ANALYSIS INDICATES A 1/1 CRITICALITY FOR A PAD ABORT (PRELAUNCH). IOA CONCURS WITH THIS RESULT. REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 11-13-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/25/88
 ASSESSMENT ID: MPS-1174
 NASA FMEA #: 0452-7

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 1174
 ITEM: LO2 BLEED SHUTOFF VALVE (PV19)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 / 1]	[NA]	[NA]	[NA]	[X] *
IOA	[1 / 1]	[NA]	[NA]	[NA]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 11-13-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/25/88
 ASSESSMENT ID: MPS-1175
 NASA FMEA #: 0452-3

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 1175
 ITEM: LO2 BLEED SHUTOFF VALVE (PV19)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 / 1]	[NA]	[NA]	[NA]	[X] *
IOA	[1 / 1]	[NA]	[NA]	[NA]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 11-13-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/25/88
 ASSESSMENT ID: MPS-1176
 NASA FMEA #: NA

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 1176
 ITEM: LO2 BLEED SHUTOFF VALVE (PV19)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[/]	[]	[]	[]	[] *
IOA	[1 / 1]	[NA]	[NA]	[NA]	[X]
COMPARE	[N / N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

THIS IOA WORKSHEET SHOULD BE COMBINED WITH NUMBER 1172.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/25/88
 ASSESSMENT ID: MPS-1181
 NASA FMEA #: 0453-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 1181
 ITEM: LO2 POGO ACCUMULATOR RECIRCULATION VALVE (PV20,
 21)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 / 3]	[NA]	[NA]	[NA]	[X] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] [] (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

THE RI/NASA ANALYSIS RESULTED IN A 1/1 CRITICALITY FOR PAD ABORTS (PRELAUNCH). THE SECOND FAILURE CITED (LEAK IN ENGINE OR LINE) IS NOT A VALID REDUNDANCY FOR THE POGO VALUES. REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 10-17-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/25/88
 ASSESSMENT ID: MPS-1182
 NASA FMEA #: 0453-3

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 1182
 ITEM: LO2 POGO ACCUMULATOR RECIRCULATION VALVE (PV20, 21)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 / 3]	[NA]	[NA]	[NA]	[] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/25/88
ASSESSMENT ID: MPS-1183
NASA FMEA #: 0453-7

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 1183
ITEM: LO2 POGO ACCUMULATOR RECIRCULATION VALVE (PV20, 21)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 / 1]	[NA]	[NA]	[NA]	[X] *
IOA	[1 / 1]	[NA]	[NA]	[NA]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 10-17-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/25/88
ASSESSMENT ID: MPS-1184
NASA FMEA #: 0453-6

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 1184
ITEM: LO2 POGO ACCUMULATOR RECIRCULATION VALVE (PV20, 21)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 /1R]	[F]	[F]	[P]	[X] *
IOA	[2 /1R]	[P]	[P]	[P]	[X]
COMPARE	[N /]	[N]	[N]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] [] (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 10-17-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/26/88
 ASSESSMENT ID: MPS-1185
 NASA FMEA #: 0453-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 1185
 ITEM: LO2 POGO ACCUMULATOR RECIRCULATION VALVE (PV20,
 21)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[P]	[X] *
IOA	[2 /1R]	[P]	[P]	[P]	[X]
COMPARE	[/]	[]	[N]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] [] (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

LOSS OF REDUNDANT ITEMS IS NOT READILY DETECTABLE. REF: RI/NASA
 CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 10-17-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/26/88
ASSESSMENT ID: MPS-1191
NASA FMEA #: 0427-4

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 1191
ITEM: LO2 LOW LEVEL LIQUID SENSOR (MT1, 2)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[P]	[X] *
IOA	[3 /1R]	[P]	[P]	[P]	[]
COMPARE	[N /]	[]	[N]	[]	[N]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

THIS ASSESSMENT ALSO COVERS THE LH2 ECO SENSORS. TWO SENSORS INDICATING WET WILL ALLOW ENGINE TO RUN, RESULTING IN DEPLETION SHUTDOWN AND POSSIBLE ENGINE EXPLOSION. REF: RI/NASA CIL OF 12-23-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/26/88
 ASSESSMENT ID: MPS-1192
 NASA FMEA #: 0427-5

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 1192
 ITEM: LO2 LOW LEVEL LIQUID SENSOR (MT1, 2)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 /1R]	[P]	[F]	[F]	[X] *
IOA	[2 /1R]	[P]	[P]	[P]	[X]
COMPARE	[N /]	[]	[N]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[2 /1R] [P] [F] [P] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

THIS ASSESSMENT ALSO COVERS THE LH2 ECO SENSORS. TWO SENSORS INDICATING DRY WILL CAUSE AN ENGINE SHUTDOWN COMMAND TO BE GIVEN.
 REF: RI/NASA CIL OF 12-23-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/26/88
 ASSESSMENT ID: MPS-1201
 NASA FMEA #: 0410-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 1201
 ITEM: LO2 SYSTEM DELTA P TRANSDUCER (MT44, 50)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 / 3]	[NA]	[NA]	[NA]	[] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

FOR MTS ONLY. REF: RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/26/88
ASSESSMENT ID: MPS-1211
NASA FMEA #: NA

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 1211
ITEM: LO2 PREPRESS DISCONNECT CHECK VALVE TEST PORT
(TP9)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[/]	[]	[]	[]	[] *
IOA	[2 / 1R]	[P]	[P]	[P]	[X]
COMPARE	[N / N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

THIS FAILURE MODE IS ADDRESSED IN THE ANALYSIS OF THE GO2 PRESSURIZATION SUPPLY LINE (PD9 TO CV16) ON IOA WORKSHEET 264 AND RI/NASA 0510-1.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/26/88
 ASSESSMENT ID: MPS-1221
 NASA FMEA #: NA

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 1221
 ITEM: LO2 17 INCH ORBITER DISCONNECT TEST PORT (TP17, 18)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[/]	[]	[]	[]	[] *
IOA	[1 / 1]	[NA]	[NA]	[NA]	[X]
COMPARE	[N / N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] [] (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

THIS FAILURE MODE IS ADDRESSED IN THE ANALYSIS OF THE LO2 FEEDLINE DISCONNECT (PD1) ON IOA WORKSHEET 1042 AND RI/NASA 0408-4.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/26/88
 ASSESSMENT ID: MPS-1231
 NASA FMEA #: NA

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 1231
 ITEM: LO2 FEEDLINE RELIEF TEST PORT (TP24)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[/]	[]	[]	[]	[] *
IOA	[2 /1R]	[P]	[F]	[P]	[X]
COMPARE	[N /N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

THIS FAILURE MODE IS ADDRESSED IN THE ANALYSIS OF THE LO2 RELIEF
 LINE (PV7 TO RV5) ON IOA WORKSHEET 252 AND RI/NASA 0424-1.

C-2

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/26/88
 ASSESSMENT ID: MPS-1241
 NASA FMEA #: NA

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 1241
 ITEM: LO2 FEEDLINE MANIFOLD (MA1)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[/]	[]	[]	[]	[] *
IOA	[1 / 1]	[NA]	[NA]	[NA]	[X]
COMPARE	[N / N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[3 / 3] [NA] [NA] [NA] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

BLOCKAGE WILL PREVENT TANK FILL OR ENGINE START.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/26/88
 ASSESSMENT ID: MPS-1242
 NASA FMEA #: 0419-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 1242
 ITEM: LO2 FEEDLINE MANIFOLD (MA1)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 / 1]	[NA]	[NA]	[NA]	[X] *
IOA	[1 / 1]	[NA]	[NA]	[NA]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-14-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/26/88
ASSESSMENT ID: MPS-1243
NASA FMEA #: 0419-2

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 1243
ITEM: LO2 FEEDLINE MANIFOLD (MA1)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 / 1]	[NA]	[NA]	[NA]	[X] *
IOA	[1 / 1]	[NA]	[NA]	[NA]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

THIS IOA WORKSHEET SHOULD BE COMBINED WITH 1242.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/26/88
 ASSESSMENT ID: MPS-1244
 NASA FMEA #: 0419-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 1244
 ITEM: LO2 FEEDLINE MANIFOLD (MA1)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 / 3]	[NA]	[NA]	[NA]	[] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/26/88
 ASSESSMENT ID: MPS-1251
 NASA FMEA #: NA

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 1251
 ITEM: LO2 FILL & DRAIN LINE (FH1)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[/]	[]	[]	[]	[] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[N / N]	[N]	[N]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[3 / 3] [NA] [NA] [NA] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/26/88
 ASSESSMENT ID: MPS-1252
 NASA FMEA #: 0306-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 1252
 ITEM: LO2 FILL & DRAIN LINE (FH1)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 / 1]	[NA]	[NA]	[NA]	[X] *
IOA	[1 / 1]	[NA]	[NA]	[NA]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

THIS ANALYSIS IS FOR THE UNINSULATED LINE (OV102). REF: RI/NASA
 CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-14-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/26/88
 ASSESSMENT ID: MPS-1253
 NASA FMEA #: 0306-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 1253
 ITEM: LO2 FILL & DRAIN LINE (FH1)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 / 1]	[NA]	[NA]	[NA]	[X] *
IOA	[1 / 1]	[NA]	[NA]	[NA]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] [] (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

THIS IOA WORKSHEET SHOULD BE COMBINED WITH 1252.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/26/88
ASSESSMENT ID: MPS-1253A
NASA FMEA #: 0307-2

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 1253
ITEM: LO2 FILL & DRAIN LINE (FH1)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 /1]	[NA]	[NA]	[NA]	[X] *
IOA	[1 /1]	[NA]	[NA]	[NA]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

THIS ANALYSIS IS FOR THE FOAM-INSULATED LINE. REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-14-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/26/88
 ASSESSMENT ID: MPS-1254
 NASA FMEA #: 0307-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 1254
 ITEM: LO2 FILL & DRAIN LINE (FH1)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 / 3]	[NA]	[NA]	[NA]	[] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

THIS ANALYSIS IS FOR THE FOAM-INSULATED LINE. REF: RI/NASA
 FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/26/88
ASSESSMENT ID: MPS-1261
NASA FMEA #: NA

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 1261
ITEM: LO2 17 INCH FEEDLINE (FH2)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[/]	[]	[]	[]	[] *
IOA	[1 / 1]	[NA]	[NA]	[NA]	[X]
COMPARE	[N / N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[3 / 3] [NA] [NA] [NA] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

BLOCKAGE WILL PREVENT TANK FILL OR ENGINE START.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/26/88
 ASSESSMENT ID: MPS-1262
 NASA FMEA #: 0459-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 1262
 ITEM: LO2 17 INCH FEEDLINE (FH2)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 / 1]	[NA]	[NA]	[NA]	[X] *
IOA	[1 / 1]	[NA]	[NA]	[NA]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

THIS ANALYSIS IS FOR THE FOA INSULATED LINE. REF: RI/NASA CIL
 OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-14-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/26/88
 ASSESSMENT ID: MPS-1262A
 NASA FMEA #: 0418-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 1262
 ITEM: LO2 17 INCH FEEDLINE (FH2)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 / 1]	[NA]	[NA]	[NA]	[X] *
IOA	[1 / 1]	[NA]	[NA]	[NA]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] [] (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-14-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/26/88
 ASSESSMENT ID: MPS-1263
 NASA FMEA #: 0459-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 1263
 ITEM: LO2 17 INCH FEEDLINE (FH2)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 /1]	[NA]	[NA]	[NA]	[X] *
IOA	[1 /1]	[NA]	[NA]	[NA]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

THIS ANALYSIS IS FOR THE FOAM INSULATED LINE. THIS IOA WORKSHEET SHOULD BE COMBINED WITH 1262.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/26/88
 ASSESSMENT ID: MPS-1264
 NASA FMEA #: 0459-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 1264
 ITEM: LO2 17 INCH FEEDLINE (FH2)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY		REDUNDANCY SCREENS			CIL ITEM
	FLIGHT	HDW/FUNC	A	B	C	
NASA	[3 / 3]		[NA]	[NA]	[NA]	[] *
IOA	[3 / 3]		[NA]	[NA]	[NA]	[]
COMPARE	[/]		[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

THIS ANALYSIS IS FOR THE FOAM INSULATED LINE. REF: RI/NASA
 FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/26/88
 ASSESSMENT ID: MPS-1264A
 NASA FMEA #: 0418-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 1264
 ITEM: LO2 17 INCH FEEDLINE (FH2)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 / 3]	[NA]	[NA]	[NA]	[] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

THIS ANALYSIS IS FOR THE VACUUM JACKETED LINE. REF: RI/NASA
 FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/26/88
 ASSESSMENT ID: MPS-1271
 NASA FMEA #: NA

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 1271
 ITEM: LO2 12 INCH FEEDLINE (FH3, 4, 5)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[/]	[]	[]	[]	[] *
IOA	[1 / 1]	[NA]	[NA]	[NA]	[X]
COMPARE	[N / N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[3 / 3] [NA] [NA] [NA] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

BLOCKAGE WILL PREVENT PRESTART CONDITIONING AND PREVENT ENGINE START.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/26/88
 ASSESSMENT ID: MPS-1272
 NASA FMEA #: 0420-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 1272
 ITEM: LO2 12 INCH FEEDLINE (FH3, 4, 5)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 /1]	[NA]	[NA]	[NA]	[X] *
IOA	[1 /1]	[NA]	[NA]	[NA]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

THIS ANALYSIS IS FOR THE VACUUM JACKETED LINE (OV102). REF:
 RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-14-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/26/88
 ASSESSMENT ID: MPS-1272A
 NASA FMEA #: 0460-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 1272
 ITEM: LO2 12 INCH FEEDLINE (FH3, 4, 5)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 / 1]	[NA]	[NA]	[NA]	[X] *
IOA	[1 / 1]	[NA]	[NA]	[NA]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

THIS ANALYSIS IS FOR THE FOAM INSULATED LINE. REF: RI/NASA CIL
 OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-14-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/26/88
ASSESSMENT ID: MPS-1281
NASA FMEA #: 0412-4

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 1281
ITEM: LO2 FEED MANIFOLD RELIEF VALVE (RV5)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 /1]	[NA]	[NA]	[NA]	[X] *
IOA	[2 /1R]	[P]	[F]	[P]	[X]
COMPARE	[N /N]	[N]	[N]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] [] (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

LEAKAGE OF LO2 FROM THE SENSE LINE CAN OCCUR WITHOUT A PRIOR FAILURE OF THE ISOLATION VALVE.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/26/88
 ASSESSMENT ID: MPS-1281A
 NASA FMEA #: 0412-5

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 1281
 ITEM: LO2 FEED MANIFOLD RELIEF VALVE (RV5)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 /1]	[NA]	[NA]	[NA]	[X] *
IOA	[2 /1R]	[P]	[F]	[P]	[X]
COMPARE	[N /N]	[N]	[N]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

LEAKAGE OF LO2 FROM THE SENSE LINE CAN OCCUR WITHOUT A PRIOR
 FAILURE OF THE ISOLATION VALVE.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/26/88
 ASSESSMENT ID: MPS-1282
 NASA FMEA #: 0412-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 1282
 ITEM: LO2 FEED MANIFOLD RELIEF VALVE (RV5)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 / 3]	[NA]	[NA]	[NA]	[] *
IOA	[3 / 2R]	[P]	[F]	[P]	[X]
COMPARE	[/ N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] [] (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

THE RI/NASA ANALYSIS IS FOR A FAILURE TO RESEAT FOLLOWING RELIEF.
 IOA'S ANALYSIS REFERS TO FAILURE TO REMAIN CLOSED DURING ENGINE
 OPERATION. REF: RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/26/88
 ASSESSMENT ID: MPS-1283
 NASA FMEA #: 0412-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 1283
 ITEM: LO2 FEED MANIFOLD RELIEF VALVE (RV5)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 /1R]	[P]	[F]	[P]	[X] *
IOA	[1 /1]	[NA]	[NA]	[NA]	[X]
COMPARE	[N /N]	[N]	[N]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] [] (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REDUNDANCY EXISTS TO RELIEVE MANIFOLD PRESSURE. REF: RI/NASA
 CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 10-5-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/26/88
 ASSESSMENT ID: MPS-1291
 NASA FMEA #: 0609-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 1291
 ITEM: GO2 PRESSURE MANIFOLD REPRESS ORIFICE (RP1)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 / 3]	[NA]	[NA]	[NA]	[] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/26/88
 ASSESSMENT ID: MPS-1292
 NASA FMEA #: NA

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 1292
 ITEM: GO2 PRESSURE MANIFOLD REPRESS ORIFICE (RP1)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[/]	[]	[]	[]	[] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[N / N]	[N]	[N]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:
 FAILURE MODE NOT CREDIBLE.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/27/88
ASSESSMENT ID: MPS-2002
NASA FMEA #: 0301-4

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 2002
ITEM: LH2 INBOARD FILL AND DRAIN VALVE (PV12)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 / 1]	[NA]	[NA]	[NA]	[X] *
IOA	[1 / 1]	[P]	[P]	[P]	[X]
COMPARE	[/]	[N]	[N]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 11-23-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/27/88
ASSESSMENT ID: MPS-2004
NASA FMEA #: 0301-2

NASA DATA: []
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 2004
ITEM: LH2 INBOARD FILL AND DRAIN VALVE (PV12)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 / 3]	[NA]	[NA]	[NA]	[] *
IOA	[3 / 1R]	[P]	[P]	[P]	[]
COMPARE	[/ N]	[N]	[N]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

FROZEN H2 WOULD THAW AND BOIL OFF OR SUBLIMATE AND BE VENTED THROUGH THE RELIEF SYSTEM OR DURING MPS INERT.
REF: RI/NASA FMEA/CIL REVIEW MEETIN NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/27/88
 ASSESSMENT ID: MPS-2006
 NASA FMEA #: 0301-3

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 2006
 ITEM: LH2 INBOARD FILL AND DRAIN VALVE (PV12)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[P]	[X] *
IOA	[3 /3]	[NA]	[NA]	[NA]	[]
COMPARE	[N /N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[3 /3] [NA] [NA] [NA] [D]
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

VALVE FAILURE TO CLOSE IS ADDRESSED ON 0301-2. INDICATOR FAILURE
 MAY CAUSE LAUNCH SCRUB.

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 11-23-
 87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/27/88
 ASSESSMENT ID: MPS-2007
 NASA FMEA #: 0301-10

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 2007
 ITEM: LH2 INBOARD FILL AND DRAIN VALVE (PV12)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 / 1]	[NA]	[NA]	[NA]	[X] *
IOA	[1 / 1]	[NA]	[NA]	[NA]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-14-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/27/88
ASSESSMENT ID: MPS-2011
NASA FMEA #: 0302-6

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 2011
ITEM: LH2 OUTBOARD FILL AND DRAIN VALVE (PV11)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 / 1]	[NA]	[NA]	[NA]	[X] *
IOA	[1 / 1]	[NA]	[NA]	[NA]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-14-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
 ASSESSMENT ID: MPS-2012
 NASA FMEA #: 0302-4

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 2012
 ITEM: LH2 OUTBOARD FILL AND DRAIN VALVE (PV11)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[P]	[X] *
IOA	[2 /1R]	[P]	[P]	[P]	[X]
COMPARE	[/]	[]	[N]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 11-23-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: MPS-2013
NASA FMEA #: 0302-5

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 2013
ITEM: LH2 OUTBOARD FILL AND DRAIN VALVE (PV11)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[P]	[X] *
IOA	[1 /1]	[NA]	[NA]	[NA]	[X]
COMPARE	[N /N]	[N]	[N]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] [] (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

TWO FAILURES ARE REQUIRED BEFORE MANIFOLD RUPTURE OR HAZARDOUS VENTING ARE POSSIBLE.

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 11-24-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/25/88
 ASSESSMENT ID: MPS-2015
 NASA FMEA #: 0302-3

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 2015
 ITEM: LH2 OUTBOARD FILL AND DRAIN VALVE (PV11)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[P]	[X] *
IOA	[3 /3]	[NA]	[NA]	[NA]	[]
COMPARE	[N /N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[3 /3] [NA] [NA] [NA] [D]
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

FAILURE TO CLOSE IS ADDRESSED ON 0302-2. INDICATOR FAILURE MAY CAUSE LAUNCH SCRUB.
 REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 11-23-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/28/88
 ASSESSMENT ID: MPS-2021
 NASA FMEA #: 0308-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 2021
 ITEM: LH2 FILL AND DRAIN LINE (FH6)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 / 1]	[NA]	[NA]	[NA]	[X] *
IOA	[1 / 1]	[NA]	[NA]	[NA]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] [] (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-14-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/28/88
 ASSESSMENT ID: MPS-2022
 NASA FMEA #: NA

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 2022
 ITEM: LH2 FILL AND DRAIN LINE (FH6)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[/]	[]	[]	[]	[] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[N / N]	[N]	[N]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[3 / 3] [NA] [NA] [NA] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/28/88
 ASSESSMENT ID: MPS-2023
 NASA FMEA #: 0308-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 2023
 ITEM: LH2 FILL AND DRAIN LINE (FH6)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 / 3]	[NA]	[NA]	[NA]	[] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/28/88
 ASSESSMENT ID: MPS-2031
 NASA FMEA #: 0303-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 2031
 ITEM: LH2 GROUND FILL AND DRAIN (ORB/GND) DISCONNECT
 (ORBITER HALF) (PD11)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 / 1]	[NA]	[NA]	[NA]	[X] *
IOA	[1 / 1]	[NA]	[NA]	[NA]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-14-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/28/88
 ASSESSMENT ID: MPS-2031A
 NASA FMEA #: 0303-6

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 2031
 ITEM: LH2 GROUND FILL AND DRAIN (ORB/GND) DISCONNECT
 (ORBITER HALF) (PD11)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 / 1]	[NA]	[NA]	[NA]	[X] *
IOA	[1 / 1]	[NA]	[NA]	[NA]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-14-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/28/88
 ASSESSMENT ID: MPS-2041
 NASA FMEA #: 0432-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 2041
 ITEM: LH2 HI POINT BLEED (ORB/GND) DISCONNECT (ORB HALF) (PD17)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 /1]	[NA]	[NA]	[NA]	[X] *
IOA	[1 /1]	[NA]	[NA]	[NA]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 11-13-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/28/88
 ASSESSMENT ID: MPS-2042
 NASA FMEA #: 0432-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 2042
 ITEM: LH2 HI POINT BLEED (ORB/GND) DISCONNECT (ORB
 HALF) (PD17)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[P]	[X] *
IOA	[2 /1R]	[P]	[P]	[F]	[X]
COMPARE	[/]	[]	[N]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] [] (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 11-13-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/28/88
 ASSESSMENT ID: MPS-2043
 NASA FMEA #: 0432-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 2043
 ITEM: LH2 HI POINT BLEED (ORB/GND) DISCONNECT (ORB
 HALF) (PD17)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[P]	[X] *
IOA	[2 /1R]	[P]	[P]	[F]	[X]
COMPARE	[/]	[]	[N]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 11-13-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/28/88
 ASSESSMENT ID: MPS-2044
 NASA FMEA #: 0432-5

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 2044
 ITEM: LH2 HI POINT BLEED (ORB/GND) DISCONNECT (ORB
 HALF) (PD17)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 / 3]	[NA]	[NA]	[NA]	[] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/28/88
 ASSESSMENT ID: MPS-2051
 NASA FMEA #: 0304-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 2051
 ITEM: LH2 REPLENISH VALVE (PV13)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[P]	[X] *
IOA	[3 /1R]	[P]	[P]	[P]	[]
COMPARE	[N /]	[]	[N]	[]	[N]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 11-11-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/28/88
 ASSESSMENT ID: MPS-2052
 NASA FMEA #: 0304-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 2052
 ITEM: LH2 REPLENISH VALVE (PV13)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 / 3]	[NA]	[NA]	[NA]	[] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] [] (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/28/88
 ASSESSMENT ID: MPS-2053
 NASA FMEA #: 0304-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 2053
 ITEM: LH2 REPLENISH VALVE (PV13)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[P]	[X] *
IOA	[3 /1R]	[P]	[P]	[P]	[]
COMPARE	[N /]	[]	[N]	[]	[N]

RECOMMENDATIONS: (If different from NASA)

[2 /1R] [P] [P] [P] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

MANIFOLD PRESSURE INDICATOR AND ALARM SUPPORTS PASSAGE OF SCREEN B.
 REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 11-11-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/28/88
 ASSESSMENT ID: MPS-2054
 NASA FMEA #: 0304-4

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 2054
 ITEM: LH2 REPLENISH VALVE (PV13)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[P]	[X] *
IOA	[2 /1R]	[P]	[P]	[P]	[X]
COMPARE	[/]	[]	[N]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 11-11-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/28/88
 ASSESSMENT ID: MPS-2055
 NASA FMEA #: 0304-7

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 2055
 ITEM: LH2 REPLENISH VALVE (PV13)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 / 1]	[NA]	[NA]	[NA]	[X] *
IOA	[1 / 1]	[NA]	[NA]	[NA]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 11-11-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/28/88
ASSESSMENT ID: MPS-2061
NASA FMEA #: 0431-1

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 2061
ITEM: LH2 HI POINT BLEED VALVE (PV22)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 / 3]	[NA]	[NA]	[NA]	[] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

REF: RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/28/88
ASSESSMENT ID: MPS-2063
NASA FMEA #: 0431-8

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 2063
ITEM: LH2 HI POINT BLEED VALVE (PV22)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 /1]	[NA]	[NA]	[NA]	[X] *
IOA	[1 /1]	[NA]	[NA]	[NA]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 11-12-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/28/88
 ASSESSMENT ID: MPS-2072
 NASA FMEA #: 0410-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 2072
 ITEM: LH2 SYSTEM DELTA-P TRANSDUCER (MT44, MT50)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 / 3]	[NA]	[NA]	[NA]	[] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:
 FOR MT44 ONLY. REF: RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/28/88
 ASSESSMENT ID: MPS-2081A
 NASA FMEA #: 0430-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 2081
 ITEM: LH2 HI POINT BLEED LINE (FH19)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 / 1]	[NA]	[NA]	[NA]	[X] *
IOA	[1 / 1]	[NA]	[NA]	[NA]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

THIS ANALYSIS IS FOR THE FORM INSULATED LINE.
 REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 6-17-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/28/88
ASSESSMENT ID: MPS-2083
NASA FMEA #: NA

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 2083
ITEM: LH2 HI POINT BLEED LINE (FH19)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[/]	[]	[]	[]	[] *
IOA	[1 / 1]	[NA]	[NA]	[NA]	[X]
COMPARE	[N / N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[3 / 3] [NA] [NA] [NA] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

THIS ANALYSIS IS FOR THE VACUUM JACKETED LINE. THE LINE IS OPEN TO THE LH2 MANIFOLD. PRESSURE WOULD NOT INCREASE.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
 ASSESSMENT ID: MPS-2091
 NASA FMEA #: 0405-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 2091
 ITEM: LH2 RECIRCULATION DISCONNECT VALVE (PD3)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 / 3]	[NA]	[NA]	[NA]	[] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA FMEA/CIL REVIEW MEETING NOTES.

**APPENDIX C
ASSESSMENT WORKSHEET**

ASSESSMENT DATE: 1/29/88
 ASSESSMENT ID: MPS-2092
 NASA FMEA #: 0405-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 2092
 ITEM: LH2 RECIRCULATION DISCONNECT VALVE (PD3)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[P]	[X] *
IOA	[3 /3]	[NA]	[NA]	[NA]	[]
COMPARE	[N /N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] [] (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

RELIEF VALVE (RV7) PROVIDES REDUNDANCY.

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 11-17-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: MPS-2093
NASA FMEA #: 0405-6

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 2093
ITEM: LH2 RECIRCULATION DISCONNECT VALVE (PD3)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 / 1]	[NA]	[NA]	[NA]	[X] *
IOA	[1 / 1]	[NA]	[NA]	[NA]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 11-11-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
 ASSESSMENT ID: MPS-2094
 NASA FMEA #: 0405-3

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 2094
 ITEM: LH2 RECIRCULATION DISCONNECT VALVE (PD3)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 / 1]	[NA]	[NA]	[NA]	[X] *
IOA	[1 / 1]	[NA]	[NA]	[NA]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 11-18-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
 ASSESSMENT ID: MPS-2094A
 NASA FMEA #: 0405-10

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 2094
 ITEM: LH2 RECIRCULATION DISCONNECT VALVE (PD3)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 / 1]	[NA]	[NA]	[NA]	[X] *
IOA	[1 / 1]	[NA]	[NA]	[NA]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 11-11-87.

**APPENDIX C
ASSESSMENT WORKSHEET**

ASSESSMENT DATE: 1/29/88
 ASSESSMENT ID: MPS-2101
 NASA FMEA #: 0403-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 2101
 ITEM: LH2 RECIRCULATION PUMP VALVE (PV14, PV15, PV16)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 / 3]	[NA]	[NA]	[NA]	[] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
 ASSESSMENT ID: MPS-2103
 NASA FMEA #: 0403-6

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 2103
 ITEM: LH2 RECIRCULATION PUMP VALVE (PV14, PV15, PV16)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 /1]	[NA]	[NA]	[NA]	[X] *
IOA	[1 /1]	[NA]	[NA]	[NA]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
 ASSESSMENT ID: MPS-2112
 NASA FMEA #: 0309-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 2112
 ITEM: LH2 PRESTART CONDITIONING MANIFOLD (MA3)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 / 1]	[NA]	[NA]	[NA]	[X] *
IOA	[1 / 1]	[NA]	[NA]	[NA]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 11-13-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: MPS-2113
NASA FMEA #: NA

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 2113
ITEM: LH2 PRESTART CONDITIONING MANIFOLD (MA3)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[/]	[]	[]	[]	[] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[N / N]	[N]	[N]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[3 / 3] [NA] [NA] [NA] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
 ASSESSMENT ID: MPS-2114
 NASA FMEA #: 0309-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 2114
 ITEM: LH2 PRESTART CONDITIONING MANIFOLD (MA3)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 / 3]	[NA]	[NA]	[NA]	[] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
 ASSESSMENT ID: MPS-2121
 NASA FMEA #: 0421-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 2121
 ITEM: LH2 PRESTART CONDITIONING PUMP LINE (FH11, FH13, FH15)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 / 1]	[NA]	[NA]	[NA]	[X] *
IOA	[1 / 1]	[NA]	[NA]	[NA]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 4-23-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: MPS-2122
NASA FMEA #: NA

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 2122
ITEM: LH2 PRESTART CONDITIONING PUMP LINE (FH11, FH13, FH15)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[/]	[]	[]	[]	[] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[N / N]	[N]	[N]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[3 / 3] [NA] [NA] [NA] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
 ASSESSMENT ID: MPS-2123
 NASA FMEA #: 0421-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 2123
 ITEM: LH2 PRESTART CONDITIONING PUMP LINE (FH11, FH13, FH15)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 / 3]	[NA]	[NA]	[NA]	[] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
 ASSESSMENT ID: MPS-2131
 NASA FMEA #: 0425-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 2131
 ITEM: LH2 PRESTART CONDITIONING RETURN LINE (FH12,
 FH14, FH16)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 / 1]	[NA]	[NA]	[NA]	[X] *
IOA	[1 / 1]	[NA]	[NA]	[NA]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 4-23-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
 ASSESSMENT ID: MPS-2132
 NASA FMEA #: 0425-2

NASA DATA:
 BASELINE [X]
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 2132
 ITEM: LH2 PRESTART CONDITIONING RETURN LINE (FH12,
 FH14, FH16)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 / 1]	[NA]	[NA]	[NA]	[X] *
IOA	[1 / 1]	[NA]	[NA]	[NA]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 4-23-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
 ASSESSMENT ID: MPS-2133
 NASA FMEA #: NA

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 2133
 ITEM: LH2 PRESTART CONDITIONING RETURN LINE (FH12,
 FH14, FH16)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[/]	[]	[]	[]	[] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[N / N]	[N]	[N]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[3 / 3] [NA] [NA] [NA] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
 ASSESSMENT ID: MPS-2134
 NASA FMEA #: 0425-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 2134
 ITEM: LH2 PRESTART CONDITIONING RETURN LINE (FH12,
 FH14, FH16)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[/]	[]	[]	[]	*
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[N / N]	[N]	[N]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[3 / 3] [NA] [NA] [NA] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: MPS-2141
NASA FMEA #: 0309-2

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 2141
ITEM: LH2 PRESTART CONDITIONING REPLENISH LINE (FH17)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 / 1]	[NA]	[NA]	[NA]	[X] *
IOA	[1 / 1]	[NA]	[NA]	[NA]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 11-13-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
 ASSESSMENT ID: MPS-2143
 NASA FMEA #: 0309-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 2143
 ITEM: LH2 PRESTART CONDITIONING REPLENISH LINE (FH17)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 / 3]	[NA]	[NA]	[NA]	[] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
 ASSESSMENT ID: MPS-2151
 NASA FMEA #: 0309-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 2151
 ITEM: LH2 PRESTART CONDITIONING RETURN LINE (FH18)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 / 1]	[NA]	[NA]	[NA]	[X] *
IOA	[1 / 1]	[NA]	[NA]	[NA]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 11-13-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
 ASSESSMENT ID: MPS-2152
 NASA FMEA #: NA

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 2152
 ITEM: LH2 PRESTART CONDITIONING RETURN LINE (FH18)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[/]	[]	[]	[]	[] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[N / N]	[N]	[N]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[3 / 3] [NA] [NA] [NA] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
 ASSESSMENT ID: MPS-2153
 NASA FMEA #: 0309-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 2153
 ITEM: LH2 PRESTART CONDITIONING RETURN LINE (FH18)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 / 3]	[NA]	[NA]	[NA]	[] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
 ASSESSMENT ID: MPS-2161
 NASA FMEA #: 0411-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 2161
 ITEM: LH2 RECIRCULATION MANIFOLD RELIEF VALVE (RV7)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[P]	[X] *
IOA	[1 /1]	[NA]	[NA]	[NA]	[X]
COMPARE	[N /N]	[N]	[N]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

PROPELLANT BLEED VLAVES PROVIDE A REDUNDANT RELIEF PATH.
 REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 11-13-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: MPS-2163
NASA FMEA #: 0411-3

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 2163
ITEM: LH2 RECIRCULATION MANIFOLD RELIEF VALVE (RV7)
LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 / 1]	[NA]	[NA]	[NA]	[X] *
IOA	[1 / 1]	[NA]	[NA]	[NA]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 11-13-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
 ASSESSMENT ID: MPS-2164
 NASA FMEA #: NA

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 2164
 ITEM: LH2 RECIRCULATION MANIFOLD RELIEF VALVE (RV7)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[/]	[]	[]	[]	[] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[N / N]	[N]	[N]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[3 / 3] [NA] [NA] [NA] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
 ASSESSMENT ID: MPS-2171
 NASA FMEA #: NA

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 2171
 ITEM: LH2 RECIRCULATION PUMP (PP1, PP2, PP3)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[/]	[]	[]	[]	*
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[N / N]	[N]	[N]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[3 / 3] [NA] [NA] [NA] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
 ASSESSMENT ID: MPS-2173
 NASA FMEA #: 0404-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 2173
 ITEM: LH2 RECIRCULATION PUMP (PP1, PP2, PP3)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 / 3]	[NA]	[NA]	[NA]	[] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
 ASSESSMENT ID: MPS-2174
 NASA FMEA #: NA

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 2174
 ITEM: LH2 RECIRCULATION PUMP (PP1, PP2, PP3)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[/]	[]	[]	[]	[] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[N / N]	[N]	[N]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[3 / 3] [NA] [NA] [NA] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
 ASSESSMENT ID: MPS-2175
 NASA FMEA #: NA

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 2175
 ITEM: LH2 RECIRCULATION PUMP (PP1, PP2, PP3)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[/]	[]	[]	[]	[] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[N / N]	[N]	[N]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[3 / 3] [NA] [NA] [NA] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: MPS-2177
NASA FMEA #: 0404-2

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 2177
ITEM: LH2 RECIRCULATION PUMP (PP1, PP2, PP3)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 / 1]	[NA]	[NA]	[NA]	[X] *
IOA	[1 / 1]	[NA]	[NA]	[NA]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 11-12-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
 ASSESSMENT ID: MPS-2182
 NASA FMEA #: 0502-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 2182
 ITEM: LH2 PRE-PRESS CHECK VALVE (CV17)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[F]	[X] *
IOA	[2 /1R]	[P]	[F]	[F]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
 ASSESSMENT ID: MPS-2183
 NASA FMEA #: 0502-3

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 2183
 ITEM: LH2 PRE-PRESS CHECK VALVE (CV17)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 /1]	[NA]	[NA]	[NA]	[X] *
IOA	[1 /1]	[NA]	[NA]	[NA]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
 ASSESSMENT ID: MPS-2191
 NASA FMEA #: 0505-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 2191
 ITEM: GH2 PRESSURIZATION ISOLATION CHECK VALVE
 (CV21, CV22, CV23)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[P]	[X] *
IOA	[2 /1R]	[P]	[F]	[P]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
 ASSESSMENT ID: MPS-2192
 NASA FMEA #: 0505-4

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 2192
 ITEM: GH2 PRESSURIZATION ISOLATION CHECK VALVE
 (CV21, CV22, CV23 AND TEST PORTS TP5, TP6, TP7)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 / 1]	[NA]	[NA]	[NA]	[X] *
IOA	[1 / 1]	[NA]	[NA]	[NA]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
 ASSESSMENT ID: MPS-2201
 NASA FMEA #: 0504-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 2201
 ITEM: GH2 PRESSURIZATION FLOW CONTROL VALVE
 (LV56, LV57, LV58)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[F]	[P]	[F]	[X] *
IOA	[2 /1R]	[P]	[F]	[P]	[X]
COMPARE	[/]	[N]	[N]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: MPS-2202
NASA FMEA #: 0504-2

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 2202
ITEM: GH2 PRESSURIZATION FLOW CONTROL VALVE
(LV56, LV57, LV58)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[F]	[P]	[F]	[X] *
IOA	[2 /1R]	[P]	[F]	[P]	[X]
COMPARE	[/]	[N]	[N]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
 ASSESSMENT ID: MPS-2203
 NASA FMEA #: 0504-5

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 2203
 ITEM: GH2 PRESSURIZATION FLOW CONTROL VALVE
 (LV56, LV57, LV58)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 / 1]	[NA]	[NA]	[NA]	[X] *
IOA	[1 / 1]	[NA]	[NA]	[NA]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
 ASSESSMENT ID: MPS-2211
 NASA FMEA #: 0503-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 2211
 ITEM: GH2 PRESSURIZATION DISCONNECT (PD5)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 / 1]	[NA]	[NA]	[NA]	[X] *
IOA	[1 / 1]	[NA]	[NA]	[NA]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/01/88
 ASSESSMENT ID: MPS-2211A
 NASA FMEA #: 0503-6

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 2211
 ITEM: GH2 PRESSURIZATION DISCONNECT (PD5)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 / 3]	[NA]	[NA]	[NA]	[] *
IOA	[1 / 1]	[NA]	[NA]	[NA]	[X]
COMPARE	[N / N]	[]	[]	[]	[N]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

THE IOA CRITICALITY WAS DRIVEN BY THE FAILURE TO REMAIN OPEN.
 REF: RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
 ASSESSMENT ID: MPS-2212
 NASA FMEA #: 0503-5

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 2212
 ITEM: GH2 PRESSURIZATION DISCONNECT (PD5)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 / 3]	[NA]	[NA]	[NA]	[X] *
IOA	[1 / 1]	[NA]	[NA]	[NA]	[X]
COMPARE	[N / N]	[]	[]	[]	[N]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: MPS-2213
NASA FMEA #: 0503-3

NASA DATA: -----
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 2213
ITEM: GH2 PRESSURIZATION DISCONNECT (PD5)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 / 1]	[NA]	[NA]	[NA]	[X] *
IOA	[1 / 1]	[NA]	[NA]	[NA]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/01/88
 ASSESSMENT ID: MPS-2221
 NASA FMEA #: 0501-3

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 2221
 ITEM: LH2 TANK GROUND PRE-PRESS DISCONNECT (PD10)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 / 3]	[NA]	[NA]	[NA]	[] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/01/88
ASSESSMENT ID: MPS-2222
NASA FMEA #: 0501-1

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 2222
ITEM: LH2 TANK GROUND PRE-PRESS DISCONNECT (PD10)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[F]	[X] *
IOA	[2 /1R]	[P]	[F]	[F]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/01/88
 ASSESSMENT ID: MPS-2222A
 NASA FMEA #: 0501-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 2222
 ITEM: LH2 TANK GROUND PRE-PRESS DISCONNECT (PD10)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 /1R]	[P]	[F]	[P]	[X] *
IOA	[2 /1R]	[P]	[F]	[F]	[X]
COMPARE	[N /]	[]	[]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] [] (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

THE RI/NASA ANALYSIS ADDRESSES FAILURE DURING LOADING ONLY. AN ANALYSIS FOR THE PRELAUNCH PHASE ONLY IS NOT NECESSARY. THE 0501-2 FMEA/CIL SHOULD BE COMBINED WITH 0501-4.
 REF: RI/NASA CIL OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/01/88
 ASSESSMENT ID: MPS-2222B
 NASA FMEA #: 0501-4

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 2222
 ITEM: LH2 TANK GROUND PRE-PRESS DISCONNECT (PD10)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[P]	[X] *
IOA	[2 /1R]	[P]	[F]	[F]	[X]
COMPARE	[/]	[]	[]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] [] (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/01/88
 ASSESSMENT ID: MPS-2231
 NASA FMEA #: 0516-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 2231
 ITEM: GH2 PRESSURIZATION MANIFOLD TEST POINT COUPLING
 (PD16)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[F]	[F]	[F]	[X] *
IOA	[1 /1]	[NA]	[NA]	[NA]	[X]
COMPARE	[N /N]	[N]	[N]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[1 /1] [NA] [NA] [NA] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS: THE FAILURE MODE SPECIFIES LEAKAGE WHICH IS PRESUMED TO BE AN EXTERNAL LEAKAGE CAUSED BY A SINGLE FAILURE. THIS ANALYSIS SHOULD BE REVISED OR DELETED.

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/01/88
 ASSESSMENT ID: MPS-2231A
 NASA FMEA #: 0516-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 2231
 ITEM: GH2 PRESSURIZATION MANIFOLD TEST POINT COUPLING
 (PD16)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 / 1]	[NA]	[NA]	[NA]	[X] *
IOA	[1 / 1]	[NA]	[NA]	[NA]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/01/88
 ASSESSMENT ID: MPS-2241
 NASA FMEA #: NA

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 2241
 ITEM: LH2 PREPRESSURIZATION DISCONNECT CHECK VALVE
 TEST PORT (TP10)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[/]	[]	[F]	[F]	[X] *
IOA	[2 /1R]	[P]	[F]	[F]	[X]
COMPARE	[N /N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] [] (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

THIS FAILURE IS COVERED UNDER LEAKAGE OF THE LINE FROM CV17 TO PD10, ON IOA WORKSHEET 346; RI/NASA 0511-1.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/01/88
 ASSESSMENT ID: MPS-2251
 NASA FMEA #: NA

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 2251
 ITEM: GH2 PRESSURIZATION DUAL CHECK VALVE TEST PORT
 (TP21, TP22, TP23)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[/]	[]	[]	[]	[] *
IOA	[1 / 1]	[NA]	[NA]	[NA]	[X]
COMPARE	[N / N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

THIS FAILURE IS COVERED UNDER LEAKAGE OF THE CHECK VALVE (CV21, 22, 23), ON IOA WORKSHEET 2192; RI/NASA 0505-4.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/01/88
 ASSESSMENT ID: MPS-2261
 NASA FMEA #: 0407-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 2261
 ITEM: LH2 FEED DISCONNECT VALVE (PD2)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 / 1]	[NA]	[NA]	[NA]	[X] *
IOA	[1 / 1]	[NA]	[NA]	[NA]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-15-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/01/88
 ASSESSMENT ID: MPS-2262
 NASA FMEA #: 0407-7

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 2262
 ITEM: LH2 FEED DISCONNECT VALVE (PD2)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 / 1]	[NA]	[NA]	[NA]	[X] *
IOA	[1 / 1]	[NA]	[NA]	[NA]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-15-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/01/88
 ASSESSMENT ID: MPS-2263
 NASA FMEA #: 0407-4

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 2263
 ITEM: LH2 FEED DISCONNECT VALVE (PD2)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 / 1]	[NA]	[NA]	[NA]	[X] *
IOA	[1 / 1]	[NA]	[NA]	[NA]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-15-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/01/88
 ASSESSMENT ID: MPS-2271
 NASA FMEA #: 0402-3

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 2271
 ITEM: LH2 PREVALVE (PV4, PV5, PV6)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 / 1]	[NA]	[NA]	[NA]	[X] *
IOA	[1 / 1]	[NA]	[NA]	[NA]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-15-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/01/88
ASSESSMENT ID: MPS-2271A
NASA FMEA #: 0402-5

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 2271
ITEM: LH2 PREVALVE (PV4, PV5, PV6)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 /1R]	[P]	[F]	[P]	[X] *
IOA	[1 /1]	[NA]	[NA]	[NA]	[X]
COMPARE	[N /N]	[N]	[N]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

THE IOA CRITICALITY WAS DRIVEN BY THE FAILURE TO REMAIN OPEN.
FAILURE TO OPEN FOR LH2 DUMP HAS REDUNDANCY, THIS CIL WORKSHEET
SHOULD ADDRESS PRELAUNCH FAILURE ALSO.

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-15-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/01/88
ASSESSMENT ID: MPS-2272
NASA FMEA #: 0402-4

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 2272
ITEM: LH2 PREVALVE (PV4, PV5, PV6)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[P]	[X] *
IOA	[3 /3]	[NA]	[NA]	[NA]	[]
COMPARE	[N /N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[3 /3] [NA] [NA] [NA] [D]
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

INTERFACING SUBSYSTEMS (MFV) ARE ASSUMED TO BE OPERATING WITHIN TOLERANCE (NSTS 22206, 2.3.2d). FAILURE HAS NO EFFECT.
REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-15-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/01/88
ASSESSMENT ID: MPS-2274
NASA FMEA #: 0402-8

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 2274
ITEM: LH2 PREVALVE (PV4, PV5, PV6)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[P]	[X] *
IOA	[1 /1]	[NA]	[NA]	[NA]	[X]
COMPARE	[N /N]	[N]	[N]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] [] (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

THE PREVALVE HAS TWO RELIEF PATHS.
REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-15-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/01/88
ASSESSMENT ID: MPS-2275
NASA FMEA #: 0402-6

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 2275
ITEM: LH2 PREVALVE (PV4, PV5, PV6)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 / 3]	[NA]	[NA]	[NA]	[] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

REF: RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/01/88
 ASSESSMENT ID: MPS-2281
 NASA FMEA #: NA

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 2281
 ITEM: LH2 17 INCH ORBITER DISCONNECT TEST PORT
 (TP11,TP12)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[/]	[]	[]	[]	[] *
IOA	[1 / 1]	[NA]	[NA]	[NA]	[X]
COMPARE	[N / N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

THIS FAILURE IS COVERED UNDER EXTERNAL LEAKAGE OF THE DISCONNECT
 (RI/NASA 0407-4, 0407-11 AND IOA 2263).

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/01/88
 ASSESSMENT ID: MPS-2291
 NASA FMEA #: 0416-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 2291
 ITEM: LH2 FEEDLINE MANIFOLD (MA2)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 / 1]	[NA]	[NA]	[NA]	[X] *
IOA	[1 / 1]	[NA]	[NA]	[NA]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-14-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/01/88
ASSESSMENT ID: MPS-2292
NASA FMEA #: NA

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 2292
ITEM: LH2 FEEDLINE MANIFOLD (MA2)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[/]	[]	[]	[]	[] *
IOA	[1 / 1]	[NA]	[NA]	[NA]	[X]
COMPARE	[N / N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[3 / 3] [NA] [NA] [NA] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

FAILURE WILL PREVENT TANK FILL OR ENGINE START. NO LOSS OF CREW OR VEHICLE.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/01/88
ASSESSMENT ID: MPS-2293
NASA FMEA #: 0416-1

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 2293
ITEM: LH2 FEEDLINE MANIFOLD (MA2)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 / 3]	[NA]	[NA]	[NA]	[] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

REF: RI/NASA FMEA/CIL REVIEW MEETING NOTES.

**APPENDIX C
ASSESSMENT WORKSHEET**

ASSESSMENT DATE: 2/01/88
 ASSESSMENT ID: MPS-2301
 NASA FMEA #: 0415-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 2301
 ITEM: LH2 17 INCH FEEDLINE (FH7)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 / 1]	[NA]	[NA]	[NA]	[X] *
IOA	[1 / 1]	[NA]	[NA]	[NA]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] [] (ADD/DELETE)

*** CIL RETENTION RATIONALE:** (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-14-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/01/88
 ASSESSMENT ID: MPS-2302
 NASA FMEA #: NA

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 2302
 ITEM: LH2 17 INCH FEEDLINE (FH7)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[/]	[]	[]	[]	[] *
IOA	[1 / 1]	[NA]	[NA]	[NA]	[X]
COMPARE	[N / N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[3 / 3] [NA] [NA] [NA] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

FAILURE WILL PREVENT TANK FILL, TEMPERATURE CONDITIONING OR
 ENGINE START. NO LOSS OF CREW OR VEHICLE.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/01/88
ASSESSMENT ID: MPS-2303
NASA FMEA #: 0415-1

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 2303
ITEM: LH2 17 INCH FEEDLINE (FH7)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 / 3]	[NA]	[NA]	[NA]	[X] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

REF: RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/01/88
ASSESSMENT ID: MPS-2311
NASA FMEA #: 0417-2

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 2311
ITEM: LH2 12 INCH FEEDLINE (FH8, FH9, FH10)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 / 1]	[NA]	[NA]	[NA]	[X] *
IOA	[1 / 1]	[NA]	[NA]	[NA]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-14-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/01/88
 ASSESSMENT ID: MPS-2312
 NASA FMEA #: NA

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 2312
 ITEM: LH2 12 INCH FEEDLINE (FH8, FH9, FH10)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[/]	[]	[]	[]	[] *
IOA	[1 / 1]	[NA]	[NA]	[NA]	[X]
COMPARE	[N / N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[3 / 3] [NA] [NA] [NA] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

FAILURE WILL PREVENT TEMPERATURE CONDITIONING AND ENGINE START.
 NO LOSS OF CREW OR VEHICLE.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/01/88
 ASSESSMENT ID: MPS-2321
 NASA FMEA #: 0437-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 2321
 ITEM: LH2 FEEDLINE RELIEF SHUTOFF VALVE (PV8)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 / 1]	[NA]	[NA]	[NA]	[X] *
IOA	[1 / 1]	[NA]	[NA]	[NA]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 8-20-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/01/88
ASSESSMENT ID: MPS-2322
NASA FMEA #: 0437-2

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 2322
ITEM: LH2 FEEDLINE RELIEF SHUTOFF VALVE (PV8)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 / 3]	[NA]	[NA]	[NA]	[] *
IOA	[1 / 1]	[NA]	[NA]	[NA]	[X]
COMPARE	[N / N]	[]	[]	[]	[N]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

IOA CRITICALITY WAS DRIVEN BY THE FAILURE TO REMAIN CLOSED. NO
LOSS OF CREW OR VEHICLE FOR FAILURE TO CLOSE.
REF: RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/01/88
 ASSESSMENT ID: MPS-2322A
 NASA FMEA #: 0437-3

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 2322
 ITEM: LH2 FEEDLINE RELIEF SHUTOFF VALVE (PV8)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[P]	[X] *
IOA	[1 /1]	[NA]	[NA]	[NA]	[X]
COMPARE	[N /N]	[N]	[N]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

RELIEF VALVE WILL NOT CRACK AT NORMAL OPERATING PRESSURE. TWO FAILURES ARE REQUIRED TO CAUSE LOSS OF CREW OR VEHICLE.
 REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 4-10-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/01/88
ASSESSMENT ID: MPS-2323
NASA FMEA #: 0437-8

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 2323
ITEM: LH2 FEEDLINE RELIEF SHUTOFF VALVE (PV8)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 /1]	[NA]	[NA]	[NA]	[X] *
IOA	[1 /1]	[NA]	[NA]	[NA]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 8-20-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/01/88
 ASSESSMENT ID: MPS-2331
 NASA FMEA #: NA

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 2331
 ITEM: LH2 FEEDLINE RELIEF LINE TEST PORT (TP25)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[/]	[]	[]	[]	*
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[N / N]	[N]	[N]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

THIS FAILURE IS COVERED UNDER LEAKAGE OF THE RELIEF LINE ON IOA WORKSHEET 340 AND RI/NASA CIL WORKSHEET 0423-1.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/01/88
ASSESSMENT ID: MPS-2342
NASA FMEA #: 0436-2

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 2342
ITEM: LH2 FEEDLINE MANIFOLD RELIEF VALVE (RV6)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[P]	[X] *
IOA	[3 /3]	[NA]	[NA]	[NA]	[]
COMPARE	[N /N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

FAILURE OF BOTH THE RELIEF VALVE AND THE ISOLATION VALVE WILL
ALLOW LEAKAGE OF LH2 RESULTING IN POSSIBLE LOSS OF CREW/VEHICLE.
REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 10-5-
87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/02/88
ASSESSMENT ID: MPS-2342A
NASA FMEA #: 0436-3

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 2342
ITEM: LH2 FEEDLINE MANIFOLD RELIEF VALVE (RV6)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 / 3]	[NA]	[NA]	[NA]	[X] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

THE RI/NASA ANALYSIS INDICATES A CRITICALITY OF 1/1 FOR ABORT.
IOA CONCURS.

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 8-20-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/02/88
 ASSESSMENT ID: MPS-2343
 NASA FMEA #: 0436-5

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 2343
 ITEM: LH2 FEEDLINE MANIFOLD RELIEF VALVE (RV6)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 /1]	[NA]	[NA]	[NA]	[X] *
IOA	[3 /3]	[NA]	[NA]	[NA]	[]
COMPARE	[N /N]	[]	[]	[]	[N]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

LH2 FROM THE SENSE LINE WILL LEAK UPON FIRST FAILURE.
 REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 8-20-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/02/88
 ASSESSMENT ID: MPS-2343A
 NASA FMEA #: 0436-4

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 2343
 ITEM: LH2 FEEDLINE MANIFOLD RELIEF VALVE (RV6)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 / 1]	[NA]	[NA]	[NA]	[X] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[N / N]	[]	[]	[]	[N]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

THIS RI/NASA ANALYSIS SHOULD BE COMBINED WITH 0436-5.
 REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 8-20-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/02/88
ASSESSMENT ID: MPS-2351
NASA FMEA #: 0608-1

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 2351
ITEM: LH2 DUMP PRESSURIZATION ORIFICE (RP10)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[P]	[X] *
IOA	[3 /3]	[NA]	[NA]	[NA]	[]
COMPARE	[N /N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[3 /3] [NA] [NA] [NA] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

RELIEF SYSTEMS ARE NOT REDUNDANT TO THE ORIFICE.
REF: RI/NASA CIL OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/02/88
 ASSESSMENT ID: MPS-2361
 NASA FMEA #: 0435-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 2361
 ITEM: LH2 FEEDLINE RELIEF FLAME ARRESTOR (FL1)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 /1]	[NA]	[NA]	[NA]	[X] *
IOA	[3 /3]	[NA]	[NA]	[NA]	[]
COMPARE	[N /N]	[]	[]	[]	[N]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

THE RI/NASA ANALYSIS IS FOR A COMPLETE BLOCKAGE OF FLOW.
 REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 8-21-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/02/88
ASSESSMENT ID: MPS-2371
NASA FMEA #: 0512-1

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 2371
ITEM: LH2 PRESSURIZATION LINE VENT VALVE (LV52)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 / 3]	[NA]	[NA]	[NA]	[] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

REF: RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/02/88
 ASSESSMENT ID: MPS-2372
 NASA FMEA #: 0512-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 2372
 ITEM: LH2 PRESSURIZATION LINE VENT VALVE (LV52)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 / 3]	[NA]	[NA]	[NA]	[] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/02/88
 ASSESSMENT ID: MPS-2381
 NASA FMEA #: 0651-3

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 2381
 ITEM: LH2 FEED RTLS INBOARD VALVE (PV17)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 / 3]	[NA]	[NA]	[NA]	[X] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

BOTH IOA AND RI/NASA INDICATE A CRITICALITY OF 1/1 FOR RTLS
 ABORT.
 REF: RI/NASA OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING
 NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/02/88
 ASSESSMENT ID: MPS-2382
 NASA FMEA #: 0651-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 2382
 ITEM: LH2 FEED RTLS INBOARD VALVE (PV17)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[P]	[X] *
IOA	[2 /1R]	[P]	[F]	[F]	[X]
COMPARE	[/]	[]	[]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/02/88
ASSESSMENT ID: MPS-2382A
NASA FMEA #: 0651-4

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 2382
ITEM: LH2 FEED RTLS INBOARD VALVE (PV17)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[F]	[X] *
IOA	[2 /1R]	[P]	[F]	[F]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[3 /3] [NA] [NA] [NA] [D]
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

REF: RI/NASA OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING NOTES.

IOA CRITICALITY WAS DRIVEN BY FAILURE TO REMAIN CLOSED DURING ASCENT. FAILURE TO CLOSE POST-MECO HAS NO EFFECT ON A NOMINAL MISSION. ENTRY REPRESS IS NONESSENTIAL. CRITICALITY 2/1R FOR ABORT ONLY.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/02/88
ASSESSMENT ID: MPS-2383
NASA FMEA #: 0651-9

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 2383
ITEM: LH2 FEED RTLS INBOARD VALVE (PV17)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 / 1]	[NA]	[NA]	[NA]	[X] *
IOA	[1 / 1]	[NA]	[NA]	[NA]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

REF: RI/NASA OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/02/88
 ASSESSMENT ID: MPS-2391
 NASA FMEA #: 0651-3

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 2391
 ITEM: LH2 FEED RTLS OUTBOARD VALVE (PV18)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 / 3]	[NA]	[NA]	[NA]	[X] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

BOTH IOA AND RI/NASA INDICATE A CRITICALITY OF 1/1 FOR ABORT.
 REF: RI/NASA OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING
 NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/02/88
ASSESSMENT ID: MPS-2392A
NASA FMEA #: 0651-4

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 2392
ITEM: LH2 FEED RTLS OUTBOARD VALVE (PV18)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[F]	[X] *
IOA	[2 /1R]	[P]	[F]	[F]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[3 /3] [NA] [NA] [NA] [D]
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

REF: RI/NASA OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING NOTES.

IOA CRITICALITY WAS DRIVEN BY FAILURE TO REMAIN CLOSED DURING ASCENT. FAILURE TO CLOSE POST-MECO HAS NO EFFECT ON A NOMINAL MISSION. ENTRY REPRESS IS NONESSENTIAL. CRITICALITY IS 2/1R FOR ABORT ONLY.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/02/88
 ASSESSMENT ID: MPS-2393
 NASA FMEA #: 0651-9

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 2393
 ITEM: LH2 FEED RTLS OUTBOARD VALVE (PV18)

LEAD ANALYST: W.J.MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 /1]	[NA]	[NA]	[NA]	[X] *
IOA	[1 /1]	[NA]	[NA]	[NA]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING NOTES.

**APPENDIX C
ASSESSMENT WORKSHEET**

ASSESSMENT DATE: 2/03/88
 ASSESSMENT ID: MPS-3010
 NASA FMEA #: 0202-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 3010
 ITEM: ENGINE HELIUM SUPPLY CHECK VALVE (CV1,CV2,CV3)

LEAD ANALYST: M.L.MCNEELY

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 /1R]	[P]	[F]	[F]	[X] *
IOA	[3 /2R]	[P]	[F]	[P]	[X]
COMPARE	[/N]	[]	[]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[3 /1R] [P] [F] [P] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

A SINGLE ENGINE SHUTDOWN WILL CAUSE AN INTACT ABORT. NO LOSS OF CREW OR VEHICLE. NSTS 22206 2.3.3L REQUIRES ASSIGNMENT OF 3/1R. REF: RI/NASA CIL OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/03/88
ASSESSMENT ID: MPS-3011
NASA FMEA #: 0202-2

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 3011
ITEM: ENGINE HELIUM SUPPLY CHECK VALVE (CV1,CV2,CV3)

LEAD ANALYST: M.L.MCNEELY

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 / 3]	[NA]	[NA]	[NA]	[] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

REF: RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/03/88
ASSESSMENT ID: MPS-3020
NASA FMEA #: 0201-2

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 3020
ITEM: HELIUM SUPPLY DISCONNECT(ORB/GND, ORB HALF),
(PD8)

LEAD ANALYST: M.L.MCNEELY

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 /1R]	[P]	[F]	[F]	[X] *
IOA	[3 /2R]	[P]	[F]	[P]	[X]
COMPARE	[/N]	[]	[]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[3 /1R] [P] [F] [P] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

SECOND FAILURE (CV1, 2, 3) WILL CAUSE LOSS OF HELIUM AND AN ENGINE SHUTDOWN. FAILURE OF ANOTHER CHECK VALVE WILL CAUSE A SECOND ENGINE SHUTDOWN AND LOSS OF VEHICLE. SCREEN C SHOULD PASS.

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/03/88
ASSESSMENT ID: MPS-3021
NASA FMEA #: 0201-3

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 3021
ITEM: HELIUM SUPPLY DISCONNECT (ORB/GND, ORB HALF),
(PD8)

LEAD ANALYST: M.L.MCNEELY

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 /3]	[NA]	[NA]	[NA]	[] *
IOA	[3 /2R]	[P]	[F]	[P]	[X]
COMPARE	[/N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[3 /1R] [P] [F] [P] [A]
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

SECOND FAILURE (CV1, 2, 3 FAIL TO CHECK) WILL CAUSE LOSS OF HELIUM AND AN ENGINE SHUTDOWN. FAILURE OF ANOTHER CHECK VALVE WILL CAUSE A SECOND ENGINE SHUTDOWN AND LOSS OF VEHICLE.
ANALYSIS 0201-3 COULD BE COMBINE WITH 0201-4.
REF: RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/03/88
 ASSESSMENT ID: MPS-3021A
 NASA FMEA #: 0201-4

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 3021
 ITEM: HELIUM SUPPLY DISCONNECT (ORB/GND, ORB HALF),
 (PD8)

LEAD ANALYST: M.L.MCNEELY

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[P]	[X] *
IOA	[3 /2R]	[P]	[F]	[P]	[X]
COMPARE	[N /N]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[3 /1R] [P] [F] [P] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

SECOND FAILURE (CV1, 2, 3 FAIL TO CHECK) WILL CAUSE LOSS OF
 HELIUM AND AN ENGINE SHUTDOWN. FAILURE OF ANOTHER CHECK VALVE
 WILL CAUSE A SECOND ENGINE SHUTDOWN AND LOSS OF VEHICLE.
 REF: RI/NASA CIL OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING
 NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/03/88
 ASSESSMENT ID: MPS-3030
 NASA FMEA #: NA

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 3030
 ITEM: TEST PORT (TP8)

LEAD ANALYST: M.L.MCNEELY

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[/]	[]	[]	[]	[] *
IOA	[3 /2R]	[P]	[F]	[P]	[X]
COMPARE	[N /N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

THIS FAILURE IS COVERED UNDER RI/NASA 0234-1 AND IOA 4620,
 RUPTURE OF THE HELIUM FILL LINE.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/03/88
 ASSESSMENT ID: MPS-3040
 NASA FMEA #: 0256-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 3040
 ITEM: 17.3 CU. FT. HELIUM SUPPLY TANK (TK6, 8, 10)

LEAD ANALYST: M.L.MCNEELY

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 /1]	[NA]	[NA]	[NA]	[X] *
IOA	[2 /2]	[NA]	[NA]	[NA]	[X]
COMPARE	[N /N]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

POSSIBLE OVERPRESSURIZATION.
 REF: RI/NASA CIL OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING
 NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/03/88
 ASSESSMENT ID: MPS-3050
 NASA FMEA #: 0203-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 3050
 ITEM: 4.7 CU. FT. HELIUM SUPPLY TANK (TK1,2,3,7,9,11)

LEAD ANALYST: M.L.MCNEELY

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 / 1]	[NA]	[NA]	[NA]	[X] *
IOA	[2 / 2]	[NA]	[NA]	[NA]	[X]
COMPARE	[N / N]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

POSSIBLE OVERPRESSURIZATION.

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/03/88
 ASSESSMENT ID: MPS-3050A
 NASA FMEA #: 0203-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 3050
 ITEM: 4.7 CU. FT. HELIUM SUPPLY TANK (TK1,2,3,7,9,11)

LEAD ANALYST: M.L.MCNEELY

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[P]	[P]	[X] *
IOA	[2 /2]	[NA]	[NA]	[NA]	[X]
COMPARE	[/N]	[N]	[N]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[1 /1] [NA] [NA] [NA] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

THIS RI/NASA ANALYSIS SHOULD BE COMBINED WITH 0203-2. POSSIBLE
 OVERPRESSURIZATION.

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING
 NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/03/88
 ASSESSMENT ID: MPS-3050B
 NASA FMEA #: 0257-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 3050
 ITEM: 4.7 CU. FT. HELIUM SUPPLY TANK (TK1,2,3,7,9,11)

LEAD ANALYST: M.L.MCNEELY

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 / 1]	[NA]	[NA]	[NA]	[X] *
IOA	[2 / 2]	[NA]	[NA]	[NA]	[X]
COMPARE	[N / N]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

POSSIBLE OVERPRESSURIZATION.
 REF: RI/NASA CIL OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/03/88
 ASSESSMENT ID: MPS-3060
 NASA FMEA #: NA

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 3060
 ITEM: PRESSURE TAP PORT (TP26,27,28)

LEAD ANALYST: M.L.MCNEELY

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[/]	[]	[]	[]	[] *
IOA	[2 / 2]	[NA]	[NA]	[NA]	[X]
COMPARE	[N / N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

THIS FAILURE IS COVERED UNDER RI/NASA 0252-1 AND IOA 4620,
 RUPTURE OF THE INTERCONNECT LINE.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/03/88
 ASSESSMENT ID: MPS-3070
 NASA FMEA #: 0258-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 3070
 ITEM: ENGINE HELIUM SUPPLY CHECK VALVE
 (CV25,26;36,37;41,42)

LEAD ANALYST: M.L.MCNEELY

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[P]	[X] *
IOA	[3 /3]	[NA]	[NA]	[NA]	[]
COMPARE	[N /N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[3 /3] [NA] [NA] [NA] [D]
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

SINGLE FAILURE WILL HAVE NO EFFECT. LEAKAGE OF UPSTREAM LINE IS
 A SINGLE FAILURE POINT.
 REF: RI/NASA OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING
 NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/03/88
 ASSESSMENT ID: MPS-3070A
 NASA FMEA #: 0258-3

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 3070
 ITEM: ENGINE HELIUM SUPPLY CHECK VALVE
 (CV25,26;36,37;41,42)

LEAD ANALYST: M.L.MCNEELY

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[/]	[]	[]	[]	*
IOA	[3 / 3]	[NA]	[NA]	[NA]	
COMPARE	[N / N]	[N]	[N]	[N]	

RECOMMENDATIONS: (If different from NASA)

[3 / 3] [NA] [NA] [NA] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

THE VALVE IS NOT REQUIRED TO REMAIN CLOSED.

REF: RI/NASA OF 12-23-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/03/88
 ASSESSMENT ID: MPS-3071
 NASA FMEA #: 0258-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 3071
 ITEM: ENGINE HELIUM SUPPLY CHECK VALVE
 (CV25,26;36,37;41,42)

LEAD ANALYST: M.L.MCNEELY

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 /3]	[NA]	[NA]	[NA]	[] *
IOA	[3 /2R]	[P]	[F]	[P]	[X]
COMPARE	[/N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[3 /1R] [P] [F] [P] [A]
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

FAILURE OF BOTH CHECK VALVES IN AN ENGINE SYSTEM WILL CAUSE
 ENGINE SHUTDOWN AND LOSS OF MISSION. NSTS 22206 2.3.3L REQUIRES
 ASSIGNMENT OF 3/1R.

REF: RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/03/88
ASSESSMENT ID: MPS-3080
NASA FMEA #: 0242-1

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 3080
ITEM: ENGINE HELIUM SUPPLY FILTER - PANEL A;B
(FL2,6;3,7;4,8)

LEAD ANALYST: M.L.MCNEELY

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 /1R]	[P]	[F]	[P]	[X] *
IOA	[3 /2R]	[P]	[F]	[P]	[X]
COMPARE	[/N]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[3 /1R] [P] [F] [P] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

LOSS OF REDUNDANCY RESULTS IN SHUTDOWN OF ONE ENGINE AND LOSS OF MISSION. NSTS 22206 2.3.3L REQUIRES ASSIGNMENT OF 3/1R.
REF: RI/NASA CIL OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/03/88
 ASSESSMENT ID: MPS-3081
 NASA FMEA #: 0242-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 3081
 ITEM: ENGINE HELIUM SUPPLY FILTER - PANEL A;B
 (FL2,6;3,7;4,8)

LEAD ANALYST: M.L.MCNEELY

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 /1]	[NA]	[NA]	[NA]	[X] *
IOA	[3 /2R]	[P]	[F]	[P]	[X]
COMPARE	[N /N]	[N]	[N]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

SINGLE FAILURE CAN CAUSE OVERPRESSURIZATION.
 REF: RI/NASA CIL OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING
 NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/03/88
 ASSESSMENT ID: MPS-3082
 NASA FMEA #: NA

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 3082
 ITEM: ENGINE HELIUM SUPPLY FILTER - PANEL A;B
 (FL2,6;3,7;4,8)

LEAD ANALYST: M.L.MCNEELY

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[/]	[]	[]	[]	[] *
IOA	[2 / 2]	[NA]	[NA]	[NA]	[X]
COMPARE	[N / N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[2 / 2] [NA] [NA] [NA] [A]
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/03/88
 ASSESSMENT ID: MPS-3090
 NASA FMEA #: 0204-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 3090
 ITEM: ENGINE HELIUM SUPPLY ISOLATION VALVE
 (LV1,2;3,4;5,6)

LEAD ANALYST: M.L.MCNEELY

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 / 3]	[NA]	[NA]	[NA]	[] *
IOA	[3 / 2R]	[P]	[P]	[P]	[]
COMPARE	[/N]	[N]	[N]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

THE IOA CRITICALITY WAS DRIVEN BY THE FAILURE TO REMAIN OPEN. NO
 EFFECT OF FAILURE TO OPEN.
 REF: RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/03/88
ASSESSMENT ID: MPS-3090A
NASA FMEA #: 0204-2

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 3090
ITEM: ENGINE HELIUM SUPPLY ISOLATION VALVE
(LV1,2;3,4;5,6)

LEAD ANALYST: M.L.MCNEELY

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 /1R]	[P]	[F]	[P]	[X] *
IOA	[3 /2R]	[P]	[P]	[P]	[]
COMPARE	[/N]	[]	[N]	[]	[N]

RECOMMENDATIONS: (If different from NASA)

[3 /1R] [P] [P] [P] [D]
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

SECOND FAILURE WILL CAUSE ENGINE SHUTDOWN AND LOSS OF MISSION.
NSTS 22206 2.3.3L REQUIRES ASSIGNMENT OF 3/1R.
REF: RI/NASA CIL OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/03/88
ASSESSMENT ID: MPS-3092
NASA FMEA #: 0204-4

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 3092
ITEM: ENGINE HELIUM SUPPLY ISOLATION VALVE
(LV1,2;3,4;5,6)

LEAD ANALYST: M.L.MCNEELY

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[P]	[X] *
IOA	[2 /2]	[NA]	[NA]	[NA]	[X]
COMPARE	[/N]	[N]	[N]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[2 /2] [NA] [NA] [NA] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

FAILURE WILL CAUSE ENGINE SHUTDOWN AND LOSS OF MISSION.
REF: RI/NASA CIL OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/03/88
 ASSESSMENT ID: MPS-3092A
 NASA FMEA #: 0204-5

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 3092
 ITEM: ENGINE HELIUM SUPPLY ISOLATION VALVE
 (LV1,2;3,4;5,6)

LEAD ANALYST: M.L.MCNEELY

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 /1]	[NA]	[NA]	[NA]	[X] *
IOA	[2 /2]	[NA]	[NA]	[NA]	[X]
COMPARE	[N /N]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:
 POSSIBLE OVERPRESSURIZATION.
 REF: RI/NASA CIL OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING
 NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/03/88
ASSESSMENT ID: MPS-3110
NASA FMEA #: 0205-1

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 3110
ITEM: ENGINE HELIUM PRESSURE REGULATOR (PR1,7;2,8;3,9)

LEAD ANALYST: M.L.MCNEELY

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 /1R]	[P]	[F]	[P]	[X] *
IOA	[3 /2R]	[P]	[P]	[P]	[]
COMPARE	[/N]	[]	[N]	[]	[N]

RECOMMENDATIONS: (If different from NASA)

[3 /1R] [P] [P] [P] [D]
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

SECOND FAILURE WILL CAUSE ENGINE SHUTDOWN AND LOSS OF MISSION.
NSTS 22206 2.3.3L REQUIRES ASSIGNMENT OF 3/1R.
REF: RI/NASA CIL OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING
NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/03/88
 ASSESSMENT ID: MPS-3110A
 NASA FMEA #: 0205-3

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 3110
 ITEM: ENGINE HELIUM PRESSURE REGULATOR (PR1,7;2,8;3,9)

LEAD ANALYST: M.L.MCNEELY

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[P]	[X] *
IOA	[3 /2R]	[P]	[P]	[P]	[]
COMPARE	[N /N]	[]	[N]	[]	[N]

RECOMMENDATIONS: (If different from NASA)

[3 /1R] [P] [P] [P] [D]
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

SECOND FAILURE WILL CAUSE ENGINE SHUTDOWN AND LOSS OF MISSION.
 NSTS 22206 2.3.3L REQUIRES ASSIGNMENT OF 3/1R.
 REF: RI/NASA CIL OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING
 NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/03/88
ASSESSMENT ID: MPS-3111
NASA FMEA #: 0205-2

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 3111
ITEM: ENGINE HELIUM PRESSURE REGULATOR (PR1,7;2,8;3,9)
LEAD ANALYST: M.L.MCNEELY

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[P]	[X] *
IOA	[2 /2]	[NA]	[NA]	[NA]	[X]
COMPARE	[/N]	[N]	[N]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[1 /1]	[NA]	[NA]	[NA]	[]
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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

HELIUM ESCAPING THROUGH THE RELIEF VALVE CAN OVERPRESSURIZE THE AFT COMPARTMENT.

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/03/88
ASSESSMENT ID: MPS-3112
NASA FMEA #: 0205-4

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 3112
ITEM: ENGINE HELIUM PRESSURE REGULATOR (PR1,7;2,8;3,9)

LEAD ANALYST: M.L.MCNEELY

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 / 1]	[NA]	[NA]	[NA]	[X] *
IOA	[2 / 2]	[NA]	[NA]	[NA]	[X]
COMPARE	[N / N]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

POSSIBLE OVERPRESSURIZATION.

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/03/88
ASSESSMENT ID: MPS-3120
NASA FMEA #: 0206-1

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 3120
ITEM: ENGINE HE RELIEF VALVE PANEL A;B
(RV1,8;2,9;3,10)

LEAD ANALYST: M.L.MCNEELY

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[P]	[X] *
IOA	[2 /2]	[NA]	[NA]	[NA]	[X]
COMPARE	[/N]	[N]	[N]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[1 /1] [NA] [NA] [NA] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

POSSIBLE OVERPRESSURIZATION (1/1). POSSIBLE ENGINE SHUTDOWN
CAUSED BY LOSS OF HELIUM (2/2).
REF: RI/NASA CIL OF 12-23-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/03/88
ASSESSMENT ID: MPS-3120A
NASA FMEA #: 0206-3

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 3120
ITEM: ENGINE HE RELIEF VALVE PANEL A;B
(RV1,8;2,9;3,10)

LEAD ANALYST: M.L.MCNEELY

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 / 3]	[NA]	[NA]	[NA]	[] *
IOA	[2 / 2]	[NA]	[NA]	[NA]	[X]
COMPARE	[N / N]	[]	[]	[]	[N]

RECOMMENDATIONS: (If different from NASA)

[1 / 1]	[NA]	[NA]	[NA]	[A]
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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE	[]
INADEQUATE	[]

REMARKS:
POSSIBLE OVERPRESSURIZATION (1/1).
REF: RI/NASA CIL OF 12-23-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/03/88
 ASSESSMENT ID: MPS-3121
 NASA FMEA #: 0206-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 3121
 ITEM: ENGINE HE RELIEF VALVE PANEL A;B
 (RV1,8;2,9;3,10)

LEAD ANALYST: M.L.MCNEELY

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[P]	[X] *
IOA	[2 /2]	[NA]	[NA]	[NA]	[X]
COMPARE	[/N]	[N]	[N]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[1 /1] [NA] [NA] [NA] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

POSSIBLE OVERPRESSURIZATION (1/1).
 REF: RI/NASA CIL OF 12-23-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/03/88
ASSESSMENT ID: MPS-3122
NASA FMEA #: 0206-2

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 3122
ITEM: ENGINE HE RELIEF VALVE PANEL A;B
(RV1,8;2,9;3,10)

LEAD ANALYST: M.L.MCNEELY

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[NA]	[P]	[X] *
IOA	[2 /2]	[NA]	[NA]	[NA]	[X]
COMPARE	[/N]	[N]	[]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

POSSIBLE OVERPRESSURIZATION UPON SECOND FAILURE.
REF: RI/NASA CIL OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING
NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/03/88
 ASSESSMENT ID: MPS-3123
 NASA FMEA #: 0206-4

NASA DATA: _____
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 3123
 ITEM: ENGINE HE RELIEF VALVE PANEL A;B
 (RV1,8;2,9;3,10)

LEAD ANALYST: M.L.MCNEELY

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 /1]	[NA]	[NA]	[NA]	[X] *
IOA	[2 /2]	[NA]	[NA]	[NA]	[X]
COMPARE	[N /N]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

POSSIBLE OVERPRESSURIZATION.

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/03/88
ASSESSMENT ID: MPS-3140
NASA FMEA #: 0207-2

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 3140
ITEM: ENGINE REG OUTLET CHECK VLV (CV5,29;6,40;7,45)

LEAD ANALYST: M.L.MCNEELY

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[F]	[F]	[P]	[X] *
IOA	[3 /3]	[NA]	[NA]	[NA]	[]
COMPARE	[N /N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[3 /3] [NA] [NA] [NA] [D]
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

FAILURE HAS NO EFFECT. THE CHECK VALVE CANNOT PROTECT AGAINST AN UPSTREAM LEAK.
REF: RI/NASA CIL OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/03/88
 ASSESSMENT ID: MPS-3141
 NASA FMEA #: 0207-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 3141
 ITEM: ENGINE REG OUTLET CHECK VLV (CV5,29;6,40;7,45)

LEAD ANALYST: M.L.MCNEELY

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 /3]	[NA]	[NA]	[NA]	[] *
IOA	[3 /2R]	[P]	[P]	[P]	[]
COMPARE	[/N]	[N]	[N]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

LAUNCH SCRUB.

REF: RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/04/88
ASSESSMENT ID: MPS-3150
NASA FMEA #: 0260-1

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 3150
ITEM: ENGINE HELIUM SUPPLY INTERCONNECT INLET VALVE
(LV59, 61, 63)

LEAD ANALYST: M.L.MCNEELY

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 /1]	[NA]	[NA]	[NA]	[X] *
IOA	[2 /2]	[NA]	[NA]	[NA]	[X]
COMPARE	[N /N]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[3 /1R] [F] [F] [P] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

INTERCONNECT IN VALVE MAY NEED TO BE OPENED DURING ASCENT DUE TO A FAILURE IN AN ENGINE HELIUM SYSTEM. FAILURE WILL CAUSE AN ENGINE TO SHUTDOWN DUE TO LACK OF HELIUM PURGE. LOSS OF MISSION. NSTS 22206 2.3.3L REQUIRES ASSIGNMENT OF 3/1R.
REF: RI/NASA CIL OF 12-23-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/04/88
ASSESSMENT ID: MPS-3151
NASA FMEA #: 0260-2

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 3151
ITEM: ENGINE HELIUM SUPPLY INTERCONNECT INLET VALVE
(LV59, 61, 63)

LEAD ANALYST: M.L.MCNEELY

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 /1R]	[P]	[F]	[P]	[X] *
IOA	[3 /3]	[NA]	[NA]	[NA]	[]
COMPARE	[/N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[3 /3] [NA] [NA] [NA] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

FAILURE HAS NO EFFECT. THE VALVE HAS NO REDUNDANCY.
REF: RI/NASA CIL OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING
NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/04/88
ASSESSMENT ID: MPS-3152
NASA FMEA #: 0260-3

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 3152
ITEM: ENGINE HELIUM SUPPLY INTERCONNECT INLET VALVE
(LV59,61,63)

LEAD ANALYST: M.L.MCNEELY

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 /1R]	[P]	[F]	[P]	[X] *
IOA	[3 /3]	[NA]	[NA]	[NA]	[]
COMPARE	[/N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[1 /1] [NA] [NA] [NA] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

POSSIBLE OVERPRESSURIZATION. THIS RI/NASA ANALYSIS COULD BE
COMBINED WITH 0260-4.
REF: RI/NASA CIL OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING
NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/04/88
ASSESSMENT ID: MPS-3152A
NASA FMEA #: 0260-4

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 3152
ITEM: ENGINE HELIUM SUPPLY INTERCONNECT INLET VALVE
(LV59, 61, 63)

LEAD ANALYST: M.L.MCNEELY

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 / 1]	[NA]	[NA]	[NA]	[X] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[N / N]	[]	[]	[]	[N]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/04/88
 ASSESSMENT ID: MPS-3160
 NASA FMEA #: 0262-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 3160
 ITEM: ENGINE HELIUM SUPPLY INTERCONNECT OUTLET VALVE
 (LV60, 62, 64)

LEAD ANALYST: M. L. MCNEELY

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 / 3]	[NA]	[NA]	[NA]	[] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

THE RI/NASA ANALYSIS INDICATES 3/1R FOR ABORT. NO SUPPORTING RATIONALE IS AVAILABLE AND IOA DOES NOT AGREE.
 REF: RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/04/88
 ASSESSMENT ID: MPS-3161
 NASA FMEA #: 0262-5

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 3161
 ITEM: ENGINE HELIUM SUPPLY INTERCONNECT OUTLET VALVE
 (LV60, 62, 64)

LEAD ANALYST: M.L.MCNEELY

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 / 3]	[NA]	[NA]	[NA]	[] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/04/88
ASSESSMENT ID: MPS-3162
NASA FMEA #: 0262-3

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 3162
ITEM: ENGINE HELIUM SUPPLY INTERCONNECT OUTLET VALVE
(LV60,62,64)

LEAD ANALYST: M.L.MCNEELY

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[/]	[NA]	[NA]	[NA]	[X] *
IOA	[2 / 2]	[NA]	[NA]	[NA]	[X]
COMPARE	[N / N]	[]	[]	[]	[N]

RECOMMENDATIONS: (If different from NASA)

[1 / 1] [NA] [NA] [NA] [A]
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

RI/NASA INDICATES 1/1 FOR ABORT ONLY. POSSIBLE
OVERPRESSURIZATION.
REF: RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/04/88
 ASSESSMENT ID: MPS-3162A
 NASA FMEA #: 0262-4

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 3162
 ITEM: ENGINE HELIUM SUPPLY INTERCONNECT OUTLET VALVE
 (LV60, 62, 64)

LEAD ANALYST: M.L.MCNEELY

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[P]	[X] *
IOA	[2 /2]	[NA]	[NA]	[NA]	[X]
COMPARE	[/N]	[N]	[N]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[1 /1] [NA] [NA] [NA] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

POSSIBLE OVERPRESSURIZATION.

REF: RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/04/88
 ASSESSMENT ID: MPS-3162B
 NASA FMEA #: 0262-6

NASA DATA: -----
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 3162
 ITEM: ENGINE HELIUM SUPPLY INTERCONNECT OUTLET VALVE
 (LV60, 62, 64)

LEAD ANALYST: M.L.MCNEELY

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 /1]	[NA]	[NA]	[NA]	[X] *
IOA	[2 /2]	[NA]	[NA]	[NA]	[X]
COMPARE	[N /N]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/04/88
ASSESSMENT ID: MPS-3170
NASA FMEA #: 0261-2

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 3170
ITEM: ENGINE HELIUM INTERCONNECT CHECK VALVE-PANEL
OUTLET (CV28,39,44)

LEAD ANALYST: M.L.MCNEELY

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[P]	[X] *
IOA	[3 /3]	[NA]	[NA]	[NA]	[]
COMPARE	[N /N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[3 /3] [NA] [NA] [NA] [D]
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

FAILURE WILL HAVE NO EFFECT.
REF: RI/NASA OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING
NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/04/88
 ASSESSMENT ID: MPS-3171
 NASA FMEA #: 0261-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 3171
 ITEM: ENGINE HELIUM INTERCONNECT CHECK VALVE-PANEL
 OUTLET (CV28,39,44)

LEAD ANALYST: M.L.MCNEELY

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 / 3]	[NA]	[NA]	[NA]	[] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA FMEA/CIL REVIEW MEETING NOTES.

**APPENDIX C
ASSESSMENT WORKSHEET**

ASSESSMENT DATE: 2/04/88
 ASSESSMENT ID: MPS-3181
 NASA FMEA #: 0259-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 3181
 ITEM: ENGINE HELIUM INTERCONNECT CHECK VALVE-PANEL
 INLET (CV27,38,43)

LEAD ANALYST: M.L.MCNEELY

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 / 3]	[NA]	[NA]	[NA]	[] *
IOA	[2 / 2]	[NA]	[NA]	[NA]	[X]
COMPARE	[N / N]	[]	[]	[]	[N]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/04/88
 ASSESSMENT ID: MPS-3190
 NASA FMEA #: 0409-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 3190
 ITEM: MAIN ENGINE GN2 PURGE DISCONNECT (ORB HALF)
 (PD14)

LEAD ANALYST: M.L.MCNEELY

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 / 3]	[NA]	[NA]	[NA]	[] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

THIS FAILURE IS ADDRESSED ON IOA WORKSHEET 4660 AND 4666. THIS
 DUPLICATE ANALYSIS SHOULD BE DELETED.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/04/88
 ASSESSMENT ID: MPS-3200
 NASA FMEA #: NA

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 3200
 ITEM: FACILITY PORTS

LEAD ANALYST: M.L.MCNEELY

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[/]	[]	[]	[]	[] *
IOA	[2 / 2]	[NA]	[NA]	[NA]	[X]
COMPARE	[N / N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

THIS FAILURE IS COVERED UNDER LEAKAGE OF THE LINE (IOA 443,
 RI/NASA 0235-1).

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/04/88
 ASSESSMENT ID: MPS-4010
 NASA FMEA #: 0202-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4010
 ITEM: PNEU VALVE HE SUPPLY CHECK VALVE (CV4)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 /1R]	[P]	[F]	[F]	[X] *
IOA	[3 /2R]	[P]	[P]	[P]	[]
COMPARE	[/N]	[]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[3 /1R] [P] [P] [P] [D]
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

SECOND FAILURE (PD8) WILL ALLOW PNEUMATIC HELIUM TO LEAK AWAY. PNEUMATIC ACCUMULATORS WILL RETAIN PRESSURE TO CLOSE PREVALVES. THE CORSSOVER VALVE WILL PROVIDE HELIUM FOR SUBSEQUENT VALVE OPERATIONS. FAILURE OF ANOTHER HELIUM SUPPLY CHECK VALVE WILL DEplete ENGINE HELIUM SUPPLIES AND VALVE OPERATIONS WILL BE IMPOSSIBLE. RELIEF SYSTEM WILL PROTECT AGAINST MANIFOLD RUPTURE, BUT VENTING HYDROGEN IS A FIRE HAZARD DURING ENTRY/LANDING. REF: RI/NASA CIL OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING NOTES.

**APPENDIX C
ASSESSMENT WORKSHEET**

ASSESSMENT DATE: 2/04/88
 ASSESSMENT ID: MPS-4011
 NASA FMEA #: 0202-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4011
 ITEM: PNEU VALVE HE SUPPLY CHECK VALVE (CV4)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 / 3]	[NA]	[NA]	[NA]	[] *
IOA	[3 / 3]	[P]	[P]	[P]	[]
COMPARE	[/]	[N]	[N]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

*** CIL RETENTION RATIONALE:** (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/04/88
ASSESSMENT ID: MPS-4030
NASA FMEA #: 0209-1

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 4030
ITEM: PNEU VALVE HE ISOLATION CHECK VALVE (CV9)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[P]	[X] *
IOA	[2 /1R]	[P]	[F]	[P]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[3 /3] [NA] [NA] [NA] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

ACCUMULATORS WILL SUPPLY HELIUM PRESSURE FOR MECO. MAY NOT BE ABLE TO OPEN PREVALVES FOR DUMP. FILL AND DRAIN VALVES ARE ON OTHER HELIUM PREVALVES FOR DUMP. FILL AND DRAIN VALVES ARE ON OTHER HELIUM LEG, SO WILL BE OPERATIONAL. INEFFICIENT DUMP DUE TO PREVALVE INOPERABILITY, BUT RELIEF SYSTEM AND INERTING WILL PROTECT AGAINST MANIFOLD RUPTURE. NO REDUNDANCY.
REF: RI/NASA CIL OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/04/88
 ASSESSMENT ID: MPS-4031
 NASA FMEA #: 0209-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4031
 ITEM: PNEU VALVE HE ISOLATION CHECK VALVE (CV9)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[P]	[X] *
IOA	[3 /2R]	[P]	[P]	[P]	[]
COMPARE	[N /N]	[]	[N]	[]	[N]

RECOMMENDATIONS: (If different from NASA)

[3 /1R] [P] [P] [P] [D]
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

FAILURE OF CV8 AND RV4 TO REMAIN CLOSED IN ADDITION TO CV9
 FAILURE WILL ALLOW PNEUMATIC PRESSURE TO ESCAPE.
 REF: RI/NASA CIL OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING
 NOTES.

**APPENDIX C
ASSESSMENT WORKSHEET**

ASSESSMENT DATE: 2/04/88
 ASSESSMENT ID: MPS-4040A
 NASA FMEA #: 0631-3

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4040
 ITEM: GO2 PRESS MANIF REPRESS CHECK VALVE (CV10)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 / 3]	[NA]	[NA]	[NA]	[] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/04/88
 ASSESSMENT ID: MPS-4050
 NASA FMEA #: 0603-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4050
 ITEM: LO2 FEED MANIF REPRESS CHECK VALVE (CV12)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[P]	[X] *
IOA	[3 /3]	[NA]	[NA]	[NA]	[]
COMPARE	[N /N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[3 /3] [NA] [NA] [NA] [D]
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

LINE RUPTURE IS NOT VALID AS A LOSS OF REDUNDANCY.
 REF: RI/NASA CIL OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING
 NOTES.

**APPENDIX C
ASSESSMENT WORKSHEET**

ASSESSMENT DATE: 2/04/88
 ASSESSMENT ID: MPS-4050A
 NASA FMEA #: 0603-3

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4050
 ITEM: LO2 FEED MANIF REPRESS CHECK VALVE (CV12)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 / 3]	[NA]	[NA]	[NA]	[] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/04/88
 ASSESSMENT ID: MPS-4051
 NASA FMEA #: 0603-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4051
 ITEM: LO2 FEED MANIF REPRESS CHECK VALVE (CV12)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 /1R]	[P]	[F]	[P]	[X] *
IOA	[1 /1]	[NA]	[NA]	[NA]	[]
COMPARE	[N /N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[3 /3] [NA] [NA] [NA] [D]
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

HELIUM PRESSURE IS NOT REQUIRED FOR DUMP. RELIEF SYSTEM AND
 INERTING WILL PROTECT AGAINST MANIFOLD RUPTURE.
 REF: RI/NASA CIL OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING
 NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/04/88
 ASSESSMENT ID: MPS-4060
 NASA FMEA #: NA

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4060
 ITEM: GH2 PRESS MANIF REPRESS CHECK VALVE (CV13)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[/]	[]	[]	[]	[] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[N / N]	[N]	[N]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[3 / 3] [NA] [NA] [NA] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

**APPENDIX C
ASSESSMENT WORKSHEET**

ASSESSMENT DATE: 2/04/88
 ASSESSMENT ID: MPS-4060A
 NASA FMEA #: 0605-3

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4060
 ITEM: GH2 PRESS MANIF REPRESS CHECK VALVE (CV13)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 / 3]	[NA]	[NA]	[NA]	[] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/04/88
 ASSESSMENT ID: MPS-4061
 NASA FMEA #: 0605-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4061
 ITEM: GH2 PRESS MANIF REPRESS CHECK VALVE (CV13)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 / 3]	[NA]	[NA]	[NA]	[] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/04/88
 ASSESSMENT ID: MPS-4070
 NASA FMEA #: 0632-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4070
 ITEM: LH2 RECIRC MANIF REPRESS CHECK VALVE (CV14)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[P]	[X] *
IOA	[3 /3]	[NA]	[NA]	[NA]	[]
COMPARE	[N /N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[3 /3] [NA] [NA] [NA] [D]
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

LINE RUPTURE IS NOT VALID AS LOSS OF REDUNDANCY.
 REF: RI/NASA CIL OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/04/88
 ASSESSMENT ID: MPS-4070A
 NASA FMEA #: 0632-3

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4070
 ITEM: LH2 RECIRC MANIF REPRESS CHECK VALVE (CV14)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 / 3]	[NA]	[NA]	[NA]	[] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/04/88
ASSESSMENT ID: MPS-4071
NASA FMEA #: 0632-1

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 4071
ITEM: LH2 RECIRC MANIF REPRESS CHECK VALVE (CV14)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[P]	[X] *
IOA	[3 /3]	[NA]	[NA]	[NA]	[]
COMPARE	[N /N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[3 /3] [NA] [NA] [NA] [D]
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

RELIEF VALVE RV7 IS NOT REDUNDANT TO THE CHECK VALVE. FAILURE HAS NO EFFECT.
REF: RI/NASA CIL OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/05/88
ASSESSMENT ID: MPS-4080
NASA FMEA #: 0630-2

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 4080
ITEM: LH2 FEED MANIF NOM REPRESS CHECK VALVE (CV15)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[P]	[X] *
IOA	[3 /3]	[NA]	[NA]	[NA]	[]
COMPARE	[N /N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[3 /3] [NA] [NA] [NA] [D]
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

LINE RUPTURE IS NOT VALID AS A LOSS OF REDUNDANCY. FAILURE HAS NO EFFECT.

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA FMEA/CIL&a4248HREWEFWNG NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/05/88
 ASSESSMENT ID: MPS-4080A
 NASA FMEA #: 0630-3

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4080
 ITEM: LH2 FEED MANIF NOM REPRESS CHECK VALVE (CV15)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 / 3]	[NA]	[NA]	[NA]	[] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/05/88
ASSESSMENT ID: MPS-4081
NASA FMEA #: 0630-1

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 4081
ITEM: LH2 FEED MANIF NOM REPRESS CHECK VALVE (CV15)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[P]	[X] *
IOA	[3 /3]	[NA]	[NA]	[NA]	[]
COMPARE	[N /N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[3 /3] [NA] [NA] [NA] [D]
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

DEGRADED DUMP. MPS INERTING WILL CLEAR REMAINING LH2. RELIEF SYSTEM WILL PROTECT AGAINST MANIFOLD RUPTURE. NO REDUNDANCY. REF: RI/NASA CIL OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING NOTES.

**APPENDIX C
ASSESSMENT WORKSHEET**

ASSESSMENT DATE: 2/05/88
 ASSESSMENT ID: MPS-4090
 NASA FMEA #: NA

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4090
 ITEM: LO2 TANK PRE-PRESS CHECK VALVE (CV16)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY	REDUNDANCY SCREENS			CIL
	FLIGHT HDW/FUNC	A	B	C	ITEM
NASA	[/]	[]	[]	[]	[] *
IOA	[2 /1R]	[P]	[P]	[P]	[X]
COMPARE	[N /N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

THIS ITEM IS ANALYZED ON IOA 1011-1014 AND RI/NASA 0518. DELETE
 DUPLICATE ANALYSIS.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/05/88
 ASSESSMENT ID: MPS-4100
 NASA FMEA #: NA

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4100
 ITEM: LH2 TANK PRE-PRESS CHECK VALVE (CV17)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[/]	[]	[]	[]	[] *
IOA	[2 /1R]	[P]	[P]	[P]	[X]
COMPARE	[N /N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] [] (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

THIS ITEM IS ANALYZED ON IOA 2181-2183 AND RI/NASA 0502. DELETE
 DUPLICATE ANALYSIS.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/05/88
 ASSESSMENT ID: MPS-4101
 NASA FMEA #: NA

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4101
 ITEM: LH2 TANK PRE-PRESS CHECK VALVE (DV17)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[/]	[]	[]	[]	[] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[N / N]	[N]	[N]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

THIS ITEM IS ANALYZED ON IOA 2181-2183 AND RI/NASA 0502. DELETE
 DUPLICATE ANALYSIS.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/05/88
 ASSESSMENT ID: MPS-4110
 NASA FMEA #: NA

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4110
 ITEM: GH2 PRESS MANIFOLD REPRESS CHECK VALVE (CV24)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

		REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
	CRITICALITY FLIGHT HDW/FUNC				
NASA	[/]	[]	[]	[]	[] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[N / N]	[N]	[N]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[3 / 3] [NA] [NA] [NA] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/05/88
 ASSESSMENT ID: MPS-4110A
 NASA FMEA #: 0605-3

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4110
 ITEM: GH2 PRESS MANIFOLD REPRESS CHECK VALVE (CV24)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 / 3]	[NA]	[NA]	[NA]	[] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA FMEA/CIL REVIEW MEETING NOTES.

**APPENDIX C
ASSESSMENT WORKSHEET**

ASSESSMENT DATE: 2/05/88
 ASSESSMENT ID: MPS-4111
 NASA FMEA #: 0605-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4111
 ITEM: GH2 PRESS MANIFOLD REPRESS CHECK VALVE (CV24)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 / 3]	[NA]	[NA]	[NA]	[] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/05/88
ASSESSMENT ID: MPS-4120
NASA FMEA #: 0248-2

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 4120
ITEM: LH2 FEED MANIF RTLS REPRESS CHECK VALVE (CV30)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[P]	[X] *
IOA	[3 /3]	[NA]	[NA]	[NA]	[]
COMPARE	[N /N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[3 /3] [NA] [NA] [NA] [D]
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

LINE RUPTURE IS NOT VALID AS LOSS OF REDUNDANCY. FAILURE HAS NO EFFECT.

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/05/88
ASSESSMENT ID: MPS-4121
NASA FMEA #: 0248-1

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 4121
ITEM: LH2 FEED MANIF RTLS REPRESS CHECK VALVE (CV30)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 / 1]	[NA]	[NA]	[NA]	[X] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[N / N]	[]	[]	[]	[N]

RECOMMENDATIONS: (If different from NASA)

[3 / 3] [NA] [NA] [NA] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

THE VALVE IS ONLY REQUIRED TO OPEN DURING AN RTLS ABORT. LACK OF HELIUM REPRESS WILL ALLOW VENTING OF RESIDUAL H2 AFTER LANDING TO CREATE A FIRE HAZARD. NOMINAL NA, ABORT 1/1.
REF: RI/NASA CIL OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING NOTES.

**APPENDIX C
ASSESSMENT WORKSHEET**

ASSESSMENT DATE: 2/05/88
 ASSESSMENT ID: MPS-4131
 NASA FMEA #: 0238-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4131
 ITEM: PNEU VALVE HE SUPPLY-ISOLATION VALVE (LV7, LV8)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 /1R]	[P]	[F]	[P]	[X] *
IOA	[3 /3]	[NA]	[NA]	[NA]	[]
COMPARE	[/N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] [] (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

ACCUMULATORS WILL RETAIN PRESSURE TO OPERATE PREVALVES AT MECO.
SUBSEQUENT VALVE OPERATION MAY BE IMPOSSIBLE. RELIEF SYSTEMS
WILL PREVENT MANIFOLD RUPTURE. VENTING HYDROGEN DURING ENTRY AND
LANDING WILL CREATE A FIRE HAZARD. RI/NASA USE OF

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/05/88
 ASSESSMENT ID: MPS-4132
 NASA FMEA #: 0238-3

NASA DATA:
 BASELINE []
 NEW [X]

ID: SUBSYSTEM: MPS
 MDAC 4132
 ITEM: PNEU VALVE HE SUPPLY-ISOLATION VALVE (LV7, LV8)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 / 3]	[NA]	[NA]	[NA]	[] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/05/88
ASSESSMENT ID: MPS-4140
NASA FMEA #: 0208-1

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 4140
ITEM: PNEU HE CROSSOVER SOLENOID (LV10)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 /1R]	[P]	[F]	[P]	[X] *
IOA	[3 /3]	[P]	[F]	[P]	[]
COMPARE	[/N]	[]	[]	[]	[N]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

LOSS OF ALL REDUNDANCY (LV10, 7, 8) WILL PRECLUDE VALVE OPERATION FOR DUMP. RELIEF SYSTEMS WILL PREVENT MANIFOLD RUPTURE, BUT VENTING OF H2 DURING ENTRY/LANDING MAY CREATE A FIRE/EXPLOSION HAZARD.

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/05/88
ASSESSMENT ID: MPS-4140A
NASA FMEA #: 0208-3

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 4140
ITEM: PNEU HE CROSSOVER SOLENOID (LV10)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 /1]	[NA]	[NA]	[NA]	[X] *
IOA	[3 /3]	[P]	[F]	[P]	[]
COMPARE	[N /N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

POSSIBLE OVERPRESSURIZATION.

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/05/88
 ASSESSMENT ID: MPS-4141
 NASA FMEA #: NA

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4141
 ITEM: PNEU HE CROSSOVER SOLENOID (LV10)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[/]	[]	[]	[]	[] *
IOA	[3 / 3]	[P]	[F]	[P]	[]
COMPARE	[N / N]	[N]	[N]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[3 / 1R] [P] [F] [P] [A]
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

LOSS OF ALL REDUNDANCY (LV10, 7, 8) WILL MAKE VALVE OPERATION FOLLOWING MECO IMPOSSIBLE. RELIEF SYSTEMS WILL PREVENT MANIFOLD RUPTURE. VENTING HYDROGEN DURING ENTRY AND LANDING MAY CREATE A FIRE/EXPLOSION HAZARD.

**APPENDIX C
ASSESSMENT WORKSHEET**

ASSESSMENT DATE: 2/05/88
 ASSESSMENT ID: MPS-4142
 NASA FMEA #: 0208-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4142
 ITEM: PNEU HE CROSSOVER SOLENOID (LV10)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 /1R]	[P]	[F]	[P]	[X] *
IOA	[3 /3]	[NA]	[NA]	[NA]	[]
COMPARE	[/N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[3 /3] [NA] [NA] [NA] [D]
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

HELIUM LEAK AND ENGINE SHUTDOWN ARE NOT VALID FAILURES TO BE
 CONSIDERED LOSS OF REDUNDANCY.

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING
 NOTES.

**APPENDIX C
ASSESSMENT WORKSHEET**

ASSESSMENT DATE: 2/05/88
 ASSESSMENT ID: MPS-4150
 NASA FMEA #: 0225-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4150
 ITEM: LO2 PREVALVE OPENING SOLENOID (LV12, LV14, LV16)
 LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 /1R]	[P]	[P]	[P]	[] *
IOA	[3 /3]	[NA]	[NA]	[NA]	[]
COMPARE	[/N]	[N]	[N]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

NSTS 22206 2.3.2d PRECLUDES THE INCLUSION OF SSME HPOT SEALS OR RIV IN THE SUCCESSION OF FAILURES. AS SUCH, RELIEF WILL BE PROVIDED FOR THE 12" FEED LINE. STILL 3/1R FOR LO2 INERT.
 REF: RI/NASA CIL OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/05/88
ASSESSMENT ID: MPS-4151
NASA FMEA #: 0225-4

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 4151
ITEM: LO2 PREVALVE OPENING SOLENOID (LV12, LV14, LV16)

LEAD ANALYST: A.J. MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[P]	[X] *
IOA	[3 /3]	[NA]	[NA]	[NA]	[]
COMPARE	[N /N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-14-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/05/88
 ASSESSMENT ID: MPS-4152
 NASA FMEA #: 0225-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4152
 ITEM: LO2 PREVALVE OPENING SOLENOID (LV12, LV14, LV16)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[P]	[X] *
IOA	[2 /1R]	[P]	[F]	[P]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-14-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/05/88
 ASSESSMENT ID: MPS-4152A
 NASA FMEA #: 0225-5

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4152
 ITEM: LO2 PREVALVE OPENING SOLENOID (LV12, LV14, LV16)

LEAD ANALYST: A.J. MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 /1R]	[P]	[F]	[P]	[X] *
IOA	[2 /1R]	[P]	[F]	[P]	[X]
COMPARE	[N /]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[2 /1R] [P] [F] [P] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

FAILURE OF BOTH OPENING SOLENOIDS CAN PREVENT PREVALVE CLOSURE
 DESPITE PROPER OPERATION OF CLOSING SOLENOIDS.
 REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-14-
 87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/05/88
ASSESSMENT ID: MPS-4160
NASA FMEA #: 0226-1

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 4160
ITEM: LO2 PREVALVE OPENING SOLENOID (LV13, LV15, LV17)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[P]	[X] *
IOA	[2 /1R]	[P]	[F]	[P]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] [] (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-14-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/05/88
ASSESSMENT ID: MPS-4160A
NASA FMEA #: 0290-1

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 4160
ITEM: LO2 PREVALVE OPENING SOLENOID (LV13, LV15, LV17)

LEAD ANALYST: A.J. MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 /1]	[NA]	[NA]	[NA]	[X] *
IOA	[2 /1R]	[P]	[F]	[P]	[X]
COMPARE	[N /N]	[N]	[N]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-14-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/08/88
 ASSESSMENT ID: MPS-4160B
 NASA FMEA #: 0290-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4160
 ITEM: LO2 PREVALVE CLOSING SOLENOID (LV13, LV15, LV17)
 LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 /1]	[NA]	[NA]	[NA]	[X] *
IOA	[2 /1R]	[P]	[F]	[P]	[X]
COMPARE	[N /N]	[N]	[N]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] [] (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-14-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/05/88
 ASSESSMENT ID: MPS-4161
 NASA FMEA #: 0226-5

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4161
 ITEM: LO2 PREVALVE CLOSING SOLENOID (LV13, LV15, LV17)

LEAD ANALYST: A.J. MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[P]	[X] *
IOA	[2 /1R]	[P]	[F]	[P]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-14-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/05/88
ASSESSMENT ID: MPS-4162
NASA FMEA #: 0226-2

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 4162
ITEM: LO2 PREVALVE CLOSING SOLENOID (LV13, LV15, LV17)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 /1R]	[P]	[P]	[P]	[] *
IOA	[3 /3]	[NA]	[NA]	[NA]	[]
COMPARE	[/N]	[N]	[N]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

NSTS 22206 2.3.2d PRECLUDES THE INCLUSION OF SSME HPOT SEALS OR RIV IN THE SUCCESSION OF FAILURES. THEY REMAIN VALID RELIEF PATHS. STILL 3/1R FOR LO2 INERT.

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 11-20-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/08/88
ASSESSMENT ID: MPS-4162A
NASA FMEA #: 0226-4

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 4162
ITEM: LO2 PREVALVE CLOSING SOLENOID (LV13, LV15, LV17)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 /1R]	[P]	[F]	[P]	[X] *
IOA	[3 /3]	[NA]	[NA]	[NA]	[]
COMPARE	[/N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[2 /1R] [P] [F] [P] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:
SECOND FAILURE CAN CLOSE PREVALVE.
REF: RI/NASA CIL OF 12-23-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/08/88
 ASSESSMENT ID: MPS-4164
 NASA FMEA #: 0227-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4164
 ITEM: LH2 PREVALVE OPENING SOLENOID (LV18, LV20, LV22)

LEAD ANALYST: A.J. MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 /1R]	[P]	[P]	[P]	[] *
IOA	[3 /3]	[NA]	[NA]	[NA]	[]
COMPARE	[/N]	[N]	[N]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[3 /1R] [P] [F] [P] [A]
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

FAILURE IS NOT DETECTABLE.
 REF: RI/NASA CIL OF 12-23-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/08/88
ASSESSMENT ID: MPS-4165
NASA FMEA #: 0227-4

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 4165
ITEM: LH2 PREVALVE OPENING SOLENOID (LV18, LV20, LV22)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[P]	[X] *
IOA	[3 /3]	[NA]	[NA]	[NA]	[]
COMPARE	[N /N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-15-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/08/88
ASSESSMENT ID: MPS-4166
NASA FMEA #: 0227-2

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 4166
ITEM: LH2 PREVALVE OPENING SOLENOID (LV18, LV20, LV22)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[P]	[P]	[X] *
IOA	[2 /1R]	[P]	[F]	[P]	[X]
COMPARE	[/]	[]	[N]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[3 /3] [NA] [NA] [NA] [D]
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

FAILURES IN INTERFACING SUBSYSTEMS ARE NOT ALLOWED (NSTS 22206, 2.3.2d). SECOND FAILURE WILL PREVENT CLOSURE AT MECO, BUT HAS NO HARMFUL EFFECT.

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-15-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/08/88
 ASSESSMENT ID: MPS-4166A
 NASA FMEA #: 0227-5

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4166
 ITEM: LH2 PREVALVE OPENING SOLENOID (LV18, LV20, LV22)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[P]	[X] *
IOA	[2 /1R]	[P]	[F]	[P]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[3 /3] [NA] [NA] [NA] [D]
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

FAILURE TO CLOSE PREVALVE HAS NO EFFECT. POSTULATING FAILURES IN INTERFACING SUBSYSTEMS IS NOT PART OF THIS ANALYSIS (NSTS 22206, 2.3.2d).

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-15-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/08/88
ASSESSMENT ID: MPS-4167
NASA FMEA #: 0228-1

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 4167
ITEM: LH2 PREVALVE CLOSING SOLENOID (LV19, LV21, LV23)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[P]	[P]	[X] *
IOA	[2 /1R]	[P]	[F]	[P]	[X]
COMPARE	[/]	[]	[N]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[3 /3] [NA] [NA] [NA] [D]
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

FAILURE TO CLOSE PREVALVE HAS NOT EFFECT. SUBSEQUENT FAILURES IN INTERFACING SUBSYSTEMS ARE NOT CONSIDERED (NSTS 22206, 2.3.2d).
REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-14-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/08/88
 ASSESSMENT ID: MPS-4169
 NASA FMEA #: 0228-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4169
 ITEM: LH2 PREVALVE CLOSING SOLENOID (LV19, LV21, LV23)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 /1R]	[P]	[F]	[P]	[X] *
IOA	[3 /3]	[NA]	[NA]	[NA]	[]
COMPARE	[/N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 11-20-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/08/88
ASSESSMENT ID: MPS-4170
NASA FMEA #: 0231-1

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 4170
ITEM: LO2 FEEDLINE RELIEF SHUTOFF VALVE CLOSING
SOLENOID (LV24)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 / 3]	[NA]	[NA]	[NA]	[] *
IOA	[2 / 1R]	[P]	[P]	[P]	[X]
COMPARE	[N / N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] [] (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

REF: RI/NASA FMEA/CIL REVIEW MEETING NOTES.

**APPENDIX C
ASSESSMENT WORKSHEET**

ASSESSMENT DATE: 2/08/88
 ASSESSMENT ID: MPS-4170A
 NASA FMEA #: 0290-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4170
 ITEM: LO2 FEEDLINE RELIEF SHUTOFF VALVE CLOSING
 SOLENOID (LV24)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 /1]	[NA]	[NA]	[NA]	[X] *
IOA	[2 /1R]	[P]	[P]	[P]	[X]
COMPARE	[N /N]	[N]	[N]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-14-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/08/88
ASSESSMENT ID: MPS-4171
NASA FMEA #: 0231-4

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 4171
ITEM: LO2 FEEDLINE RELIEF SHUTOFF VALVE CLOSING
SOLENOID (LV24)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[P]	[X] *
IOA	[2 /1R]	[P]	[P]	[P]	[X]
COMPARE	[/]	[]	[N]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 8-18-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/08/88
ASSESSMENT ID: MPS-4172
NASA FMEA #: 0231-2

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 4172
ITEM: LO2 FEEDLINE RELIEF SHUTOFF VALVE CLOSING
SOLENOID (LV24)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 /1R]	[P]	[F]	[P]	[X] *
IOA	[2 /1R]	[P]	[P]	[P]	[X]
COMPARE	[N /]	[]	[N]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[3 /1R] [P] [P] [P] [D]
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

LOSS OF ALL REDUNDANCY IS DETECTABLE VIA MANIFOLD PRESSURE INDICATORS.

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 8-18-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/08/88
ASSESSMENT ID: MPS-4172A
NASA FMEA #: 0231-5

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 4172
ITEM: LO2 FEEDLINE RELIEF SHUTOFF VALVE CLOSING
SOLENOID (LV24)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 /1R]	[P]	[F]	[P]	[X] *
IOA	[2 /1R]	[P]	[P]	[P]	[X]
COMPARE	[N /]	[]	[N]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[3 /1R] [P] [P] [P] [D]
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

LOSS OF ALL REDUNDANCY IS DETECTABLE VIA MANIFOLD PRESSURE INDICATORS.

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 8-18-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/08/88
 ASSESSMENT ID: MPS-4180
 NASA FMEA #: 0232-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4180
 ITEM: LH2 FEEDLINE RELIEF SHUTOFF VALVE CLOSING
 SOLENOID (LV25)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 / 3]	[NA]	[NA]	[NA]	[] *
IOA	[2 / 1R]	[P]	[P]	[P]	[X]
COMPARE	[N / N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/08/88
 ASSESSMENT ID: MPS-4180B
 NASA FMEA #: 0290-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4180
 ITEM: LH2 FEEDLINE RELIEF SHUTOFF VALVE CLOSING
 SOLENOID (LV25)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 / 1]	[NA]	[NA]	[NA]	[X] *
IOA	[2 / 1R]	[P]	[P]	[P]	[X]
COMPARE	[N / N]	[N]	[N]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-14-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/08/88
 ASSESSMENT ID: MPS-4181
 NASA FMEA #: 0232-4

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4181
 ITEM: LH2 FEEDLINE RELIEF SHUTOFF VALVE CLOSING
 SOLENOID (LV25)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[NA]	[P]	[X] *
IOA	[2 /1R]	[P]	[P]	[P]	[X]
COMPARE	[/]	[]	[N]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 8-18-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/08/88
ASSESSMENT ID: MPS-4182
NASA FMEA #: 0232-2

NASA DATA:
BASELINE [X]
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 4182
ITEM: LH2 FEEDLINE RELIEF SHUTOFF VALVE CLOSING
SOLENOID (LV25)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 /1]	[NA]	[NA]	[NA]	[X] *
IOA	[2 /1R]	[P]	[P]	[P]	[X]
COMPARE	[N /N]	[N]	[N]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] [] (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 8-18-87.

**APPENDIX C
ASSESSMENT WORKSHEET**

ASSESSMENT DATE: 2/08/88
 ASSESSMENT ID: MPS-4190
 NASA FMEA #: 0233-3

NASA DATA: []
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4190
 ITEM: HE SUPPLY BLOWDOWN VALVE (LV26, LV27)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 /1]	[NA]	[NA]	[NA]	[X] *
IOA	[2 /1R]	[P]	[F]	[P]	[X]
COMPARE	[N /N]	[N]	[N]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] [] (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/08/88
 ASSESSMENT ID: MPS-4191
 NASA FMEA #: NA

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4191
 ITEM: HE SUPPLY BLOWDOWN VALVE (LV26, LV27)

LEAD ANALYST: A.J. MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[/]	[]	[]	[]	[] *
IOA	[3 / 3]	[P]	[F]	[P]	[]
COMPARE	[N / N]	[N]	[N]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[1 / 1] [NA] [NA] [NA] [A]
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

INADEQUATE PURGE MAY CAUSE LOSS OF VEHICLE.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/08/88
ASSESSMENT ID: MPS-4192
NASA FMEA #: 0233-4

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 4192
ITEM: HE SUPPLY BLOWDOWN VALVE (LV26, LV27)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[P]	[X] *
IOA	[2 /1R]	[P]	[F]	[P]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/08/88
ASSESSMENT ID: MPS-4200
NASA FMEA #: 0221-1

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 4200
ITEM: LO2 OUTBOARD FILL VALVE OPENING SOLENOID (LV28)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 /1R]	[P]	[P]	[P]	[X] *
IOA	[3 /3]	[NA]	[NA]	[NA]	[]
COMPARE	[/N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] [] (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-15-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/08/88
ASSESSMENT ID: MPS-4201
NASA FMEA #: 0221-4

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 4201
ITEM: LO2 OUTBOARD FILL VALVE OPENING SOLENOID (LV28)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[P]	[X] *
IOA	[3 /3]	[NA]	[NA]	[NA]	[]
COMPARE	[N /N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-15-87.

**APPENDIX C
ASSESSMENT WORKSHEET**

ASSESSMENT DATE: 2/08/88
 ASSESSMENT ID: MPS-4202
 NASA FMEA #: 0221-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4202
 ITEM: LO2 OUTBOARD FILL VALVE OPENING SOLENOID (LV28)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 / 3]	[NA]	[NA]	[NA]	[X] *
IOA	[2 / 1R]	[P]	[F]	[P]	[X]
COMPARE	[N / N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] [] (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

THE RI/NASA ANALYSIS ASSIGNED A 1/1 CRITICALITY FOR ABORT. IOA CONCURS.

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-15-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/08/88
ASSESSMENT ID: MPS-4202A
NASA FMEA #: 0221-5

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 4202
ITEM: LO2 OUTBOARD FILL VALVE OPENING SOLENOID (LV28)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 /1R]	[P]	[F]	[P]	[X] *
IOA	[2 /1R]	[P]	[F]	[P]	[X]
COMPARE	[N /]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-15-87.

**APPENDIX C
ASSESSMENT WORKSHEET**

ASSESSMENT DATE: 2/08/88
 ASSESSMENT ID: MPS-4210
 NASA FMEA #: 0222-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4210
 ITEM: LO2 OUTBOARD FILL VALVE CLOSING SOLENOID (LV29)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 / 3]	[NA]	[NA]	[NA]	[X] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

THE RI/NASA ANALYSIS INDICATES 1/1 FOR ABORT. IOA CONCURS.
 REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-15-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/08/88
ASSESSMENT ID: MPS-4211
NASA FMEA #: 0222-5

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 4211
ITEM: LO2 OUTBOARD FILL VALVE CLOSING SOLENOID (LV29)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 /1R]	[P]	[F]	[P]	[X] *
IOA	[3 /3]	[NA]	[NA]	[NA]	[]
COMPARE	[/N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-15-87.

**APPENDIX C
ASSESSMENT WORKSHEET**

ASSESSMENT DATE: 2/08/88
 ASSESSMENT ID: MPS-4212
 NASA FMEA #: 0222-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4212
 ITEM: LO2 OUTBOARD FILL VALVE CLOSING SOLENOID (LV29)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 /1R]	[P]	[P]	[P]	[] *
IOA	[3 /3]	[NA]	[NA]	[NA]	[]
COMPARE	[/N]	[N]	[N]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] [] (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL WORKSHEET OF 12-15-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/08/88
 ASSESSMENT ID: MPS-4212A
 NASA FMEA #: 0222-4

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4212
 ITEM: LO2 OUTBOARD FILL VALVE CLOSING SOLENOID (LV29)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[P]	[X] *
IOA	[3 /3]	[NA]	[NA]	[NA]	[]
COMPARE	[N /N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-15-87.

**APPENDIX C
ASSESSMENT WORKSHEET**

ASSESSMENT DATE: 2/09/88
 ASSESSMENT ID: MPS-4220
 NASA FMEA #: 0223-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4220
 ITEM: LO2 INBOARD FILL VALVE OPENING SOLENOID (LV30)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 /1R]	[P]	[P]	[P]	[] *
IOA	[3 /3]	[NA]	[NA]	[NA]	[]
COMPARE	[/N]	[N]	[N]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL WORKSHEET OF 12-15-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/09/88
 ASSESSMENT ID: MPS-4221
 NASA FMEA #: 0223-5

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4221
 ITEM: LO2 INBOARD FILL VALVE OPENING SOLENOID (LV30)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[P]	[X] *
IOA	[3 /3]	[NA]	[NA]	[NA]	[]
COMPARE	[N /N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-15-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/09/88
 ASSESSMENT ID: MPS-4222
 NASA FMEA #: 0223-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4222
 ITEM: LO2 INBOARD FILL VALVE OPENING SOLENOID (LV30)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 / 3]	[NA]	[NA]	[NA]	[] *
IOA	[2 / 1R]	[P]	[F]	[P]	[X]
COMPARE	[N / N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] [] (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/09/88
 ASSESSMENT ID: MPS-4222A
 NASA FMEA #: 0223-4

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4222
 ITEM: LO2 INBOARD FILL VALVE OPENING SOLENOID (LV30)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[P]	[X] *
IOA	[2 /1R]	[P]	[F]	[P]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-15-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/09/88
ASSESSMENT ID: MPS-4223
NASA FMEA #: 0224-1

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 4223
ITEM: LO2 INBOARD FILL VALVE CLOSING SOLENOID (LV31)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 / 3]	[NA]	[NA]	[NA]	[] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

REF: RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/09/88
ASSESSMENT ID: MPS-4225
NASA FMEA #: 0224-2

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 4225
ITEM: LO2 INBOARD FILL VALVE CLOSING SOLENOID (LV31)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 /1R]	[P]	[P]	[P]	[] *
IOA	[3 /3]	[NA]	[NA]	[NA]	[]
COMPARE	[/N]	[N]	[N]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] [] (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

REF: RI/NASA CIL WORKSHEET OF 12-15-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/09/88
 ASSESSMENT ID: MPS-4225A
 NASA FMEA #: 0224-5

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4225
 ITEM: LO2 INBOARD FILL VALVE CLOSING SOLENOID (LV31)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[P]	[X] *
IOA	[3 /3]	[NA]	[NA]	[NA]	[]
COMPARE	[N /N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-15-87.

**APPENDIX C
ASSESSMENT WORKSHEET**

ASSESSMENT DATE: 2/10/88
 ASSESSMENT ID: MPS-4226
 NASA FMEA #: 0270-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4226
 ITEM: LH2 OUTBOARD FILL VALVE OPENING SOLENOID (LV32)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[P]	[X] *
IOA	[3 /3]	[NA]	[NA]	[NA]	[]
COMPARE	[N /N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-15-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/10/88
ASSESSMENT ID: MPS-4227
NASA FMEA #: 0270-4

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 4227
ITEM: LH2 OUTBOARD FILL VALVE OPENING SOLENOID (LV32)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[P]	[X] *
IOA	[3 /3]	[NA]	[NA]	[NA]	[]
COMPARE	[N /N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-15-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/10/88
ASSESSMENT ID: MPS-4228
NASA FMEA #: 0270-2

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 4228
ITEM: LH2 OUTBOARD FILL VALVE OPENING SOLENOID (LV32)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 / 3]	[NA]	[NA]	[NA]	[X] *
IOA	[2 / 1R]	[P]	[F]	[P]	[X]
COMPARE	[N / N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] [] (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

THE RI/NASA ANALYSIS INDICATES 1/1 FOR ABORT. IOA CONCURS. THE IOA CRITICALITY WAS DRIVEN BY THE FAILURE TO REMAIN CLOSED. REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-15-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/10/88
ASSESSMENT ID: MPS-4228A
NASA FMEA #: 0270-5

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 4228
ITEM: LH2 OUTBOARD FILL VALVE OPENING SOLENOID (LV32)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 /1R]	[P]	[F]	[P]	[X] *
IOA	[2 /1R]	[P]	[F]	[P]	[X]
COMPARE	[N /]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

THREE FAILURES MUST OCCUR BEFORE LH2 CAN ESCAPE.
REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-15-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/10/88
ASSESSMENT ID: MPS-4229
NASA FMEA #: 0271-1

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 4229
ITEM: LH2 OUTBOARD FILL VALVE CLOSING SOLENOID (LV33)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 / 3]	[NA]	[NA]	[NA]	[X] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

RI/NASA INDICATES 1/1 FOR ABORT. IOA CONCURS.
REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-15-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/10/88
 ASSESSMENT ID: MPS-4230
 NASA FMEA #: 0271-4

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4230
 ITEM: LH2 OUTBOARD FILL VALVE CLOSING SOLENOID (LV33)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 /1R]	[P]	[F]	[P]	[X] *
IOA	[3 /3]	[NA]	[NA]	[NA]	[]
COMPARE	[/N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-15-87.

**APPENDIX C
ASSESSMENT WORKSHEET**

ASSESSMENT DATE: 2/10/88
 ASSESSMENT ID: MPS-4231
 NASA FMEA #: 0271-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4231
 ITEM: LH2 OUTBOARD FILL VALVE CLOSING SOLENOID (LV33)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[P]	[P]	[X] *
IOA	[3 /3]	[NA]	[NA]	[NA]	[]
COMPARE	[N /N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-15-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/10/88
 ASSESSMENT ID: MPS-4231A
 NASA FMEA #: 0271-5

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4231
 ITEM: LH2 OUTBOARD FILL VALVE CLOSING SOLENOID (LV33)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[P]	[X] *
IOA	[3 /3]	[NA]	[NA]	[NA]	[]
COMPARE	[N /N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-15-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/10/88
 ASSESSMENT ID: MPS-4232
 NASA FMEA #: 0272-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4232
 ITEM: LH2 INBOARD FILL VALVE OPENING SOLENOID (LV34)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 /1R]	[P]	[P]	[P]	[] *
IOA	[3 /3]	[NA]	[NA]	[NA]	[]
COMPARE	[/N]	[N]	[N]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-15-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/10/88
 ASSESSMENT ID: MPS-4233
 NASA FMEA #: 0272-4

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4233
 ITEM: LH2 INBOARD FILL VALVE OPENING SOLENOID (LV34)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[P]	[X] *
IOA	[3 /3]	[NA]	[NA]	[NA]	[]
COMPARE	[N /N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-15-87.

**APPENDIX C
ASSESSMENT WORKSHEET**

ASSESSMENT DATE: 2/10/88
 ASSESSMENT ID: MPS-4234
 NASA FMEA #: 0272-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4234
 ITEM: LH2 INBOARD FILL VALVE OPENING SOLENOID (LV34)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 / 3]	[NA]	[NA]	[NA]	[] *
IOA	[2 / 1R]	[P]	[F]	[P]	[X]
COMPARE	[N / N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] [] (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/10/88
 ASSESSMENT ID: MPS-4234A
 NASA FMEA #: 0272-5

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4234
 ITEM: LH2 INBOARD FILL VALVE OPENING SOLENOID (LV34)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[P]	[X] *
IOA	[2 /1R]	[P]	[F]	[P]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-15-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/10/88
 ASSESSMENT ID: MPS-4235
 NASA FMEA #: 0273-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4235
 ITEM: LH2 INBOARD FILL VALVE CLOSING SOLENOID (LV35)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 / 3]	[NA]	[NA]	[NA]	[] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA FMEA/CIL REVIEW MEETING NOTES.

**APPENDIX C
ASSESSMENT WORKSHEET**

ASSESSMENT DATE: 2/10/88
 ASSESSMENT ID: MPS-4236
 NASA FMEA #: 0273-4

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4236
 ITEM: LH2 INBOARD FILL VALVE CLOSING SOLENOID (LV35)
 LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[P]	[X] *
IOA	[2 /1R]	[P]	[F]	[P]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-15-87.

**APPENDIX C
ASSESSMENT WORKSHEET**

ASSESSMENT DATE: 2/10/88
 ASSESSMENT ID: MPS-4236A
 NASA FMEA #: 0291-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4236
 ITEM: LH2 INBOARD FILL VALVE CLOSING SOLENOID (LV35)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[P]	[X] *
IOA	[2 /1R]	[P]	[F]	[P]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] [] (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-9-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/10/88
ASSESSMENT ID: MPS-4236B
NASA FMEA #: 0291-2

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 4236
ITEM: LH2 INBOARD FILL VALVE CLOSING SOLENOID (LV35)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[P]	[X] *
IOA	[2 /1R]	[P]	[F]	[P]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (if applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-9-87.

**APPENDIX C
ASSESSMENT WORKSHEET**

ASSESSMENT DATE: 2/10/88
 ASSESSMENT ID: MPS-4237
 NASA FMEA #: 0273-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4237
 ITEM: LH2 INBOARD FILL VALVE CLOSING SOLENOID (LV35)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 /1R]	[P]	[P]	[P]	[] *
IOA	[3 /3]	[NA]	[NA]	[NA]	[]
COMPARE	[/N]	[N]	[N]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] [] (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL WORKSHEET OF 12-15-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/10/88
 ASSESSMENT ID: MPS-4237A
 NASA FMEA #: 0273-5

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4237
 ITEM: LH2 INBOARD FILL VALVE CLOSING SOLENOID (LV35)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[P]	[X] *
IOA	[3 /3]	[NA]	[NA]	[NA]	[]
COMPARE	[N /N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-15-87.

**APPENDIX C
ASSESSMENT WORKSHEET**

ASSESSMENT DATE: 2/10/88
 ASSESSMENT ID: MPS-4240
 NASA FMEA #: 0229-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4240
 ITEM: LH2 RECIRC PUMP VALVE OPENING SOLENOID (LV36)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 / 3]	[NA]	[NA]	[NA]	[] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

*** CIL RETENTION RATIONALE: (If applicable)**

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/10/88
 ASSESSMENT ID: MPS-4241
 NASA FMEA #: 0229-5

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4241
 ITEM: LH2 RECIRC PUMP VALVE OPENING SOLENOID (LV36)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 / 3]	[NA]	[NA]	[NA]	[] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA FMEA/CIL REVIEW MEETING NOTES.

**APPENDIX C
ASSESSMENT WORKSHEET**

ASSESSMENT DATE: 2/10/88
 ASSESSMENT ID: MPS-4242
 NASA FMEA #: 0229-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4242
 ITEM: LH2 RECIRC PUMP VALVE OPENING SOLENOID (LV36)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 /1]	[NA]	[NA]	[NA]	[X] *
IOA	[3 /3]	[NA]	[NA]	[NA]	[]
COMPARE	[N /N]	[]	[]	[]	[N]

RECOMMENDATIONS: (If different from NASA)

[3 /3] [NA] [NA] [NA] [D]
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

THIS FAILURE WILL BE 1/1 DURING ABORT ONLY.
 REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 8-18-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/10/88
ASSESSMENT ID: MPS-4242A
NASA FMEA #: 0229-4

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 4242
ITEM: LH2 RECIRC PUMP VALVE OPENING SOLENOID (LV36)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 /1]	[NA]	[NA]	[NA]	[X] *
IOA	[3 /3]	[NA]	[NA]	[NA]	[]
COMPARE	[N /N]	[]	[]	[]	[N]

RECOMMENDATIONS: (If different from NASA)

[3 /3] [NA] [NA] [NA] [D]
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

FAILURE WILL BE 1/1 DURING AN ABORT ONLY.

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 8-18-87.

**APPENDIX C
ASSESSMENT WORKSHEET**

ASSESSMENT DATE: 2/10/88
 ASSESSMENT ID: MPS-4250
 NASA FMEA #: 0230-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4250
 ITEM: LH2 REPLENISH VALVE OPENING SOLENOID(LV39)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 /1]	[NA]	[NA]	[NA]	[X] *
IOA	[3 /3]	[NA]	[NA]	[NA]	[]
COMPARE	[N /N]	[]	[]	[]	[N]

RECOMMENDATIONS: (If different from NASA)

[2 /1R] [P] [P] [F] []
 (ADD/DELETE)

*** CIL RETENTION RATIONALE: (If applicable)**

ADEQUATE []
 INADEQUATE []

REMARKS:

FAILURE CAN PREVENT LH2 DUMP. SUBSEQUENT FAILURE OF RELIEF SYSTEM CAN CAUSE MANIFOLD RUPTURE.

REF: RI/NASA CIL OF 12-23-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/10/88
 ASSESSMENT ID: MPS-4251
 NASA FMEA #: 0230-5

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4251
 ITEM: LH2 REPLENISH VALVE OPENING SOLENOID(LV39)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[P]	[X] *
IOA	[3 /3]	[NA]	[NA]	[NA]	[]
COMPARE	[N /N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 8-18-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/10/88
 ASSESSMENT ID: MPS-4252
 NASA FMEA #: 0230-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4252
 ITEM: LH2 REPLENISH VALVE OPENING SOLENOID(LV39)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 /3]	[NA]	[NA]	[NA]	[] *
IOA	[2 /1R]	[P]	[F]	[P]	[X]
COMPARE	[N /N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

LAUNCH SCRUB.
 REF: RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/10/88
 ASSESSMENT ID: MPS-4252A
 NASA FMEA #: 0230-4

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4252
 ITEM: LH2 REPLENISH VALVE OPENING SOLENOID(LV39)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[P]	[X] *
IOA	[2 /1R]	[P]	[F]	[P]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 8-18-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/10/88
ASSESSMENT ID: MPS-4260
NASA FMEA #: 0601-1

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 4260
ITEM: LO2 MANIFOLD REPRESS VALVE (LV40, LV41)

LEAD ANALYST: A.J. MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 /1R]	[P]	[F]	[P]	[X] *
IOA	[2 /1R]	[P]	[P]	[P]	[X]
COMPARE	[N /]	[]	[N]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[3 /3] [NA] [NA] [NA] [D]
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

DUMP AND RELIEF SYSTEMS ARE NOT REDUNDANT TO THE REPRESS SYSTEM.
FAILURE RESULTS IN DEGRADED DUMP. NO LOSS OF CREW OR VEHICLE.
REF: RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/10/88
ASSESSMENT ID: MPS-4260A
NASA FMEA #: 0601-4

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 4260
ITEM: LO2 MANIFOLD REPRESS VALVE (LV40, LV41)

LEAD ANALYST: A.J. MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 /1]	[NA]	[NA]	[NA]	[X] *
IOA	[2 /1R]	[P]	[P]	[P]	[X]
COMPARE	[N /N]	[N]	[N]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

INBOARD VALVE (LV40) IS 1/1. OUTBOARD VALVE (LV41) IS 2/1R.
REF: RI/NASA CIL OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/10/88
ASSESSMENT ID: MPS-4261
NASA FMEA #: 0601-1

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 4261
ITEM: LO2 MANIFOLD REPRESS VALVE (LV40, LV41)

LEAD ANALYST: A.J. MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 /1R]	[P]	[F]	[P]	[X] *
IOA	[2 /1R]	[P]	[P]	[P]	[X]
COMPARE	[N /]	[]	[N]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[3 /3] [NA] [NA] [NA] [D]
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

DUMP AND RELIEF SYSTEMS ARE NOT REDUNDANT TO THE REPRESS SYSTEM.
FAILURE RESULTS IN DEGRADED DUMP. NO LOSS OF CREW OR VEHICLE.
REF: RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/10/88
ASSESSMENT ID: MPS-4262
NASA FMEA #: 0601-2

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 4262
ITEM: LO2 MANIFOLD REPRESS VALVE (LV40, LV41)

LEAD ANALYST: A.J. MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 /1R]	[P]	[F]	[P]	[X] *
IOA	[3 /2R]	[P]	[P]	[P]	[]
COMPARE	[/N]	[]	[N]	[]	[N]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/10/88
 ASSESSMENT ID: MPS-4262A
 NASA FMEA #: 0601-3

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4262
 ITEM: LO2 MANIFOLD REPRESS VALVE (LV40, LV41)

LEAD ANALYST: A.J. MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 / 3]	[NA]	[NA]	[NA]	[] *
IOA	[3 / 2R]	[P]	[P]	[P]	[]
COMPARE	[/ N]	[N]	[N]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/10/88
ASSESSMENT ID: MPS-4270
NASA FMEA #: 0606-1

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 4270
ITEM: LH2 MANIFOLD REPRESS VALVE (LV42, LV43)

LEAD ANALYST: A.J. MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[P]	[X] *
IOA	[3 /3]	[NA]	[NA]	[NA]	[]
COMPARE	[N /N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[3 /3] [NA] [NA] [NA] [D]
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

DUMP AND RELIEF SYSTEMS ARE NOT REDUNDANT TO THE REPRESS SYSTEM.
FAILURE RESULTS IN DEGRADED DUMP. NO LOSS OF CREW OR VEHICLE.
REF: RI/NASA CIL OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING
NOTES.

**APPENDIX C
ASSESSMENT WORKSHEET**

ASSESSMENT DATE: 2/10/88
 ASSESSMENT ID: MPS-4271
 NASA FMEA #: NA

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4271
 ITEM: LH2 MANIFOLD REPRESS VALVE (LV42, LV43)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[/]	[]	[]	[]	[] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[N / N]	[N]	[N]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[3 / 3] [NA] [NA] [NA] []
 (ADD/DELETE)

*** CIL RETENTION RATIONALE:** (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/10/88
ASSESSMENT ID: MPS-4272
NASA FMEA #: 0606-2

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 4272
ITEM: LH2 MANIFOLD REPRESS VALVE (LV42, LV43)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[P]	[] *
IOA	[3 /1R]	[P]	[P]	[P]	[]
COMPARE	[N /]	[]	[N]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

REGULATOR (PR6) WILL KEEP HELIUM FLOW AT LOW LEVEL.
REF: RI/NASA CIL OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/10/88
 ASSESSMENT ID: MPS-4272A
 NASA FMEA #: 0606-3

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4272
 ITEM: LH2 MANIFOLD REPRESS VALVE (LV42, LV43)

LEAD ANALYST: A.J. MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 / 3]	[NA]	[NA]	[NA]	[] *
IOA	[3 / 1R]	[P]	[P]	[P]	[]
COMPARE	[/ N]	[N]	[N]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/10/88
 ASSESSMENT ID: MPS-4280
 NASA FMEA #: 0219-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4280
 ITEM: LO2 FEED DISCONNECT VALVE OPENING SOLENOID
 (LV46)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 / 3]	[NA]	[NA]	[NA]	[] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/10/88
 ASSESSMENT ID: MPS-4281
 NASA FMEA #: 0219-4

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4281
 ITEM: LO2 FEED DISCONNECT VALVE OPENING SOLENOID
 (LV46)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 /1R]	[P]	[F]	[P]	[X] *
IOA	[2 /1R]	[P]	[F]	[P]	[X]
COMPARE	[N /]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-11-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/10/88
 ASSESSMENT ID: MPS-4281A
 NASA FMEA #: 0290-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4281
 ITEM: LO2 FEED DISCONNECT VALVE OPENING SOLENOID
 (LV46)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 /1]	[NA]	[NA]	[NA]	[X] *
IOA	[2 /1R]	[P]	[F]	[P]	[X]
COMPARE	[N /N]	[N]	[N]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-14-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/10/88
 ASSESSMENT ID: MPS-4281B
 NASA FMEA #: 0290-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4281
 ITEM: LO2 FEED DISCONNECT VALVE OPENING SOLENOID
 (LV46)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 /1]	[NA]	[NA]	[NA]	[X] *
IOA	[2 /1R]	[P]	[F]	[P]	[X]
COMPARE	[N /N]	[N]	[N]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-14-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/10/88
ASSESSMENT ID: MPS-4282
NASA FMEA #: 0219-2

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 4282
ITEM: LO2 FEED DISCONNECT VALVE OPENING SOLENOID
(LV46)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 /1]	[NA]	[NA]	[NA]	[X] *
IOA	[3 /3]	[NA]	[NA]	[NA]	[]
COMPARE	[N /N]	[]	[]	[]	[N]

RECOMMENDATIONS: (If different from NASA)

[2 /1R] [P] [F] [P] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

THE VALVE HAS A MECHANICAL BACKUP CLOSURE DEVICE.
REF: RI/NASA CIL OF 12-23-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/10/88
 ASSESSMENT ID: MPS-4282A
 NASA FMEA #: 0219-5

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4282
 ITEM: LO2 FEED DISCONNECT VALVE OPENING SOLENOID
 (LV46)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 /1R]	[P]	[F]	[P]	[X] *
IOA	[3 /3]	[NA]	[NA]	[NA]	[]
COMPARE	[/N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/10/88
ASSESSMENT ID: MPS-4290
NASA FMEA #: 0220-1

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 4290
ITEM: LO2 FEED DISCONNECT VALVE CLOSING SOLENOID
(LV47)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[P]	[X] *
IOA	[3 /3]	[NA]	[NA]	[NA]	[]
COMPARE	[N /N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-11-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/10/88
 ASSESSMENT ID: MPS-4291
 NASA FMEA #: 0220-5

NASA DATA:
 BASELINE [X]
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4291
 ITEM: LO2 FEED DISCONNECT VALVE CLOSING SOLENOID
 (LV47)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[P]	[X] *
IOA	[3 /3]	[NA]	[NA]	[NA]	[]
COMPARE	[N /N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-11-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/10/88
ASSESSMENT ID: MPS-4292
NASA FMEA #: 0220-2

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 4292
ITEM: LO2 FEED DISCONNECT VALVE CLOSING SOLENOID
(LV47)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 / 3]	[NA]	[NA]	[NA]	[] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

REF: RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/10/88
 ASSESSMENT ID: MPS-4292A
 NASA FMEA #: 0220-4

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4292
 ITEM: LO2 FEED DISCONNECT VALVE CLOSING SOLENOID
 (LV47)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 /1R]	[P]	[F]	[P]	[X] *
IOA	[3 /3]	[NA]	[NA]	[NA]	[]
COMPARE	[/N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-11-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/11/88
ASSESSMENT ID: MPS-4300
NASA FMEA #: 0217-1

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 4300
ITEM: LH2 FEED DISCONNECT VALVE OPENING SOLENOID
(LV48)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 / 3]	[NA]	[NA]	[NA]	[] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

REF: RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/11/88
 ASSESSMENT ID: MPS-4301
 NASA FMEA #: 0217-4

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4301
 ITEM: LH2 FEED DISCONNECT VALVE OPENING SOLENOID
 (LV48)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 /1R]	[P]	[F]	[P]	[X] *
IOA	[2 /1R]	[P]	[F]	[P]	[X]
COMPARE	[N /]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

IOA DID NOT ACCOUNT FOR THE LATCH.
 REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-10-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/11/88
ASSESSMENT ID: MPS-4301A
NASA FMEA #: 0290-1

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 4301
ITEM: LH2 FEED DISCONNECT VALVE OPENING SOLENOID
(LV48)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 /1]	[NA]	[NA]	[NA]	[X] *
IOA	[2 /1R]	[P]	[F]	[P]	[X]
COMPARE	[N /N]	[N]	[N]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-14-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/11/88
ASSESSMENT ID: MPS-4301B
NASA FMEA #: 0290-2

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 4301
ITEM: LH2 FEED DISCONNECT VALVE OPENING SOLENOID
(LV48)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 /1]	[NA]	[NA]	[NA]	[X] *
IOA	[2 /1R]	[P]	[F]	[P]	[X]
COMPARE	[N /N]	[N]	[N]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-14-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/11/88
 ASSESSMENT ID: MPS-4302
 NASA FMEA #: 0217-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4302
 ITEM: LH2 FEED DISCONNECT VALVE OPENING SOLENOID
 (LV48)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 /1]	[NA]	[NA]	[NA]	[X] *
IOA	[3 /3]	[NA]	[NA]	[NA]	[]
COMPARE	[N /N]	[]	[]	[]	[N]

RECOMMENDATIONS: (If different from NASA)

[2 /1R] [P] [F] [P] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

THE VALVE HAS A MECHANICAL BACKUP SYSTEM TO CLOSE IT AT ET SEPARATION.

REF: RI/NASA CIL OF 12-23-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/11/88
 ASSESSMENT ID: MPS-4302A
 NASA FMEA #: 0217-5

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4302
 ITEM: LH2 FEED DISCONNECT VALVE OPENING SOLENOID
 (LV48)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 /1R]	[P]	[F]	[P]	[X] *
IOA	[3 /3]	[NA]	[NA]	[NA]	[]
COMPARE	[/N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/11/88
ASSESSMENT ID: MPS-4310
NASA FMEA #: 0218-1

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 4310
ITEM: LH2 FEED DISCONNECT VALVE CLOSING SOLENOID
(LV49)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[P]	[X] *
IOA	[3 /3]	[NA]	[NA]	[NA]	[]
COMPARE	[N /N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-11-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/11/88
ASSESSMENT ID: MPS-4311
NASA FMEA #: 0218-5

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 4311
ITEM: LH2 FEED DISCONNECT VALVE CLOSING SOLENOID
(LV49)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 /1R]	[P]	[F]	[P]	[X] *
IOA	[3 /3]	[NA]	[NA]	[NA]	[]
COMPARE	[/N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/11/88
 ASSESSMENT ID: MPS-4312
 NASA FMEA #: 0218-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4312
 ITEM: LH2 FEED DISCONNECT VALVE CLOSING SOLENOID
 (LV49)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 / 3]	[NA]	[NA]	[NA]	[] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA FMEA/CIL REVIEW MEETING NOTES.

**APPENDIX C
ASSESSMENT WORKSHEET**

ASSESSMENT DATE: 2/11/88
 ASSESSMENT ID: MPS-4312A
 NASA FMEA #: 0218-4

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4312
 ITEM: LH2 FEED DISCONNECT VALVE CLOSING SOLENOID
 (LV49)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 /1R]	[P]	[F]	[P]	[X] *
IOA	[3 /3]	[NA]	[NA]	[NA]	[]
COMPARE	[/N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-11-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/11/88
ASSESSMENT ID: MPS-4320
NASA FMEA #: 0215-1

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 4320
ITEM: LH2 RECIRC DISCONNECT VALVE OPENING SOLENOID
(LV50)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 / 3]	[NA]	[NA]	[NA]	[] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

REF: RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/11/88
ASSESSMENT ID: MPS-4321
NASA FMEA #: 0215-5

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 4321
ITEM: LH2 RECIRC DISCONNECT VALVE OPENING SOLENOID
(LV50)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[P]	[X] *
IOA	[3 /3]	[NA]	[NA]	[NA]	[]
COMPARE	[N /N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[3 /1R] [P] [F] [P] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

TWO FAILURES ARE REQUIRED BEFORE THE DISCONNECT VALVE WILL CLOSE.
ANOTHER FAILURE IS REQUIRED TO CAUSE LOSS OF CREW OR VEHICLE.
SEE RI/NASA 0405-2.
REF: RI/NASA CIL OF 12-23-87.

**APPENDIX C
ASSESSMENT WORKSHEET**

ASSESSMENT DATE: 2/11/88
 ASSESSMENT ID: MPS-4322
 NASA FMEA #: 0215-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4322
 ITEM: LH2 RECIRC DISCONNECT VALVE OPENING SOLENOID
 (LV50)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 /1]	[NA]	[NA]	[NA]	[X] *
IOA	[1 /1]	[NA]	[NA]	[NA]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[2 /1R] [P] [F] [P] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

MECHANICAL BACKUP DEVICE EXISTS FOR CLOSURE AT MECO.
 REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 11-10-87.

**APPENDIX C
ASSESSMENT WORKSHEET**

ASSESSMENT DATE: 2/11/88
 ASSESSMENT ID: MPS-4330
 NASA FMEA #: 0216-1

NASA DATA:
 BASELINE [X]
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4330
 ITEM: LH2 RECIRC DISCONNECT VALVE CLOSING SOLENOID
 (LV51)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 / 3]	[NA]	[NA]	[NA]	[X] *
IOA	[1 / 1]	[NA]	[NA]	[NA]	[X]
COMPARE	[N / N]	[]	[]	[]	[N]

RECOMMENDATIONS: (If different from NASA)

[2 / 1R] [P] [F] [P] [A]
 (ADD/DELETE)

*** CIL RETENTION RATIONALE:** (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

THE DISCONNECT VALVE HAS A BACKUP MECHANICAL CLOSURE DEVICE.
 REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 11-10-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/11/88
ASSESSMENT ID: MPS-4330A
NASA FMEA #: 0290-1

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 4330
ITEM: LH2 RECIRC DISCONNECT VALVE CLOSING SOLENOID
(LV51)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 / 1]	[NA]	[NA]	[NA]	[X] *
IOA	[1 / 1]	[NA]	[NA]	[NA]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 11-10-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/11/88
 ASSESSMENT ID: MPS-4330B
 NASA FMEA #: 0290-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4330
 ITEM: LH2 RECIRC DISCONNECT VALVE CLOSING SOLENOID
 (LV51)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 / 1]	[NA]	[NA]	[NA]	[X] *
IOA	[1 / 1]	[NA]	[NA]	[NA]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-14-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/11/88
ASSESSMENT ID: MPS-4331
NASA FMEA #: 0216-5

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 4331
ITEM: LH2 RECIRC DISCONNECT VALVE CLOSING SOLENOID
(LV51)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[P]	[X] *
IOA	[1 /1]	[NA]	[NA]	[NA]	[X]
COMPARE	[N /N]	[N]	[N]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87.

**APPENDIX C
ASSESSMENT WORKSHEET**

ASSESSMENT DATE: 2/11/88
 ASSESSMENT ID: MPS-4332
 NASA FMEA #: 0216-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4332
 ITEM: LH2 RECIRC DISCONNECT VALVE CLOSING SOLENOID
 (LV51)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 / 3]	[NA]	[NA]	[NA]	[] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/11/88
 ASSESSMENT ID: MPS-4332A
 NASA FMEA #: 0216-4

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4332
 ITEM: LH2 RECIRC DISCONNECT VALVE CLOSING SOLENOID
 (LV51)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[]	[]	[]	[X] *
IOA	[3 /3]	[NA]	[NA]	[NA]	[]
COMPARE	[N /N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[3 /1R] [P] [F] [P] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

TWO FAILURES ARE REQUIRED BEFORE THE DISCONNECT VALVE WILL CLOSE.
 ANOTHER FAILURE IS REQUIRED TO CAUSE LOSS OF CREW OR VEHICLE.
 SEE RI/NASA 0405-2.
 REF: RI/NASA CIL OF 12-23-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/12/88
 ASSESSMENT ID: MPS-4340
 NASA FMEA #: 0245-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4340
 ITEM: LH2 FEED RTLS INBOARD DUMP VALVE OPENING
 SOLENOID (LV72)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 / 3]	[NA]	[NA]	[NA]	[] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

RI/NASA DOES NOT SHOW A 1/1 CRITICALITY FOR ABORT.
 REF: RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/12/88
 ASSESSMENT ID: MPS-4340A
 NASA FMEA #: 0290-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4340
 ITEM: LH2 FEED RTLS INBOARD DUMP VALVE OPENING
 SOLENOID (LV72)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 / 1]	[NA]	[NA]	[NA]	[X] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[N / N]	[]	[]	[]	[N]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-14-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/12/88
ASSESSMENT ID: MPS-4340B
NASA FMEA #: 0290-2

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 4340
ITEM: LH2 FEED RTLS INBOARD DUMP VALVE OPENING
SOLENOID (LV72)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 /1]	[NA]	[NA]	[NA]	[X] *
IOA	[3 /3]	[NA]	[NA]	[NA]	[]
COMPARE	[N /N]	[]	[]	[]	[N]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-14-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/12/88
 ASSESSMENT ID: MPS-4342
 NASA FMEA #: 0245-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4342
 ITEM: LH2 FEED RTLS INBOARD DUMP VALVE OPENING
 SOLENOID (LV72)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[P]	[X] *
IOA	[2 /1R]	[P]	[P]	[P]	[X]
COMPARE	[/]	[]	[N]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/12/88
ASSESSMENT ID: MPS-4342A
NASA FMEA #: 0245-3

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 4342
ITEM: LH2 FEED RTLS INBOARD DUMP VALVE OPENING
SOLENOID (LV72)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[P]	[X] *
IOA	[2 /1R]	[P]	[P]	[P]	[X]
COMPARE	[/]	[]	[N]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

REF: RI/NASA FMEA/CIL REVIEW MEETING NOTES.

**APPENDIX C
ASSESSMENT WORKSHEET**

ASSESSMENT DATE: 2/12/88
 ASSESSMENT ID: MPS-4350
 NASA FMEA #: 0245-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4350
 ITEM: LH2 FEED RTLS OUTBOARD DUMP VALVE OPENING
 SOLENOID (LV73)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 / 3]	[NA]	[NA]	[NA]	[] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

RI/NASA SHOULD INDICATE 1/1 FOR ABORT.
 REF: RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/12/88
 ASSESSMENT ID: MPS-4350A
 NASA FMEA #: 0290-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4350
 ITEM: LH2 FEED RTLS OUTBOARD DUMP VALVE OPENING
 SOLENOID (LV73)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 / 1]	[NA]	[NA]	[NA]	[X] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[N / N]	[]	[]	[]	[N]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-14-87.

**APPENDIX C
ASSESSMENT WORKSHEET**

ASSESSMENT DATE: 2/12/88
 ASSESSMENT ID: MPS-4350B
 NASA FMEA #: 0290-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4350
 ITEM: LH2 FEED RTLS OUTBOARD DUMP VALVE OPENING
 SOLENOID (LV73)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 /1]	[NA]	[NA]	[NA]	[X] *
IOA	[3 /3]	[NA]	[NA]	[NA]	[]
COMPARE	[N /N]	[]	[]	[]	[N]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-14-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/12/88
 ASSESSMENT ID: MPS-4351
 NASA FMEA #: 0245-1

NASA DATA:
 BASELINE []
 NEW []

SUBSYSTEM: MPS
 MDAC ID: 4351
 ITEM: LH2 FEED RTLS OUTBOARD DUMP VALVE OPENING
 SOLENOID (LV73)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 / 3]	[NA]	[NA]	[NA]	[] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

RI/NASA SHOULD INDICATE 1/1 FOR ABORT.
 REF: RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/12/88
 ASSESSMENT ID: MPS-4352
 NASA FMEA #: 0245-2

NASA DATA:
 BASELINE []
 NEW []

SUBSYSTEM: MPS
 MDAC ID: 4352
 ITEM: LH2 FEED RTLS OUTBOARD DUMP VALVE OPENING
 SOLENOID (LV73)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[P]	[X] *
IOA	[2 /1R]	[P]	[P]	[P]	[X]
COMPARE	[/]	[]	[N]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/12/88
 ASSESSMENT ID: MPS-4352A
 NASA FMEA #: 0245-3

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4352
 ITEM: LH2 FEED RTLS OUTBOARD DUMP VALVE OPENING
 SOLENOID (LV73)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[P]	[X] *
IOA	[2 /1R]	[P]	[P]	[P]	[X]
COMPARE	[/]	[]	[N]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA FMEA/CIL REVIEW MEETING NOTES.

**APPENDIX C
ASSESSMENT WORKSHEET**

ASSESSMENT DATE: 2/12/88
 ASSESSMENT ID: MPS-4360
 NASA FMEA #: 0246-1

NASA DATA: []
 BASELINE []
 NEW []

SUBSYSTEM: MPS
 MDAC ID: 4360
 ITEM: LH2 FEED MANIFOLD RTLS PRESS VALVE (LV74, LV75)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 / 3]	[NA]	[NA]	[NA]	[X] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

RI/NASA INDICATES 1/1 FOR ABORT. IOA CONCURS.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/12/88
ASSESSMENT ID: MPS-4361
NASA FMEA #: NA

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 4361
ITEM: LH2 FEED MANIFOLD RTLS PRESS VALVE (LV74, LV75)

LEAD ANALYST: A.J. MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[/]	[]	[]	[]	[] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[N / N]	[N]	[N]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

THIS FAILURE IS 1/1 FOR RTLS ABORT AND NA FOR NOMINAL.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/12/88
 ASSESSMENT ID: MPS-4362
 NASA FMEA #: 0246-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4362
 ITEM: LH2 FEED MANIFOLD RTLS PRESS VALVE (LV74, LV75)

LEAD ANALYST: A.J. MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 /1R]	[P]	[F]	[P]	[X] *
IOA	[2 /1R]	[P]	[F]	[P]	[X]
COMPARE	[N /]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/12/88
ASSESSMENT ID: MPS-4370
NASA FMEA #: 0244-1

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 4370
ITEM: LO2 OVERBOARD BLEED VALVE CLOSING SOLENOID
(LV76)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 /1]	[NA]	[NA]	[NA]	[X] *
IOA	[2 /1R]	[P]	[P]	[P]	[X]
COMPARE	[N /N]	[N]	[N]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 8-18-87.

**APPENDIX C
ASSESSMENT WORKSHEET**

ASSESSMENT DATE: 2/12/88
 ASSESSMENT ID: MPS-4370A
 NASA FMEA #: 0290-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4370
 ITEM: LO2 OVERBOARD BLEED VALVE CLOSING SOLENOID
 (LV76)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 /1]	[NA]	[NA]	[NA]	[X] *
IOA	[2 /1R]	[P]	[P]	[P]	[X]
COMPARE	[N /N]	[N]	[N]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] [] (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-14-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/12/88
ASSESSMENT ID: MPS-4370B
NASA FMEA #: 0290-2

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 4370
ITEM: LO2 OVERBOARD BLEED VALVE CLOSING SOLENOID
(LV76)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 /1]	[NA]	[NA]	[NA]	[X] *
IOA	[2 /1R]	[P]	[P]	[P]	[X]
COMPARE	[N /N]	[N]	[N]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 8-18-87.

**APPENDIX C
ASSESSMENT WORKSHEET**

ASSESSMENT DATE: 2/12/88
 ASSESSMENT ID: MPS-4371
 NASA FMEA #: 0244-4

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4371
 ITEM: LO2 OVERBOARD BLEED VALVE CLOSING SOLENOID
 (LV76)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[P]	[X] *
IOA	[2 /1R]	[P]	[P]	[P]	[X]
COMPARE	[/]	[]	[N]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 8-18-87.

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APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/12/88
 ASSESSMENT ID: MPS-4372
 NASA FMEA #: 0244-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4372
 ITEM: LO2 OVERBOARD BLEED VALVE CLOSING SOLENOID
 (LV76)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 / 3]	[NA]	[NA]	[NA]	[X] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

RI/NASA INDICATES 1/1 CRITICALITY FOR A PRELAUNCH ABORT. IOA
 CONCURS.

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 8-18-
 87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/12/88
ASSESSMENT ID: MPS-4372A
NASA FMEA #: 0244-5

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 4372
ITEM: LO2 OVERBOARD BLEED VALVE CLOSING SOLENOID
(LV76)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY		REDUNDANCY SCREENS			CIL ITEM
	FLIGHT HDW/FUNC		A	B	C	
NASA	[3 / 3]		[NA]	[NA]	[NA]	[X] *
IOA	[3 / 3]		[NA]	[NA]	[NA]	[]
COMPARE	[/]		[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

RI/NASA INDICATES 1/1 CRITICALITY FOR A PRELAUNCH ABORT. IOA
CONCURS.

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 8-18-
87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/12/88
ASSESSMENT ID: MPS-4380
NASA FMEA #: 0243-1

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 4380
ITEM: LO2 POGO ACCUM RECIRC VALVE CLOSING SOLENOID
(LV77, LV78)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 / 3]	[NA]	[NA]	[NA]	[X] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

RI/NASA REPORTS A 1/1 CRITICALITY FOR PRELAUNCH ABORTS. IOA
CONCURS.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/12/88
 ASSESSMENT ID: MPS-4381
 NASA FMEA #: 0243-5

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4381
 ITEM: LO2 POGO ACCUM RECIRC VALVE CLOSING SOLENOID
 (LV77, LV78)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 / 3]	[NA]	[NA]	[NA]	[X] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

RI/NASA REPORTS A 1/1 CRITICALITY FOR PRELAUNCH ABORTS. IOA
 CONCURS.
 REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 8-18-
 87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/12/88
 ASSESSMENT ID: MPS-4382
 NASA FMEA #: 0243-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4382
 ITEM: LO2 POGO ACCUM RECIRC VALVE CLOSING SOLENOID
 (LV77, LV78)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 / 3]	[NA]	[NA]	[NA]	[] *
IOA	[2 / 1R]	[P]	[F]	[P]	[X]
COMPARE	[N / N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

LAUNCH SCRUB.
 REF: RI/NASA FMEA/CIL REVIEW MEETING NOTES.

**APPENDIX C
ASSESSMENT WORKSHEET**

ASSESSMENT DATE: 2/12/88
 ASSESSMENT ID: MPS-4382A
 NASA FMEA #: 0243-4

NASA DATA:
 BASELINE [X]
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4382
 ITEM: LO2 POGO ACCUM RECIRC VALVE CLOSING SOLENOID
 (LV77, LV78)

LEAD ANALYST: A.J. MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[P]	[X] *
IOA	[2 /1R]	[P]	[F]	[P]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 8-18-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/12/88
 ASSESSMENT ID: MPS-4390
 NASA FMEA #: 0250-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4390
 ITEM: LH2 HI POINT BLEED VALVE OPENING SOLENOID (LV79)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 / 3]	[NA]	[NA]	[NA]	[] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] [] (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/12/88
ASSESSMENT ID: MPS-4391
NASA FMEA #: 0250-5

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 4391
ITEM: LH2 HI POINT BLEED VALVE OPENING SOLENOID (LV79)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 / 3]	[NA]	[NA]	[NA]	[] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

REF: RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/12/88
 ASSESSMENT ID: MPS-4392
 NASA FMEA #: 0250-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4392
 ITEM: LH2 HI POINT BLEED VALVE OPENING SOLENOID (LV79)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 /1]	[NA]	[NA]	[NA]	[X] *
IOA	[2 /1R]	[P]	[F]	[P]	[X]
COMPARE	[N /N]	[N]	[N]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[2 /1R] [P] [F] [P] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 10-14-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/12/88
 ASSESSMENT ID: MPS-4392A
 NASA FMEA #: 0250-4

NASA DATA: -----
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4392
 ITEM: LH2 HI POINT BLEED VALVE OPENING SOLENOID (LV79)
 LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[P]	[X] *
IOA	[2 /1R]	[P]	[F]	[P]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 10-14-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/12/88
 ASSESSMENT ID: MPS-4400
 NASA FMEA #: 0226-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4400
 ITEM: LO2 PREVALVE REDUNDANT CLOSING SOLENOID
 (LV80, LV81, LV82)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[P]	[X] *
IOA	[2 /1R]	[P]	[F]	[P]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-14-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/12/88
 ASSESSMENT ID: MPS-4400A
 NASA FMEA #: 0290-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4400
 ITEM: LO2 PREVALVE REDUNDANT CLOSING SOLENOID
 (LV80, LV81, LV82)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY	REDUNDANCY SCREENS			CIL ITEM
	FLIGHT HDW/FUNC	A	B	C	
NASA	[1 /1]	[NA]	[NA]	[NA]	[X] *
IOA	[2 /1R]	[P]	[F]	[P]	[X]
COMPARE	[N /N]	[N]	[N]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] [] (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-14-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/12/88
 ASSESSMENT ID: MPS-4400B
 NASA FMEA #: 0290-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4400
 ITEM: LO2 PREVALVE REDUNDANT CLOSING SOLENOID
 (LV80, LV81, LV82)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 /1]	[NA]	[NA]	[NA]	[X] *
IOA	[2 /1R]	[P]	[F]	[P]	[X]
COMPARE	[N /N]	[N]	[N]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-14-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/12/88
 ASSESSMENT ID: MPS-4401
 NASA FMEA #: 0226-5

NASA DATA: -----
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4401
 ITEM: LO2 PREVALVE REDUNDANT CLOSING SOLENOID
 (LV80, LV81, LV82)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[P]	[X] *
IOA	[2 /1R]	[P]	[F]	[P]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/12/88
 ASSESSMENT ID: MPS-4402
 NASA FMEA #: 0226-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4402
 ITEM: LO2 PREVALVE REDUNDANT CLOSING SOLENOID
 (LV80, LV81, LV82)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 /1R]	[P]	[P]	[P]	[] *
IOA	[3 /3]	[NA]	[NA]	[NA]	[]
COMPARE	[/N]	[N]	[N]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

NSTS 22206 2.3.2d PRECLUDES THE INCLUSION OF HPOT SEALS OR SSME RIV IN THE FAILURE SERIES. CRITICALITY 3/1R FOR DUMP IS VALID.
 REF: RI/NASA CIL WORKSHEET OF 11-20-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/12/88
 ASSESSMENT ID: MPS-4402A
 NASA FMEA #: 0226-4

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4402
 ITEM: LO2 PREVALVE REDUNDANT CLOSING SOLENOID
 (LV80, LV81, LV82)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[P]	[X] *
IOA	[3 /3]	[NA]	[NA]	[NA]	[]
COMPARE	[N /N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-14-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/12/88
ASSESSMENT ID: MPS-4410
NASA FMEA #: 0225-1

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 4410
ITEM: LO2 PREVALVE REDUNDANT OPENING SOLENOID
(LV83, LV84, LV85)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 /1R]	[P]	[P]	[P]	[] *
IOA	[3 /3]	[NA]	[NA]	[NA]	[]
COMPARE	[/N]	[N]	[N]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

NSTS 22206 2.3.2d PRECLUDES THE INCLUSION OF HPOT SEALS OR SSME RIV IN FAILURE SERIES. CRITICALITY 3/1R FOR DUMP IS VALID.
REF: RI/NASA CIL WORKSHEET OF 12-14-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/15/88
 ASSESSMENT ID: MPS-4411
 NASA FMEA #: 0225-4

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4411
 ITEM: LO2 PREVALVE REDUNDANT OPENING SOLENOID
 (LV83, LV84, LV85)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[P]	[X] *
IOA	[3 /3]	[NA]	[NA]	[NA]	[]
COMPARE	[N /N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] [] (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-14-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/15/88
 ASSESSMENT ID: MPS-4412
 NASA FMEA #: 0225-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4412
 ITEM: LO2 PREVALVE REDUNDANT OPENING SOLENOID
 (LV83, LV84, LV85)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[P]	[X] *
IOA	[2 /1R]	[P]	[F]	[P]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-14-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/15/88
 ASSESSMENT ID: MPS-4412A
 NASA FMEA #: 0225-5

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4412
 ITEM: LO2 PREVALVE REDUNDANT OPENING SOLENOID
 (LV83, LV84, LV85)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 /1R]	[P]	[F]	[P]	[X] *
IOA	[2 /1R]	[P]	[F]	[P]	[X]
COMPARE	[N /]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[2 /1R] [P] [F] [P] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

FAILURE OF BOTH OPENING SOLENOIDS CAN PREVENT PREVALVE CLOSURE AT MECO, REGARDLESS OF THE OPERATION OF THE CLOSING SOLENOIDS.
 REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-14-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/15/88
ASSESSMENT ID: MPS-4420
NASA FMEA #: NA

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 4420
ITEM: LO2 TANK GND PRE-PRESS (ORB/GND) DISC. (ORB HALF) (PD9)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[/]	[]	[]	[]	[] *
IOA	[2 /1R]	[P]	[P]	[P]	[X]
COMPARE	[N /N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

THE DISCONNECT WAS PREVIOUSLY ANALYZED UNDER IOA 1061-1064 AND RI/NASA 0517. THIS IOA ANALYSIS SHOULD BE DELETED.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/15/88
 ASSESSMENT ID: MPS-4421
 NASA FMEA #: NA

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4421
 ITEM: LO2 TANK GND PRE-PRESS (ORB/GND) DISC. (ORB
 HALF) (PD9)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[/]	[]	[]	[]	[] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[N / N]	[N]	[N]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

THE DISCONNECT WAS PREVIOUSLY ANALYZED UNDER IOA 1061-1064 AND RI/NASA 0517. THIS IOA ANALYSIS SHOULD BE DELETED.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/15/88
 ASSESSMENT ID: MPS-4422
 NASA FMEA #: NA

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4422
 ITEM: LO2 TANK GND PRE-PRESS (ORB/GND) DISC. (ORB
 HALF) (PD9)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[/]	[]	[]	[]	[] *
IOA	[2 /1R]	[P]	[P]	[P]	[X]
COMPARE	[N /N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

THE DISCONNECT WAS PREVIOUSLY ANALYZED UNDER IOA 1061-1064 AND
 RI/NASA 0517. THIS IOA ANALYSIS SHOULD BE DELETED.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/15/88
ASSESSMENT ID: MPS-4430
NASA FMEA #: NA

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 4430
ITEM: LH2 TANK GND PRE-PRESS (ORB/GND) DISC. (ORB
HALF) (PD10)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[/]	[]	[]	[]	[] *
IOA	[2 /1R]	[P]	[P]	[P]	[X]
COMPARE	[N /N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

THE DISCONNECT WAS PREVIOUSLY ANALYZED UNDER IOA 2221 AND 2222,
AND RI/NASA 0501. THIS IOA ANALYSIS SHOULD BE DELETED.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/15/88
 ASSESSMENT ID: MPS-4431
 NASA FMEA #: NA

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4431
 ITEM: LH2 TANK GND PRE-PRESS (ORB/GND) DISC. (ORB
 HALF) (PD10)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[/]	[]	[]	[]	[] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[N / N]	[N]	[N]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

THE DISCONNECT WAS PREVIOUSLY ANALYZED UNDER IOA 2221 AND 2222,
 AND RI/NASA 0501. THIS IOA ANALYSIS SHOULD BE DELETED.

**APPENDIX C
ASSESSMENT WORKSHEET**

ASSESSMENT DATE: 2/15/88
 ASSESSMENT ID: MPS-4432
 NASA FMEA #: NA

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4432
 ITEM: LH2 TANK GND PRE-PRESS (ORB/GND) DISC. (ORB
 HALF) (PD10)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[/]	[]	[]	[]	[] *
IOA	[2 /1R]	[P]	[P]	[P]	[X]
COMPARE	[N /N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

THE DISCONNECT WAS PREVIOUSLY ANALYZED UNDER IOA 2221 AND 2222,
 AND RI/NASA 0501. THIS IOA ANALYSIS SHOULD BE DELETED.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/15/88
 ASSESSMENT ID: MPS-4470
 NASA FMEA #: NA

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4470
 ITEM: TEST PORT, LH2 REPRESS REG OUTLET (TP3)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[/]	[]	[]	[]	[] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[N / N]	[N]	[N]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

THIS FAILURE IS COVERED UNDER LEAKAGE OF THE LINE ON IOA WORKSHEET 4640. THIS IOA ANALYSIS SHOULD BE DELETED.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/15/88
ASSESSMENT ID: MPS-4490
NASA FMEA #: NA

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 4490
ITEM: TEST PORT, LO2 PREPRESS DISC. CHECK VALVE (TP9)
LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[/]	[]	[]	[]	[] *
IOA	[2 /1R]	[P]	[P]	[P]	[X]
COMPARE	[N /N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

THIS FAILURE IS COVERED UNDER LEAKAGE OF THE LINE ON IOA WORKSHEET 264 AND RI/NASA ANALYSIS 0510. THIS IOA ANALYSIS SHOULD BE DELETED.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/15/88
ASSESSMENT ID: MPS-4500
NASA FMEA #: NA

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 4500
ITEM: TEST PORT, LH2 PREPRESS DISC. CHECK VALVE (TP10)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[/]	[]	[]	[]	[] *
IOA	[2 /1R]	[P]	[P]	[P]	[X]
COMPARE	[N /N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

THIS FAILURE IS COVERED UNDER LEAKAGE OF THE LINE ON IOA WORKSHEET 346 AND RI/NASA 0511. THIS IOA ANALYSIS SHOULD BE DELETED.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/15/88
 ASSESSMENT ID: MPS-4510
 NASA FMEA #: NA

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4510
 ITEM: TEST PORT, PNEU SUPPLY HELIUM (TP29)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[/]	[]	[]	[]	[] *
IOA	[2 / 2]	[NA]	[NA]	[NA]	[X]
COMPARE	[N / N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

THIS FAILURE IS COVERED UNDER LEAKAGE OF THE LINE ON IOA ANALYSIS 4620. THIS IOA ANALYSIS SHOULD BE DELETED.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/15/88	NASA DATA:
ASSESSMENT ID: MPS-4520	BASELINE []
NASA FMEA #: NA	NEW [X]
SUBSYSTEM: MPS	
MDAC ID: 4520	
ITEM: TEST PORT, CHECK VALVE CV24 LEAKAGE (TP36)	
LEAD ANALYST: A.J.MARINO	

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[/]	[]	[]	[]	[] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[N / N]	[N]	[N]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[/]	[]	[]	[]	[]
				(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE	[]
INADEQUATE	[]

REMARKS:

THIS FAILURE IS COVERED UNDER LEAKAGE OF THE LINE ON IOA ANALYSIS 4640 AND RI/NASA 0634. THIS IOA ANALYSIS SHOULD BE DELETED.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/15/88
ASSESSMENT ID: MPS-4530
NASA FMEA #: 0239-1

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 4530
ITEM: PNEU VALVE HE SUPPLY REGULATOR (PR4)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 /1R]	[P]	[F]	[P]	[X] *
IOA	[2 /1R]	[P]	[P]	[P]	[X]
COMPARE	[N /]	[]	[N]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[2 /1R] [P] [P] [P] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

SECOND FAILURE (LV10) WILL PREVENT VALVE OPERATIONS FOR DUMP.
RELIEF SYSTEMS WILL PROTECT AGAINST MANIFOLD RUPTURE. VENTING
HYDROGEN WILL CREATE A FIRE HAZARD DURING ENTRY/LANDING.
REF: RI/NASA CIL OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING
NOTES.

**APPENDIX C
ASSESSMENT WORKSHEET**

ASSESSMENT DATE: 2/15/88
 ASSESSMENT ID: MPS-4531
 NASA FMEA #: 0239-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4531
 ITEM: PNEU VALVE HE SUPPLY REGULATOR (PR4)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 / 1]	[NA]	[NA]	[NA]	[X] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[N / N]	[]	[]	[]	[N]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

RELIEF VALVE WILL DUMP HELIUM INTO AFT COMPARTMENT.
 REF: RI/NASA CIL OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING
 NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/15/88
ASSESSMENT ID: MPS-4540
NASA FMEA #: 0602-1

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 4540
ITEM: LO2 MANIF REPRESS REGULATOR (PR5)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 /1R]	[P]	[F]	[P]	[X] *
IOA	[2 /1R]	[P]	[F]	[P]	[X]
COMPARE	[N /]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[3 /3] [NA] [NA] [NA] [D]
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

REPRESSURIZATION IS NOT ESSENTIAL FOR MPS DUMP. DEGRADED DUMP.
RELIEF SYSTEMS WILL PROTECT AGAINST MANIFOLD RUPTURE.
REF: RI/NASA CIL OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING
NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/15/88
 ASSESSMENT ID: MPS-4540A
 NASA FMEA #: 0602-4

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4540
 ITEM: LO2 MANIF REPRESS REGULATOR (PR5)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 /1]	[NA]	[NA]	[NA]	[X] *
IOA	[2 /1R]	[P]	[F]	[P]	[X]
COMPARE	[N /N]	[N]	[N]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

LO2 LEAKAGE FROM SENSE LINE THROUGH REGULATOR.
 REF: RI/NASA CIL OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING NOTES.

**APPENDIX C
ASSESSMENT WORKSHEET**

ASSESSMENT DATE: 2/15/88
 ASSESSMENT ID: MPS-4541
 NASA FMEA #: 0602-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4541
 ITEM: LO2 MANIF REPRESS REGULATOR (PR5)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[P]	[X] *
IOA	[3 /3]	[NA]	[NA]	[NA]	[]
COMPARE	[N /N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REPRESS VALVES ARE OPEN FOR 90 SEC DURING DUMP. HAZARD DURING
 ENTRY REPRESS ONLY.
 REF: RI/NASA CIL OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING
 NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/15/88
 ASSESSMENT ID: MPS-4550
 NASA FMEA #: 0629-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4550
 ITEM: LH2 MANIF REPRESS REGULATOR (PR6)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[P]	[X] *
IOA	[2 /1R]	[P]	[F]	[P]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[3 /3] [NA] [NA] [NA] [D]
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REPRESSURIZATION IS NOT ESSENTIAL FOR MPS DUMP. DEGRADED DUMP.
 RELIEF SYSTEMS WILL PROTECT AGAINST MANIFOLD RUPTURE.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/15/88
ASSESSMENT ID: MPS-4550A
NASA FMEA #: 0629-3

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 4550
ITEM: LH2 MANIF REPRESS REGULATOR (PR6)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 /1]	[NA]	[NA]	[NA]	[X] *
IOA	[2 /1R]	[P]	[F]	[P]	[X]
COMPARE	[N /N]	[N]	[N]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

LH2 LEAKAGE FROM SENSE LINE THROUGH REGULATOR.
REF: RI/NASA CIL OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/15/88
ASSESSMENT ID: MPS-4551
NASA FMEA #: 0629-4

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 4551
ITEM: LH2 MANIF REPRESS REGULATOR (PR6)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[P]	[X] *
IOA	[3 /3]	[NA]	[NA]	[NA]	[]
COMPARE	[N /N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[3 /3] [NA] [NA] [NA] [D]
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

REPRESS VALVES ARE OPEN FOR 88 SEC DURING DUMP. HAZARD DURING ENTRY REPRESS ONLY.
REF: RI/NASA CIL OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/15/88
 ASSESSMENT ID: MPS-4561
 NASA FMEA #: 0251-3

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4561
 ITEM: PNEU VALVE HE SUPPLY RELIEF VALVE (RV4)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 / 3]	[NA]	[NA]	[NA]	[] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA FMEA/CIL REVIEW MEETING NOTES.

**APPENDIX C
ASSESSMENT WORKSHEET**

ASSESSMENT DATE: 2/15/88
 ASSESSMENT ID: MPS-4570
 NASA FMEA #: 0237-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4570
 ITEM: PNEU VALVE HE SUPPLY TANK (TK4)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 /1]	[NA]	[NA]	[NA]	[X] *
IOA	[2 /2]	[NA]	[NA]	[NA]	[X]
COMPARE	[N /N]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/15/88
 ASSESSMENT ID: MPS-4590
 NASA FMEA #: 0210-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4590
 ITEM: LH2 PREVALVE PNEU ACCUMULATOR (AU6)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 /1]	[NA]	[NA]	[NA]	[X] *
IOA	[2 /1R]	[P]	[P]	[P]	[X]
COMPARE	[N /N]	[N]	[N]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/15/88
ASSESSMENT ID: MPS-4610
NASA FMEA #: 0145-1

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 4610
ITEM: PNEU HE SUPPLY FILTER (FL5)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[P]	[X] *
IOA	[3 /3]	[NA]	[NA]	[NA]	[]
COMPARE	[N /N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

RELIEF SYSTEM IS NOT A REDUNDANT ITEM. VENTING OF HYDROGEN DURING ENTRY/LANDING WILL CREATE A FIRE HAZARD.
REF: RI/NASA CIL OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/15/88
 ASSESSMENT ID: MPS-4620
 NASA FMEA #: NA

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4620
 ITEM: PNEUMATIC HE FILL LINE (.50", .375", .625" DIA)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[/]	[]	[]	[]	[] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[N / N]	[N]	[N]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[1 / 1]	[NA]	[NA]	[NA]	[A] (ADD/DELETE)
-----------	--------	--------	--------	-----------------------

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE	[]
INADEQUATE	[]

REMARKS:

THIS ASSESSMENT ADDRESSES THE LINE FROM CHECK VALVE CV4 TO TANK TK4. POSSIBLE OVERPRESSURIZATION.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/15/88
 ASSESSMENT ID: MPS-4620A
 NASA FMEA #: 0234-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4620
 ITEM: PNEUMATIC HE FILL LINE (.50", .375", .625" DIA)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[P]	[X] *
IOA	[3 /3]	[NA]	[NA]	[NA]	[]
COMPARE	[N /N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] [] (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

THIS ASSESSMENT ADDRESSES THE LINE FROM THE DISCONNECT (PD8) TO THE CHECK VALVES (CV1, 2, 3, 4).

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/15/88
ASSESSMENT ID: MPS-4620B
NASA FMEA #: 0252-1

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 4620
ITEM: PNEUMATIC HE FILL LINE (.50", .375", .625" DIA)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 / 1]	[NA]	[NA]	[NA]	[X] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[N / N]	[]	[]	[]	[N]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

THIS ASSESSMENT ADDRESSES THE LINES FROM THE HELIUM TANKS (TK1, 2, 3, 6, 7, 8, 9, 10, 11) TO THE CHECK VALVES (CV25, 26, 36, 37, 41, 42).
REF: RI/NASA CIL OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/16/88
ASSESSMENT ID: MPS-4630
NASA FMEA #: NA

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 4630
ITEM: PNEUMATIC HE PRESSURE LINE (.50" DIA)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[/]	[]	[]	[]	[] *
IOA	[1 / 1]	[NA]	[NA]	[NA]	[X]
COMPARE	[N / N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] [] (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

IOA ATTEMPTED TO ANALYZE ALL 0.5 INCH HELIUM LINES UNDER ONE ANALYSIS WORKSHEET. RI/NASA TREATED THEM INDIVIDUALLY. IOA NOW BELIEVES THE RI/NASA APPROACH IS THE MORE APPROPRIATE ONE. HALF-INCH LINES WILL BE TREATED ON SUPPLEMENTAL ASSESSMENT SHEETS SUBSEQUENT TO THIS ONE.

**APPENDIX C
ASSESSMENT WORKSHEET**

ASSESSMENT DATE: 2/16/88
 ASSESSMENT ID: MPS-4630B
 NASA FMEA #: 0113-1

NASA DATA: _____
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4630
 ITEM: PNEUMATIC HE PRESSURE LINE (.50" DIA)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 / 1]	[NA]	[NA]	[NA]	[X] *
IOA	[1 / 1]	[NA]	[NA]	[NA]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

THIS ASSESSMENT IS FOR THE LINE FROM THE PNEUMATIC ISOLATION VALVES (LV7, 8) TO THE PNEUMATIC REGULATOR (PR4).
 REF: RI/NASA CIL OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING NOTES.

**APPENDIX C
ASSESSMENT WORKSHEET**

ASSESSMENT DATE: 2/16/88
 ASSESSMENT ID: MPS-4630D
 NASA FMEA #: 0190-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4630
 ITEM: PNEUMATIC HE PRESSURE LINE (.50" DIA)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 / 1]	[NA]	[NA]	[NA]	[X] *
IOA	[1 / 1]	[NA]	[NA]	[NA]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

THIS ASSESSMENT IS FOR THE LINES FROM THE RELIEF VALVE CLOSEING SOLENOIDS (LV24, 25) TO THE RELIEF VALVES (PV7, 8).

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-9-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/16/88
 ASSESSMENT ID: MPS-4630E
 NASA FMEA #: 0143-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4630
 ITEM: PNEUMATIC HE PRESSURE LINE (.50" DIA)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[P]	[X] *
IOA	[1 /1]	[NA]	[NA]	[NA]	[X]
COMPARE	[N /N]	[N]	[N]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

THIS ASSESSMENT IS FOR THE LINE CONNECTING THE BLOWDOWN VALVES
 (LV26, 27).
 REF: RI/NASA CIL OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING
 NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/16/88
 ASSESSMENT ID: MPS-4630F
 NASA FMEA #: 0144-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4630
 ITEM: PNEUMATIC HE PRESSURE LINE (.50" DIA)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 / 3]	[NA]	[NA]	[NA]	[X] *
IOA	[1 / 1]	[NA]	[NA]	[NA]	[X]
COMPARE	[N / N]	[]	[]	[]	[N]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] [] (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

THIS ASSESSMENT IS FOR THE LINE FROM THE DOWNSTREAM BLOWDOWN VALVE (LV27) TO THE PURGE ORIFICE. RI/NASA INDICATES 1/1 FOR ABORT. IOA CONCURS. DEGRADED PURGE WILL HAVE NO EFFECT ON NOMINAL MISSION. INEFFECTIVE PURGE DURING RTLS OR TAL CAN CAUSE LOSS OF VEHICLE.

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/16/88
 ASSESSMENT ID: MPS-4630H
 NASA FMEA #: 0255-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4630
 ITEM: PNEUMATIC HE PRESSURE LINE (.50" DIA)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 / 1]	[NA]	[NA]	[NA]	[X] *
IOA	[1 / 1]	[NA]	[NA]	[NA]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

THIS ASSESSMENT IS FOR THE LINE FROM THE FILTER (FL5) TO THE PNEUMATIC ISOLATION VALVES (LV7, 8).
 REF: RI/NASA CIL OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/16/88
 ASSESSMENT ID: MPS-4630J
 NASA FMEA #: 0635-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4630
 ITEM: PNEUMATIC HE PRESSURE LINE (.50" DIA)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 /1]	[NA]	[NA]	[NA]	[X] *
IOA	[1 /1]	[NA]	[NA]	[NA]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

THIS ASSESSMENT IS FOR THE LINE FROM THE DOWNSTREAM LO2 MANIFOLD
 REPRESS VALVE (LV41) TO THE CORRESPONDING REGULATOR (PR5).
 THE HAZARD EXISTS DURING PERIODS OF REPRESSURIZATION (DUMP,
 ENTRY) ONLY. AT OTHER TIMES IT IS 3/1R.
 REF: RI/NASA CIL OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING
 NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/16/88
 ASSESSMENT ID: MPS-4630L
 NASA FMEA #: 0637-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4630
 ITEM: PNEUMATIC HE PRESSURE LINE (.50" DIA)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 /1]	[NA]	[NA]	[NA]	[X] *
IOA	[1 /1]	[NA]	[NA]	[NA]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

THIS ASSESSMENT IS FOR THE LINE FROM THE DOWNSTREAM LH2 MANIFOLD REPRESS VALVE (LV43) TO THE CORRESPONDING REGULATOR (PR6). THE HAZARD EXISTS DURING PERIODS OF REPRESSURIZATION (DUMP, ENTRY) ONLY. AT OTHER TIMES IT IS 3/1R.
 REF: RI/NASA CIL OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/16/88
 ASSESSMENT ID: MPS-4630M
 NASA FMEA #: 0638-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4630
 ITEM: PNEUMATIC HE PRESSURE LINE (.50" DIA)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 / 1]	[NA]	[NA]	[NA]	[X] *
IOA	[1 / 1]	[NA]	[NA]	[NA]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

THIS ASSESSMENT IS FOR THE LINE CONNECTING THE LH2 MANIFOLD
 REPRESSURIZATION VALVES (LV42, 43). THE HAZARD EXISTS DURING
 PERIODS OF REPRESSURIZATION (DUMP, ENTRY) ONLY. AT OTHER TIMES
 IT IS 2/1R.

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING
 NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/16/88
 ASSESSMENT ID: MPS-4640
 NASA FMEA #: NA

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4640
 ITEM: PNEUMATIC HE PRESS VALVE ACTUATION LINE
 (.25", .38" DIA)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[/]	[]	[]	[]	[] *
IOA	[1 / 1]	[NA]	[NA]	[NA]	[X]
COMPARE	[N / N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

IOA ATTEMPTED TO ANALYZE ALL 0.25 AND 0.38 INCH HELIUM LINES UNDER ONE ANALYSIS WORKSHEET. RI/NASA TREATED THEM INDIVIDUALLY. IOA NOW BELIEVES THE RI/NASA APPROACH TO BE THE MORE APPROPRIATE ONE. THESE LINES WILL BE TREATED ON SUPPLEMENTAL ASSESSMENT SHEETS SUBSEQUENT TO THIS ONE.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/16/88
ASSESSMENT ID: MPS-4640A
NASA FMEA #: 0119-1

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 4640
ITEM: PNEUMATIC HE PRESS VALVE ACTUATION LINE
(.25", .38" DIA)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 / 1]	[NA]	[NA]	[NA]	[X] *
IOA	[1 / 1]	[NA]	[NA]	[NA]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[2 / 1R] [P] [F] [F] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

FAILURE OF THE LINE AND CHECK VALVE CV30 WILL ALLOW LH2 LEAKAGE INTO THE AFT COMPARTMENT FOLLOWING THE OPENING OF THE RELIEF ISOLATION VALVE (PV8) AT MECO. THE FAILURE IS 1/1 DURING RTLS ONLY.

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/16/88
ASSESSMENT ID: MPS-4640B
NASA FMEA #: 0122-1

NASA DATA:
BASELINE [X]
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 4640
ITEM: PNEUMATIC HE PRESS VALVE ACTUATION LINE
(.25", .38" DIA)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[1 /1]	[NA]	[NA]	[NA]	[X] *
IOA	[1 /1]	[NA]	[NA]	[NA]	[X]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[2 /1R] [P] [F] [P] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

THIS ASSESSMENT IS FOR THE LINE CONNECTING THE LH2 MANIFOLD RTLS REPRESSURIZATION VALVES (LV75, 75). TWO FAILURES ARE REQUIRED FOR A HELIUM LEAK TO OCCUR DURING NOMINAL FLIGHT, AND THREE FOR A HYDROGEN LEAK. THE FAILURE IS 1/1 DURING AN RTLS ABORT ONLY.

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/16/88
ASSESSMENT ID: MPS-4640E
NASA FMEA #: 0191-1

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 4640
ITEM: PNEUMATIC HE PRESS VALVE ACTUATION LINE
(.25", .38" DIA)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[P]	[X] *
IOA	[1 /1]	[NA]	[NA]	[NA]	[X]
COMPARE	[N /N]	[N]	[N]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[1 /1] [NA] [NA] [NA] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

THIS ASSESSMENT IS FOR SEVERAL HELIUM LINES THAT CONNECT A SOLENOID VALVE TO A PROPELLANT VALVE IN ORDER TO OPERATE THE PROPELLANT VALVE. THESE ARE: LV72 TO PV17, LV73 TO PV18, LV79 TO PV22, LV51 TO PD3, LV47 TO PD1, LV49 TO PD2, LV19 TO PV4, LV21 TO PV5, LV23 TO PV6, LV66 TO PD1 LATCH AND LV68 TO PD2 LATCH. ALL OF THESE LINES ARE UNPRESSURIZED (SOLENOID CLOSED) DURING ASCENT.

LINE RUPTURE AFTER OPENING THE SOLENOID CAN CAUSE OVERPREZZURIZATION.

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/16/88
 ASSESSMENT ID: MPS-4640G
 NASA FMEA #: 0193-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4640
 ITEM: PNEUMATIC HE PRESS VALVE ACTUATION LINE
 (.25", .38" DIA)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[P]	[P]	[X] *
IOA	[1 /1]	[NA]	[NA]	[NA]	[X]
COMPARE	[N /N]	[N]	[N]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[1 /1] [NA] [NA] [NA] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

THIS ASSESSMENT IS FOR SEVERAL HELIUM LINES THAT CONNECT THE FILL & DRAIN VALVES TO THEIR CLOSING SOLENOIDS. THESE ARE: LV33 TO PV11, LV35 TO PV12, LV29 TO PV9 AND LV31 TO PV10. THESE LINES ARE PRESSURIZED DURING ASCENT.

POSSIBLE AFT COMPARTMENT OVERPRESSURIZATION.

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-10-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/16/88
ASSESSMENT ID: MPS-4640H
NASA FMEA #: 0194-1

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 4640
ITEM: PNEUMATIC HE PRESS VALVE ACTUATION LINE
(.25", .38" DIA)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 /1R]	[P]	[F]	[P]	[X] *
IOA	[1 /1]	[NA]	[NA]	[NA]	[X]
COMPARE	[N /N]	[N]	[N]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[1 /1] [NA] [NA] [NA] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

THIS ASSESSMENT IS FOR THREE HELIUM LINES THAT CONNECT A SOLEONID VALE TO A PROPELLANT VALVE IN ORDER TO OPERATE THE PROPELLANT VALVE. THESE ARE: LV36 TO PV14, 15, 16, LV77 TO PV20 AND LV78 TO PV21.

THESE LINES ARE UNPRESSURIZED DURING ASCENT AND REMAIN SO FOR THE REMAINDER OF THE MISSION.

RUPTURE DURING PRELAUNCH OPERATIONS CAN CAUSE LOSS OF VEHICLE FROM SHRAPNEL IMPACT ON OTHER COMPONENTS.

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-10-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/16/88
ASSESSMENT ID: MPS-4640I
NASA FMEA #: 0194-1

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 4640
ITEM: PNEUMATIC HE PRESS VALVE ACTUATION LINE
(.25", .38" DIA)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 /1R]	[P]	[F]	[P]	[X] *
IOA	[1 /1]	[NA]	[NA]	[NA]	[X]
COMPARE	[N /N]	[N]	[N]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[1 /1] [NA] [NA] [NA] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

THIS ASSESSMENT IS FOR FIVE HELIUM LINES THAT CONNECT A SOLEONID VALE TO A PROPELLANT VALVE IN ORDER TO OPERATE THE PROPELLANT VALVE. THESE ARE: LV39 TO PV13, LV32 TO PV11, LV34 TO PV12, LV28 TO PV9 AND LV30 TO PV10.

THESE LINES ARE UNPRESSURIZED DURING MAIN ENGINE ASCENT BUT PRESSURIZED DURING MPS DUMP OR INERT.

FAILURE CAN CAUSE AFT COMPARTMENT OVERPRESSURIZATION.

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 12-10-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/17/88
ASSESSMENT ID: MPS-4640J
NASA FMEA #: 0633-1

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 4640
ITEM: PNEUMATIC HE PRESS VALVE ACTUATION LINE
(.25", .38" DIA)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[P]	[X] *
IOA	[1 /1]	[NA]	[NA]	[NA]	[X]
COMPARE	[N /N]	[N]	[N]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

THIS ASSESSMENT IS FOR THE LH2 HELIUM PRESSURIZATION FLEXIBLE HOSE ASSEMBLY (CV13, 14, 15 TO PR6).
THIS FAILURE IS 2/1R FOR LEAKAGE OF HYDROGEN (SECOND FAILURE - CV14 OR CV15) OR HELIUM (SECOND FAILURE - REGULATOR PR6).
REF: RI/NASA CIL OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/17/88
 ASSESSMENT ID: MPS-4640K
 NASA FMEA #: 0604-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4640
 ITEM: PNEUMATIC HE PRESS VALVE ACTUATION LINE
 (.25", .38" DIA)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[P]	[X] *
IOA	[1 /1]	[NA]	[NA]	[NA]	[X]
COMPARE	[N /N]	[N]	[N]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] [] (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

THIS ASSESSMENT IS FOR THE LO2 HELIUM PRESSURIZATION FLEXIBLE HOSE ASSEMBLY (CV10 TO CV12 AND PR5).
 THIS FAILURE IS 2/1R FOR LEAKAGE OF OXYGEN (SECOND FAILURE - CV10 OR CV12) OF HELIUM (SECOND FAILURE - REGULATOR PR5).
 REF: RI/NASA CIL OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/17/88
 ASSESSMENT ID: MPS-4640L
 NASA FMEA #: 0634-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4640
 ITEM: PNEUMATIC HE PRESS VALVE ACTUATION LINE
 (.25", .38" DIA)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[F]	[P]	[X] *
IOA	[1 /1]	[NA]	[NA]	[NA]	[X]
COMPARE	[N /N]	[N]	[N]	[N]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] [] (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

THIS ASSESSMENT IS FOR THE REPRESSURIZATION LINE FROM CV13 TO CV24.

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING NOTES.

**APPENDIX C
ASSESSMENT WORKSHEET**

ASSESSMENT DATE: 2/16/88
 ASSESSMENT ID: MPS-4650
 NASA FMEA #: NA

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4650
 ITEM: PNEUMATIC HELIUM INTERCONNECT LINE
 (.63", 1.00", .50" DIA)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[/]	[]	[]	[]	[] *
IOA	[1 / 1]	[NA]	[NA]	[NA]	[X]
COMPARE	[N / N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[1 / 1] [NA] [NA] [NA] [A]
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

THIS ASSESSMENT IS FOR THE HELIUM LINES FROM THE PNEUMATICS TANK (TK4) TO THE IN/OUT INTERCONNECT VALVES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/17/88
 ASSESSMENT ID: MPS-4662
 NASA FMEA #: 0409-3

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4662
 ITEM: GN2 PURGE (ORB/GND) DISC. (ORB HALF) (PD14)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 / 3]	[NA]	[NA]	[NA]	[] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/17/88
 ASSESSMENT ID: MPS-4664
 NASA FMEA #: 0409-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 4664
 ITEM: GN2 PURGE (ORB/GND) DISC. (ORB HALF) (PD14)

LEAD ANALYST: A.J.MARINO

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 / 3]	[NA]	[NA]	[NA]	[] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REF: RI/NASA FMEA/CIL REVIEW MEETING NOTES.

**APPENDIX C
ASSESSMENT WORKSHEET**

ASSESSMENT DATE: 2/11/88
 ASSESSMENT ID: MPS-5000
 NASA FMEA #: 2182-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 5000
 ITEM: LO2 PREVALVE CONTROL CIRCUIT

LEAD ANALYST: HOLDEN/LOWERY

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 / 3]	[NA]	[NA]	[NA]	[] *
IOA	[3 / 3]	[NA]	[NA]	[NA]	[]
COMPARE	[/]	[]	[]	[]	[]

RECOMMENDATIONS: (If different from NASA)

[/] [] [] [] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

9 OPEN MDM BLOCKING DIODES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/11/88
 ASSESSMENT ID: MPS-5000A
 NASA FMEA #: 2182-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 5000
 ITEM: LO2 PREVALVE CONTROL CIRCUIT

LEAD ANALYST: HOLDEN/LOWERY

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 /1R]	[P]	[F]	[P]	[X] *
IOA	[3 /3]	[NA]	[NA]	[NA]	[]
COMPARE	[/N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

[3 /3] [NA] [NA] [NA] [D]
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

9 OPEN MDM BLOCKING DIODES. FUNCTIONAL CRITICALITY DETERMINED BY
 LIKE AND UNLIKE REDUNDANCY.