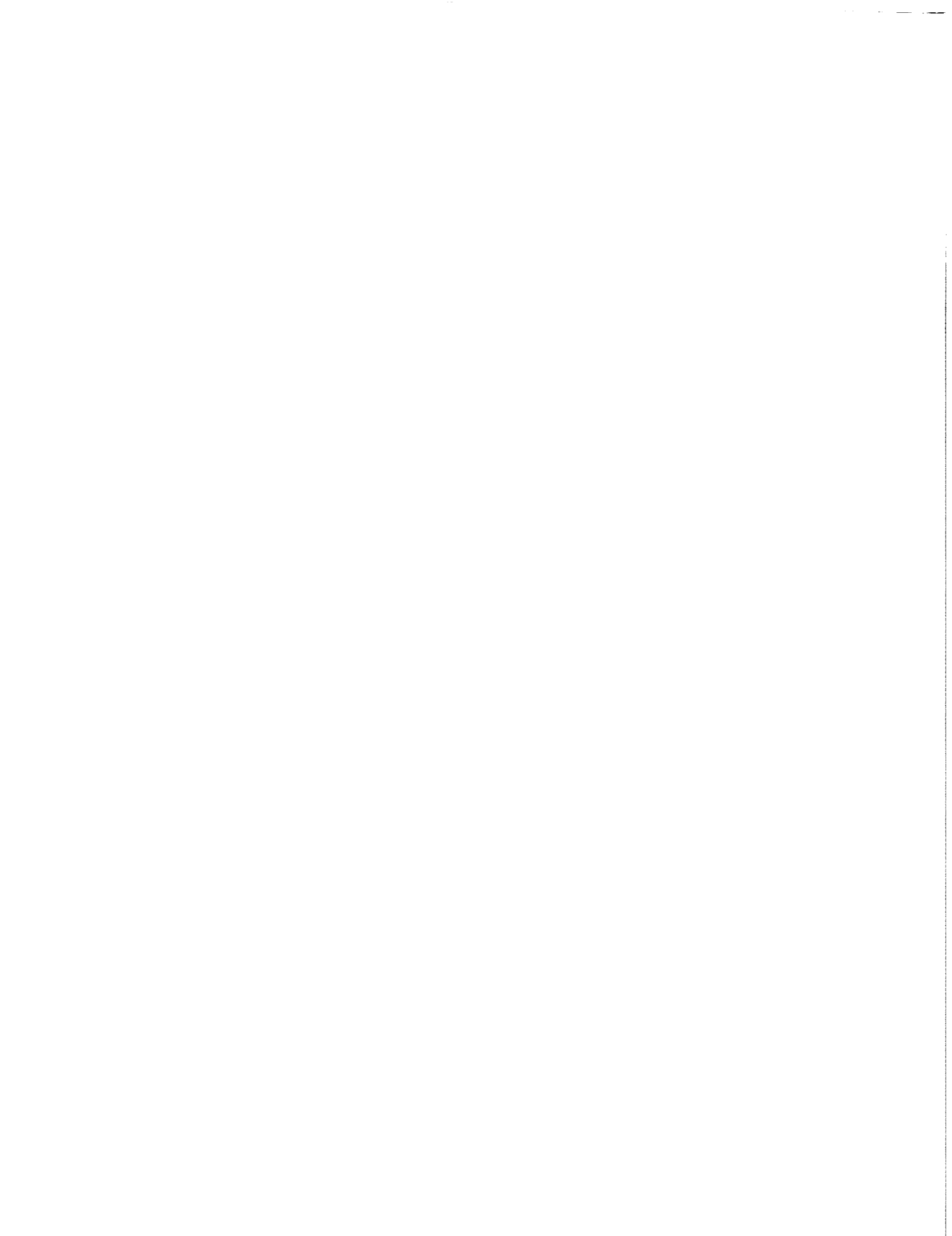


INDEPENDENT ORBITER ASSESSMENT

ASSESSMENT OF THE MAIN PROPULSION SUBSYSTEM FMEA/CIL VOLUME 1 OF 4

26 FEBRUARY 1988



MCDONNELL DOUGLAS ASTRONAUTICS COMPANY
ENGINEERING SERVICES

SPACE TRANSPORTATION SYSTEM ENGINEERING AND OPERATIONS SUPPORT

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INDEPENDENT ORBITER ASSESSMENT
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26 February 1988

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Independent Orbiter Assessment
Assessment of the Orbiter Main Propulsion System FMEA/CIL

1.0 EXECUTIVE SUMMARY

The McDonnell Douglas Astronautics Company (MDAC) was selected in June 1986 to perform an Independent Orbiter Assessment (IOA) of the Failure Modes and Effects Analysis (FMEA) and Critical Items List (CIL). Direction was given by the STS Orbiter and GFE Projects Office to perform the hardware analysis using the instructions and ground rules defined in NSTS 22206, Instructions for Preparation of FMEA and CIL, 10 October 1986.

The IOA effort first completed an analysis of the Main Propulsion System (MPS) hardware, generating draft failure modes and potential critical items. To preserve independence, this analysis was accomplished without reliance upon the results contained within the NASA FMEA/CIL documentation. The IOA results were then compared to available data from the Rockwell Downey/NASA JSC (henceforth referred to as RI/NASA) FMEA/CIL review. (This review is still in progress as of this writing.) Data available to IOA as of 1 January 1988 was used.

For the mechanical component analysis, this included: (1) The RI/NASA Critical Items List of 23 December 1987, (2) substantially complete (but still subject to revision) CIL worksheets for the Feed and Fill/Drain Subsystems, and (3) RI/NASA FMEA/CIL review meeting notes specifying revisions to the pre-51L FMEA/CIL document. These notes were acquired from J. E. Borches/Lockheed in July 1987.

Available data for the EPD&C analysis included substantially complete CIL worksheets for some EPD&C components (Feed and Fill/Drain) and the MPS/EPDC FMEA Review Summary of 18 August 1987. The Review Summary gives no supporting information, only criticalities and screens. All of this data was still subject to change at the time this assessment began.

IOA Assessment sheets (Appendix C) indicate the source of the RI/NASA work that was assessed. Where no source is given, an RI/NASA CIL worksheet was used.

Due to severe budget and schedule constraints, the resolution of differences between the RI/NASA results and IOA was not possible.

An overview of the IOA MPS Assessment results is given in Figure 1.

MPS ASSESSMENT OVERVIEW

MPS ASSESSMENT SUMMARY			
	IOA	NASA	ISSUES
FMEA	1365	1264	399
CIL	711	749	191

MECHANICAL COMPONENTS			
	IOA	NASA	ISSUES
FMEA	823	606	179
CIL	410	475	88

ELECTRICAL COMPONENTS			
	IOA	NASA	ISSUES
FMEA	742	658	220
CIL	301	274	105

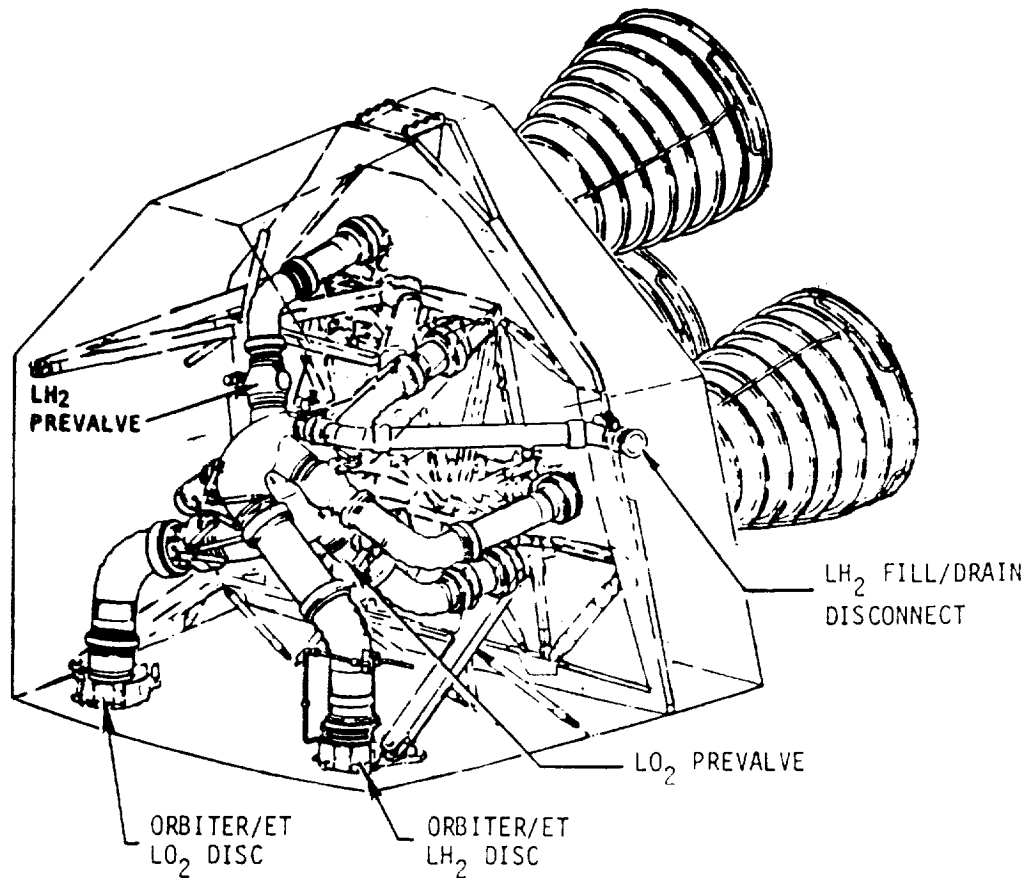


Figure 1 - MPS FMEA/CIL ASSESSMENT

2.0 INTRODUCTION

2.1 Purpose

The 51-L Challenger accident prompted the NASA to readdress safety policies, concepts, and rationale being used in the National Space Transportation System (NSTS). The NSTS Office has undertaken the task of reevaluating the FMEA/CIL for the Space Shuttle design. The MDAC is providing an independent assessment of the proposed Post 51-L Orbiter FMEA/CIL for completeness and technical accuracy.

2.2 Scope

The scope of the independent FMEA/CIL assessment activity encompasses those Shuttle Orbiter subsystems and GFE hardware identified in the Space Shuttle Independent FMEA/CIL Assessment Contractor Statement of Work. Each subsystem analysis addresses hardware, functions, internal and external interfaces, and operational requirements for all mission phases.

2.3 Analysis Approach

The independent analysis approach is a top-down analysis utilizing as-available drawings to breakdown the respective subsystem into components and low-level hardware items. Each hardware item is evaluated for failure mode, effects, and criticality. These data are documented in the respective subsystem analysis report, and are used to assess the proposed Post 51-L NASA and Prime Contractor FMEA/CIL. The IOA analysis approach is summarized in the following Steps 1.0 through 3.0. Step 4.0 summarizes the assessment of the NASA and Prime Contractor FMEA/CIL which is documented in this report.

- Step 1.0 Subsystem Familiarization
 - 1.1 Define subsystem functions
 - 1.2 Define subsystem components
 - 1.3 Define subsystem specific ground rules and assumptions

- Step 2.0 Define subsystem analysis diagram
 - 2.1 Define subsystem
 - 2.2 Define major assemblies
 - 2.3 Develop detailed subsystem representations

- Step 3.0 Failure events definition
 - 3.1 Construct matrix of failure modes
 - 3.2 Document IOA analysis results

- Step 4.0 Compare IOA analysis data to NASA FMEA/CIL
- 4.1 Resolve differences
- 4.2 Review in-house
- 4.3 Document assessment issues
- 4.4 Forward findings to Project Manager

2.4 Ground Rules and Assumptions

The ground rules and assumptions used in the IOA are defined in Appendix B. The subsystem specific ground rules were defined to provide necessary additions and clarifications to the ground rules and assumptions contained in NSTS 22206.

3.0 SUBSYSTEM DESCRIPTION

3.1 Design and Function

The Orbiter Main Propulsion System is composed of the Propellant Management Subsystem (PMS) consisting of the LO₂ and LH₂ subsystems and the Helium Subsystem (Figures 2A thru 2D). The PMS is a system of manifolds, distribution lines, and valves by which the liquid propellants pass from the ET to the SSMEs. Some of the propellants are vaporized in the engine and returned to the ET to maintain ullage pressure. The Helium Subsystem consists of a series of helium supply tanks and their associated regulators, check valves, distribution lines, and control valves. The Helium Subsystem supplies helium that is used within the SSMEs for in-flight purges and provides pressure for actuating SSME valves during emergency pneumatic shutdowns. The balance of the helium is used to provide pressure to actuate all the pneumatically operated valves within the PMS.

3.1.1 Propellant Management Subsystem Function

During engine burn, propellants under tank pressure flow from the ET to the Orbiter through two umbilicals; one for LO₂ and the other for LH₂ (Figures 3 and 4, respectively).

The PMS also provides a path which allows gases tapped from the three engines to flow back to the ET, through two gas umbilicals, to maintain pressures in the fuel and oxidizer tanks.

The PMS also functions during phases other than engine burn. During prelaunch, the PMS is used to control the loading of propellants in the ET. During orbit, PMS controls propellant dump, vacuum inerting, and system repressurization (for entry).

3.1.2 The PMS Components

The PMS contains the following major components (Figures 3 and 4).

- A. Liquid Propellant Supply and Distribution Network.
The network is composed of all the liquid propellant lines used to load propellants during prelaunch, feed propellants to the SSMEs during engine burn, and dump residual propellants after ET separation. Specifically, the network consists of:
 1. Propellant Feedline Manifolds - There are two 17-inch diameter manifolds in the Orbiter, one for LO₂ and one for LH₂. Both of the manifolds have a feedline disconnect valve at one end and two fill and drain valves (one inboard, one outboard) connected in series at the other end. The feedline manifolds connect to the ET liquid propellant umbilicals at the feedline disconnect valve, and to either GSE liquid propellant umbilicals (prelaunch only), or overboard at the outboard fill and drain valves.

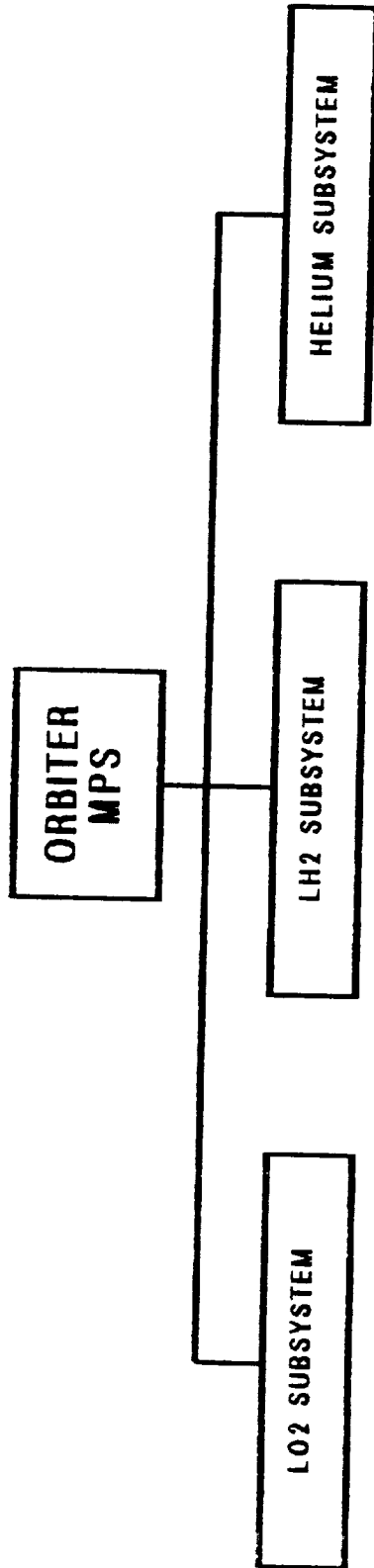


Figure 2A - ORBITER MPS SUBSYSTEMS

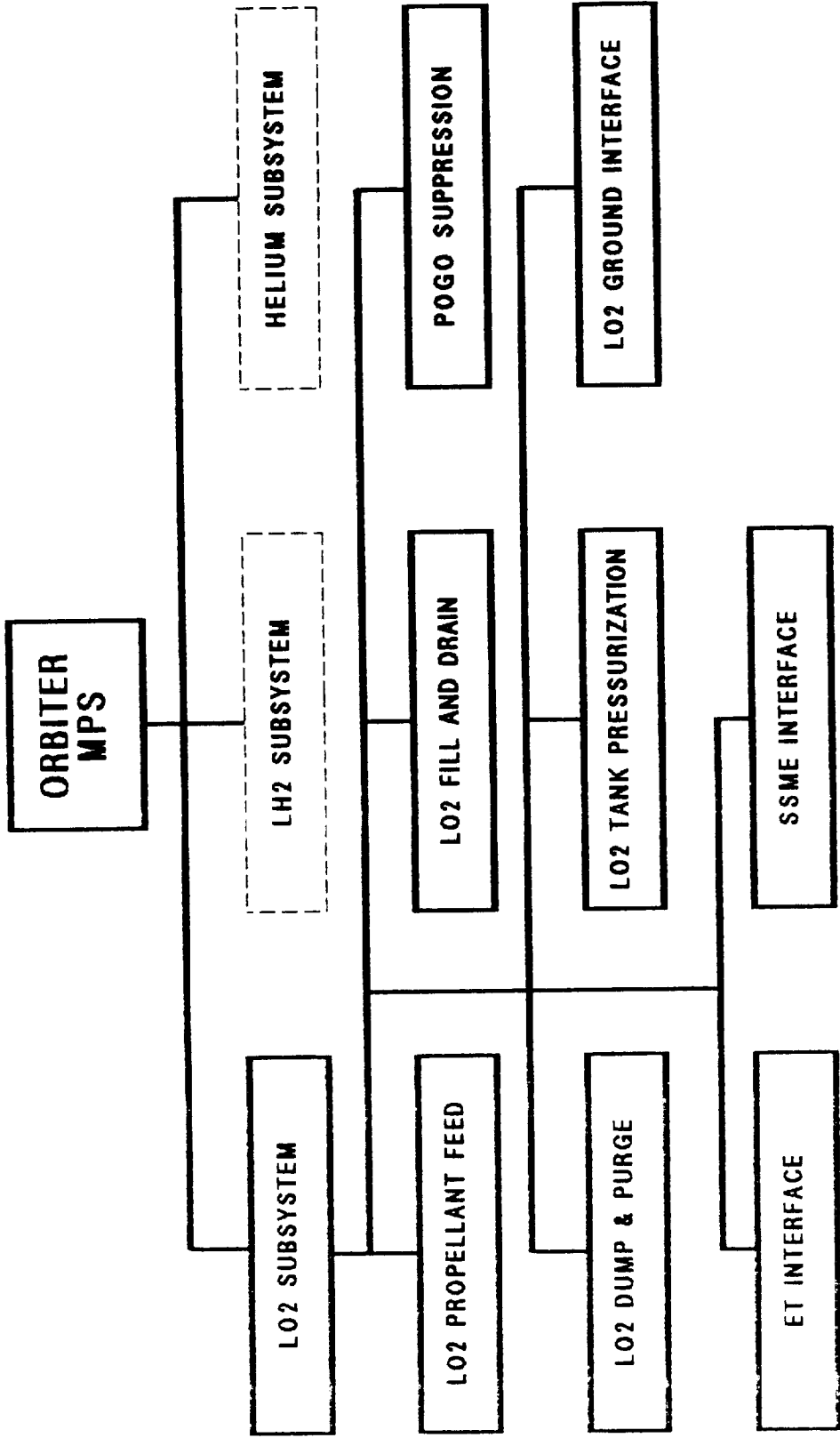


Figure 2B - ORBITER MPS L2 SUBSYSTEM OVERVIEW

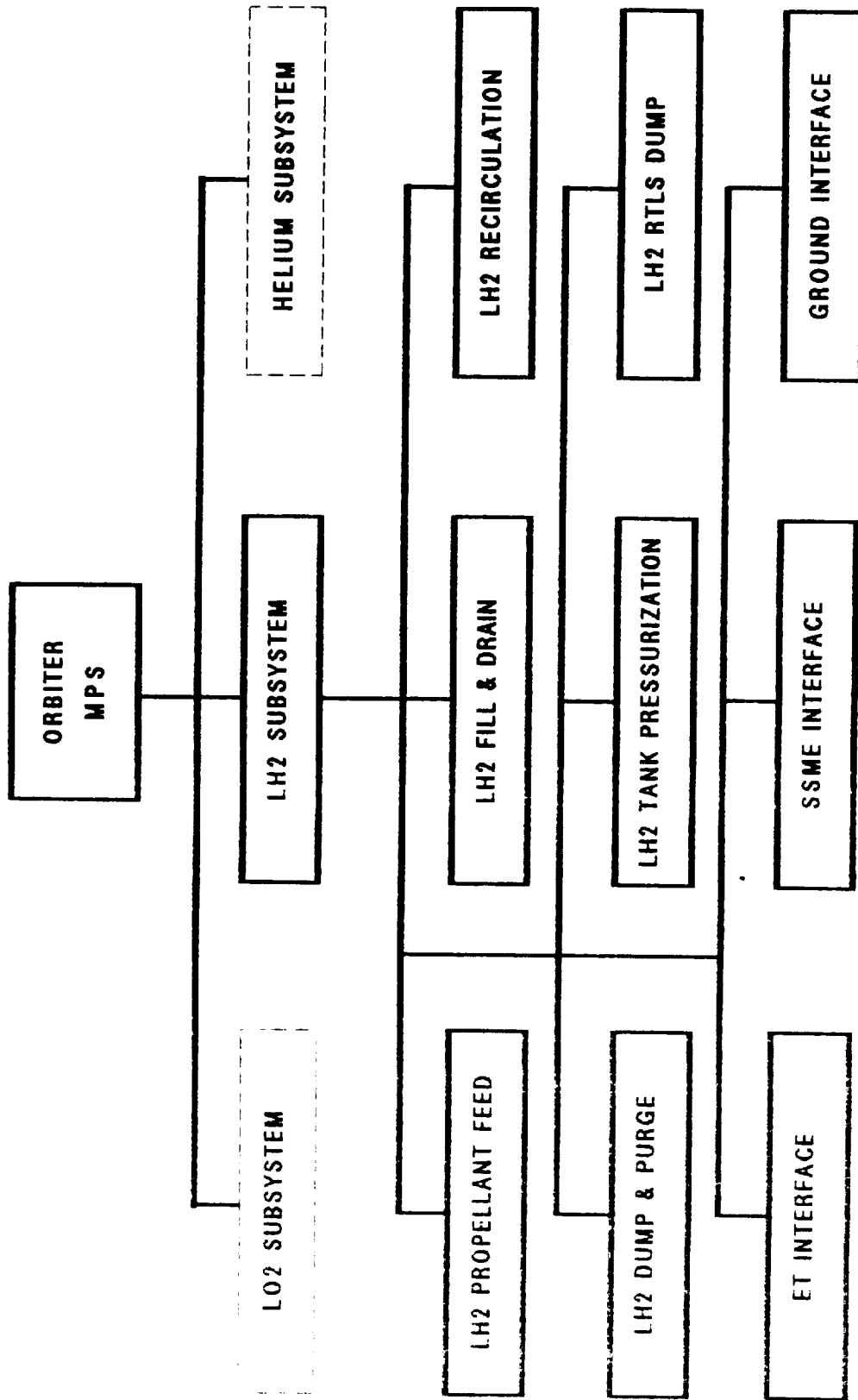


Figure 2C - ORBITER MPS LH₂ SUBSYSTEM OVERVIEW

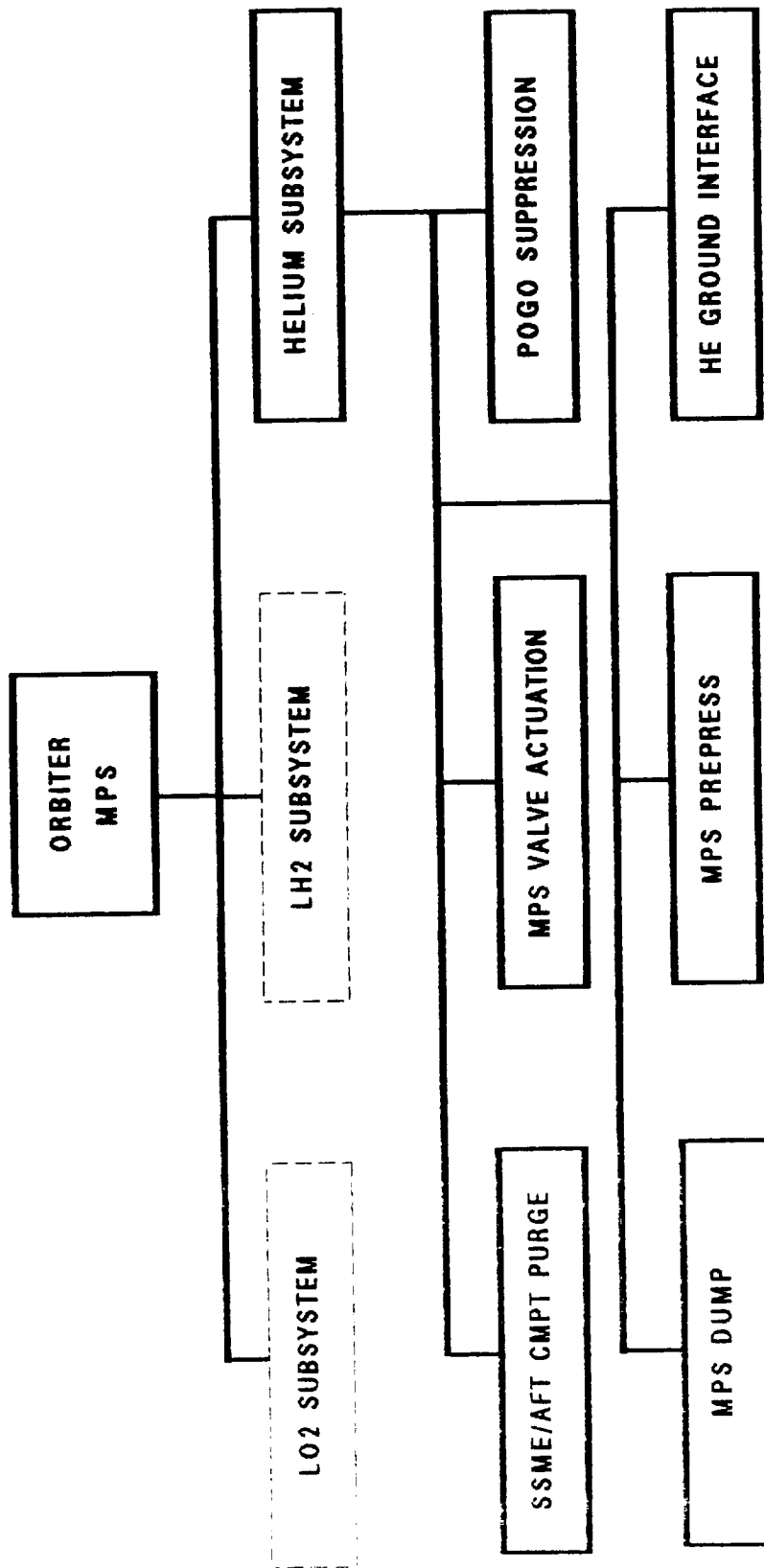
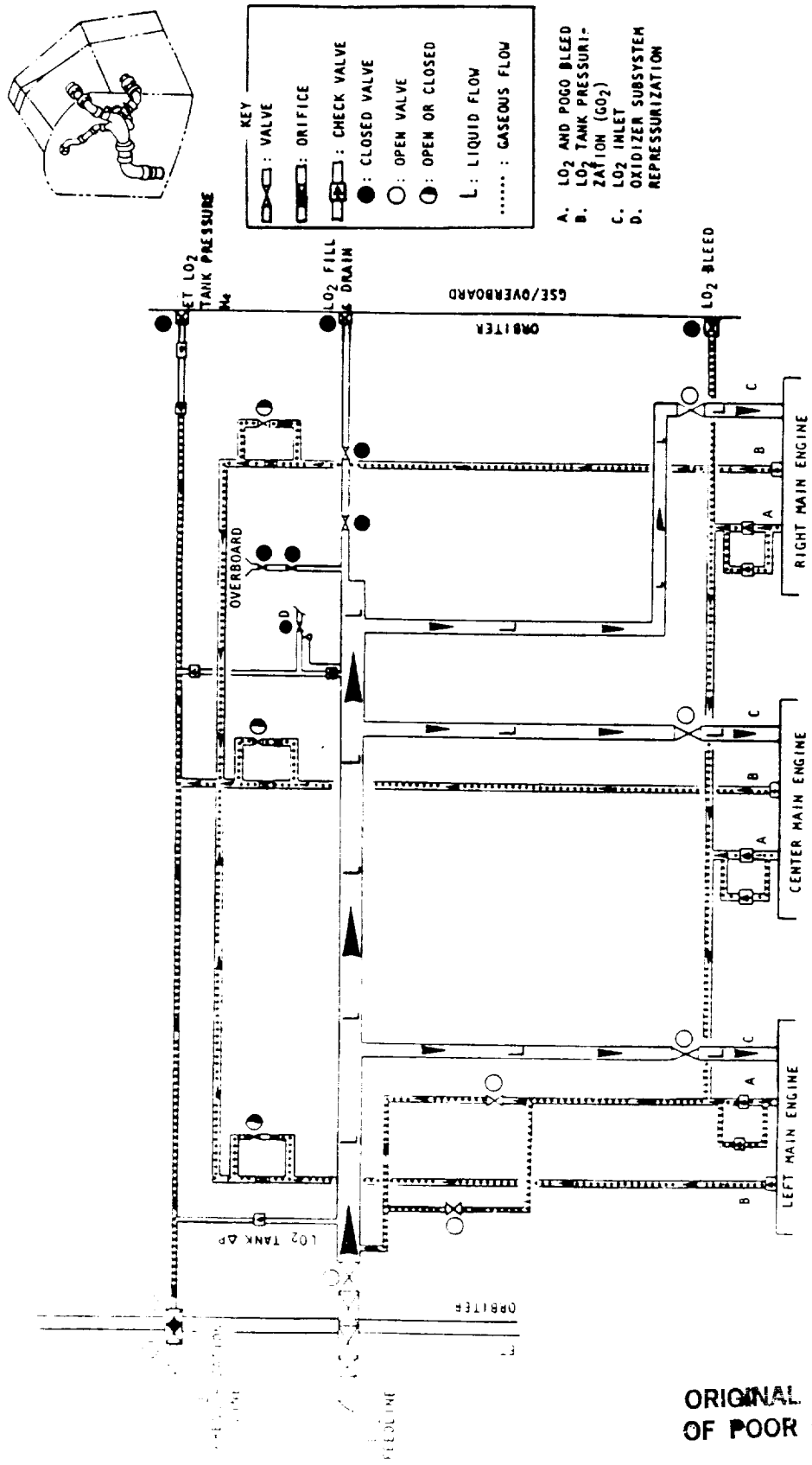


Figure 2D - ORBITER MPS HELIUM SUBSYSTEM OVERVIEW



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Figure 3 - PROPELLANT MANAGEMENT SUBSYSTEM OXIDIZER FLOW

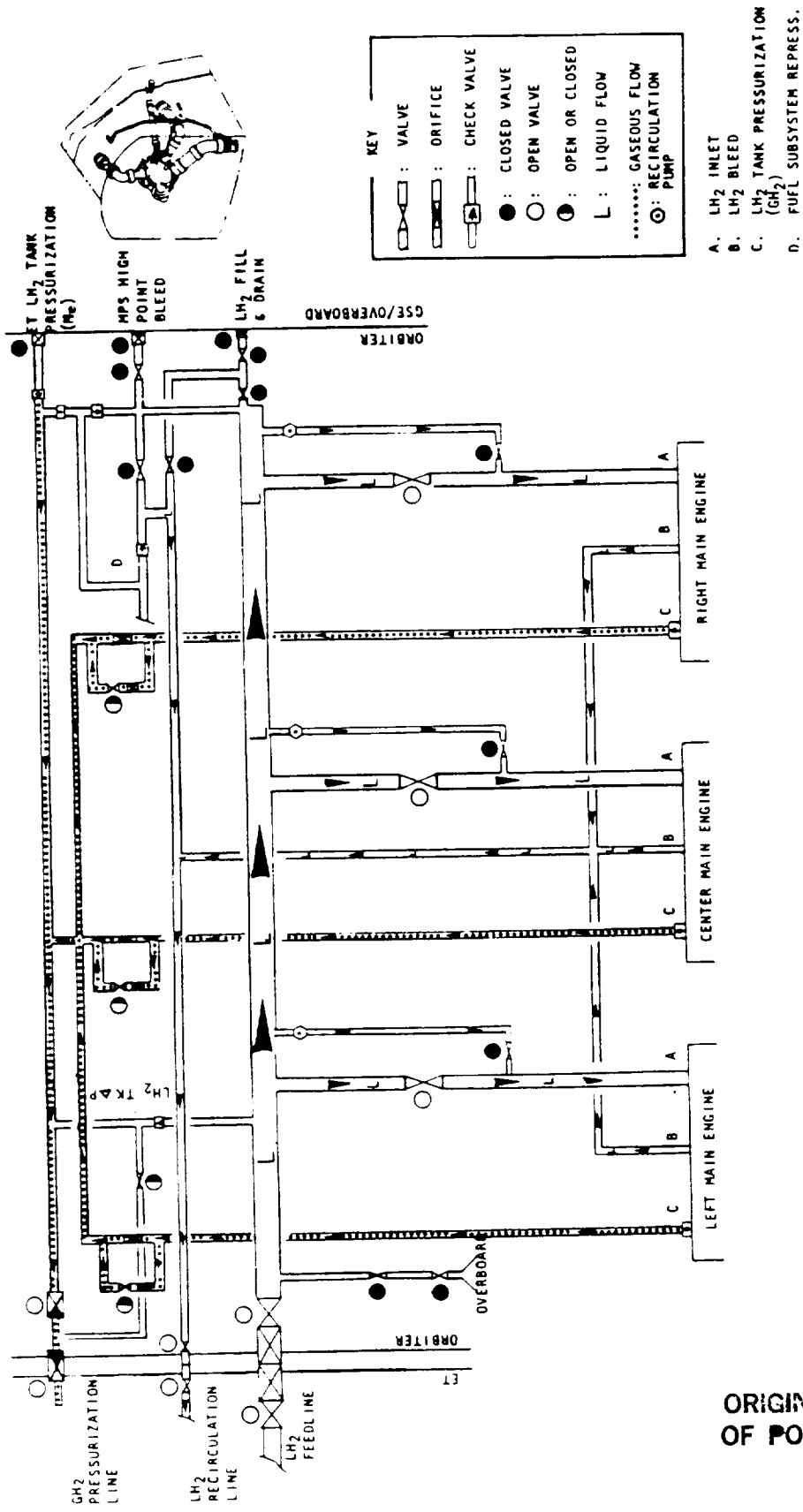


Figure 4 - PROPELLANT MANAGEMENT SUBSYSTEM FUEL FLOW

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Between the feedline disconnect valves and the in-board fill and drain valves are three outlets for the three engine propellant feedlines and 1 outlet for the propellant feedline relief line. The LH₂ feedline manifold contains an extra outlet for the LH₂ Return to Launch Site (RTLS) feedline dump line. (See paragraph 4 below.) Pressures within the LO₂ and the LH₂ feedline manifolds (MANF) can be monitored on the two ENG MANF meters on Panel F7 or the CRT display Guidance and Navigation Control (GNC) System (SYS) SUMM 1 Backup Flight System (BFS).

2. Engine Propellant Feedlines - There are 6 12-inch diameter feedlines in the Orbiter, 3 for LO₂ and 3 for LH₂. Each of the LO₂ engine propellant feedlines connects to the LO₂ feedline manifold at one end and to the Low Pressure Oxidizer Turbopump (LPOT) inlet of one of the SSMEs at the other end. Likewise, each of the LH₂ engine propellant feedlines connects to the LH₂ feedline manifold at one end and to the Low Pressure Fuel Turbopump (LPFT) inlet at one of the SSMEs at the other end. There is one pre valve in each of the six engine propellant feedlines. The pre valves are designated as left, center, or right (engine) LO₂ pre valve; or left, center, or right (engine) LH₂ pre valve.
3. Propellant Feedline Relief Line - There are 2 1-inch diameter relief lines in the Orbiter, 1 for LO₂ and 1 for LH₂. Each relief line connects to 1 of the propellant feedline manifolds at 1 end and to an overboard port at the other end. Each relief line contains a relief valve and a pneumatically actuated relief isolation valve. The isolation valve is mounted in series with, and up-stream of, the relief valve. Flow through the relief line and relief valve is enabled by relieving closing pressure on the normally open isolation valve, allowing it to open.

The position of the relief isolation valve (2) is controlled by one of two FEEDLINE RLF ISOL switches on Panel R4. Normally these switches are left in the GPC position. With the switches (2) in this position, both relief isolation valves will be opened automatically immediately after MECO. The purpose of the relief lines is to prevent excessive pressure build-ups, generated by heatup and expansion of the propellants in the feedline manifolds, by allowing the pressure to be vented overboard through the relief valves.

4. LH₂ RTLS Feedline Dump Line - This is a single 2-inch diameter line which connects to the LH₂ feedline manifold at one end and to an overboard port at the other end. (The overboard port is located on the outer skin of the left side of the Orbiter between the Orbital Maneuvering System (OMS) pod and the upper surface of the wing.) The line is used for dumping residual LH₂ during an RTLS abort. In non-RTLS situations, the pilot can use the backup LH₂ dump switch to open these valves. Flow through the line is controlled by 2 series-connected, normally closed, LH₂ RTLS dump valves (1 inboard, 1 outboard) which are mounted in the line. The LH₂ RTLS dump valves are controlled automatically by GPC commands.

B. Gaseous Propellant Collection and Supply Network. The network consists of all the lines used to collect and supply gaseous propellants (GO₂ and GH₂) from all three SSMEs to the ET to maintain propellant tank pressure during main engine burn. (Note: This network has no major function after ET separation.) Specifically, the gaseous propellant collection and supply network consists of the following.

1. Engine ET Pressurization Output Lines - There are 6 0.63-inch diameter pressurization lines in the Orbiter, 3 for GO₂ and 3 for GH₂. Each of the GO₂ pressurization lines connects to the oxidizer heat exchanger outlet of 1 of the SSMEs at 1 end and the GO₂ ET pressurization manifold at the other end. Each of the GH₂ pressurization lines connects to the LPFT turbine outlet of 1 of the SSMEs at 1 end and the GH₂ ET pressurization manifold at the other end. Six flow control valves are used to control ullage pressure in the two ET propellant tanks.
2. ET Pressurization Manifolds - There are 2 2-inch diameter manifolds in the Orbiter, 1 for GO₂ and 1 for GH₂. At each end of both manifolds are self-sealing quick disconnects. The pressurization manifolds connect to the ET gaseous propellant umbilicals at 1 set of quick-disconnects and to the GSE helium pressurization umbilicals at the other set of quick-disconnects. The GSE helium pressurization umbilicals (2) are used for the initial pressurization of the ET propellant tanks during prelaunch.

Each pressurization manifold contains inlets for the 3 engine ET pressurization output lines. (The ET GH₂ pressurization manifold contains, in addition to the three inlets, an outlet for the GH₂ pressurization vent line. (See paragraph 3 below.)

3. GH₂ Pressurization Vent Line - This is a single line which connects to the ET GH₂ pressurization manifold line at 1 end and to an overboard port at the other end. This line is used exclusively for vacuum inerting the GH₂ pressurization lines during orbit. Flow through the line is controlled by the normally closed GH₂ pressurization line vent valve which is mounted in the line. This valve is controlled by the GH₂ PRESS LINE VENT switch on cockpit Panel R4.

C. Valves - There are 2 basic types of valves used in the PMS: those that are pneumatically actuated and those that are electrically actuated. Pneumatically actuated valves are used where large loads are encountered, such as in the control of liquid propellant flows. Electrically actuated valves are used where lighter loads are encountered, such as in the control of gaseous propellant flows.

Pneumatically actuated valves can be further divided into 2 subtypes - those that require pneumatic pressure to open and close the valve (type 1) and those that are spring-loaded to 1 position and require pneumatic pressure to move to the other position (type 2).

The following is a list of the type 1 valves.

LH₂ feedline disconnect valve
LO₂ feedline disconnect valve
LH₂ prevalues (3)
LO₂ prevalues (3)
LH₂ inboard fill/drain valve
LO₂ inboard fill/drain valve
LH₂ outboard fill/drain valve
LO₂ outboard fill/drain valve

Each type 1 valve actuator is equipped with 2 electrically actuated solenoid valves. Each of the 2 solenoid valves controls helium pressure to either an "open" port or a "close" port on the actuator.

Energizing the solenoid valve connected to the "open" port will allow helium pressure to open the pneumatic valve. Similarly, closing of the pneumatic valve is performed by energizing the solenoid valve connected to the "close" port. (The LO₂ Prevalues have 4 solenoids, two redundant solenoids each to control helium pressure to the "open" and to the "closed" ports.)

Removing power from a solenoid valve not only removes helium pressure from the corresponding port of the pneumatic actuator, but also allows the helium pressure trapped in that side of the actuator to vent overboard. Removing power from both solenoids allows the pneumatic valve to remain in its last commanded position.

The following is a list of the type 2 valves.

LH₂ RTLS inboard dump valve, Normally Closed (NC)
LH₂ RTLS outboard dump valve (NC)
LH₂ feedline relief shutoff valve, Normally Open (NO)
LO₂ feedline relief shutoff valve (NO)
LO₂ Pogo accumulator recirculation valve (NO)

Each type 2 valve is equipped with a single electrically actuated solenoid valve which controls helium pressure to either an "open" port or a "close" port on the actuator. Removing power from the solenoid valve removes helium pressure from the corresponding port of the pneumatic actuator and allows helium pressure trapped in that side of the actuator to vent overboard. Spring force will then take over and drive the valve to the opposite position. If the spring force drives the valve to the open position, the valve is referred to as a Normally Open (NO) valve. If the spring force drives the valve to the closed position, the valve is referred to as a Normally Closed (NC) valve.

The following is a list of the electrically actuated solenoid valves:

H₂ pressurization line vent valve (NC)
GH₂ pressurization flow control valves (3) (NO)
GO₂ pressurization flow control valves (3) (NO)

The above electrically actuated valves are spring-loaded to one position and move to the other position when power is applied. These valves are referred to as either normally open or normally closed, based on their position in the de-energized state.

3.1.3 Orbiter MPS - Helium Subsystem General Description

The helium subsystem consists of 7 4.7-ft³ helium supply tanks, 3 17.3-ft³ helium supply tanks, and their associated regulators, check valves, distribution lines, and control valves (Figure 5). Four of the 4.7-ft³ helium supply tanks are located within the Orbiter aft of the payload bay area. The other 3 4.7-ft³ supply tanks and the three 17.3-ft³ supply tanks are located below the payload bay liner and above the main landing gear cavity. Each of the 17.3-ft³ supply tanks is plumbed to two of the 4.7-ft³ supply tanks (1 in the mid-body, the other in the aft body) to form 3

sets of 3 tanks. Each set of tanks, thus formed, normally provides helium to only one engine and for this reason is commonly referred to by the engine's designation; for example, "left engine helium." This helium is used for in-flight purges of engines, aft compartments, and provides pressure for actuating engine valves during emergency pneumatic shutdowns.

The remaining 4.7-ft³ helium supply tank (the 1 which is not connected to a 17.3-ft³ tank) is called the "pneumatic helium" supply tank. It normally provides pressure to actuate all of the pneumatically operated valves within the propellant management subsystem (Figure 5).

Each of the 4 helium supply circuits described above (3 engine helium and one pneumatic helium) will operate independently until after MECO, when the 3 "out" helium interconnect valves will be opened, connecting all circuits to a common manifold. This interconnection can be performed manually by the crew; however, normally the GPC will automatically interconnect the circuits just before the start of the MPS propellant dump.

3.1.4 Helium Subsystem Components

The helium subsystem contains the following major components.

- A. Supply Tank - Each engine helium supply tank cluster consists of 2 4.7-ft³ supply tanks and 1 17.3-ft³ supply tank. One of the 4.7-ft³ tanks and the 17.3-ft³ tank are located in the mid-body area of the Shuttle under the payload bay liner, in an area originally reserved for additional Power Reactant Supply and Distribution (PRSD) cryogenic storage. The 17.3-ft³ tank is identical to that used in the OMS. The remaining 4.7-ft³ tank is located in the rear of the Shuttle, aft of the payload bay bulkhead. The single 4.7-ft³ pneumatic helium supply tank is also located in this area. Prior to lift-off, all helium supply tanks will be pressurized to an nominal value of 4500 psia.
- B. Solenoid Actuated Valves - All of the valves in the helium subsystem are spring-loaded to one position and electrically actuated to the other position.

Valve position is controlled via electrical signals from either the GPCs or a manual switch. The crew can control only a portion of the valves through cockpit switches, the remainder are controlled automatically by the GPCs.

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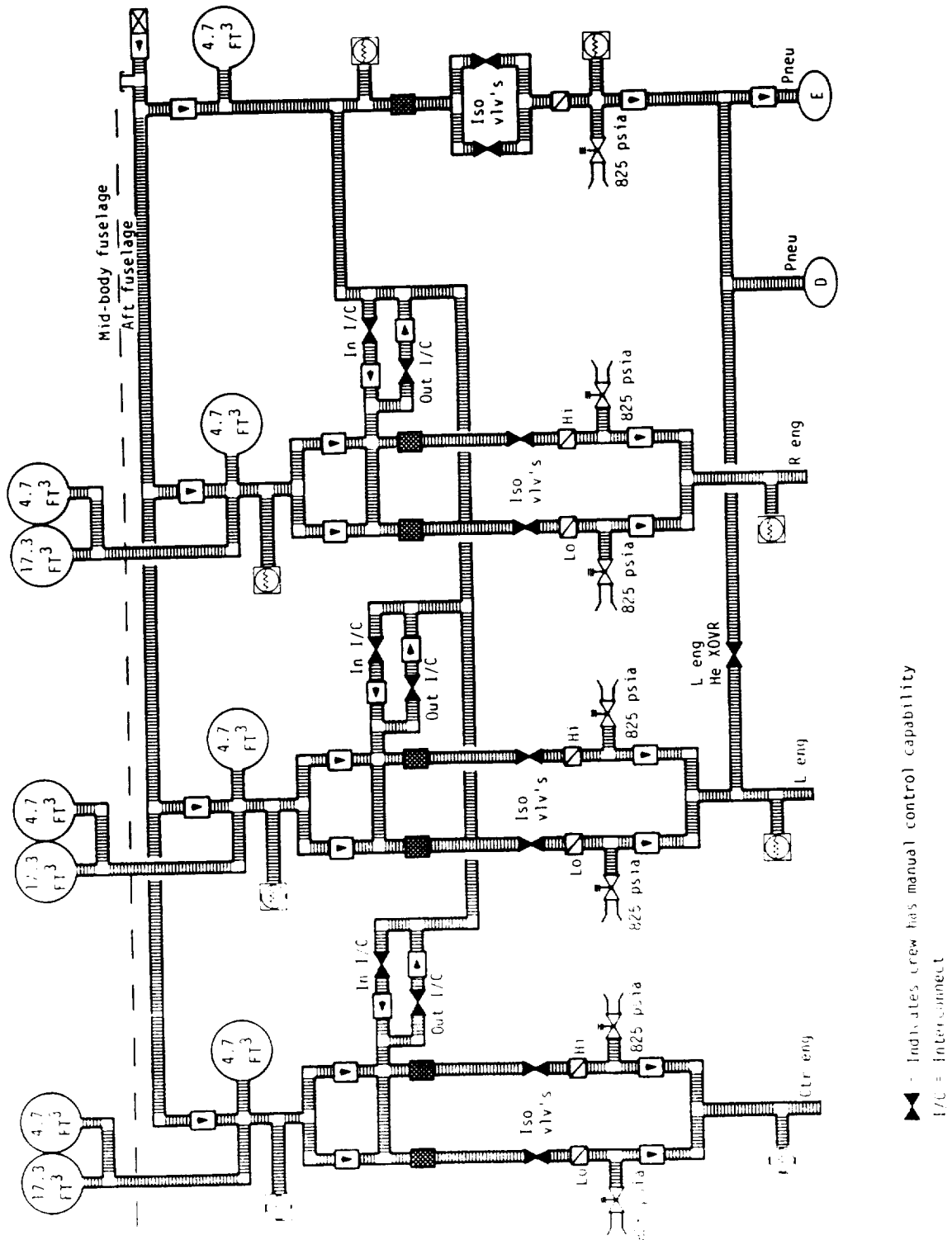


Figure 5 - HELIUM SUBSYSTEM; STORAGE AND REGULATION

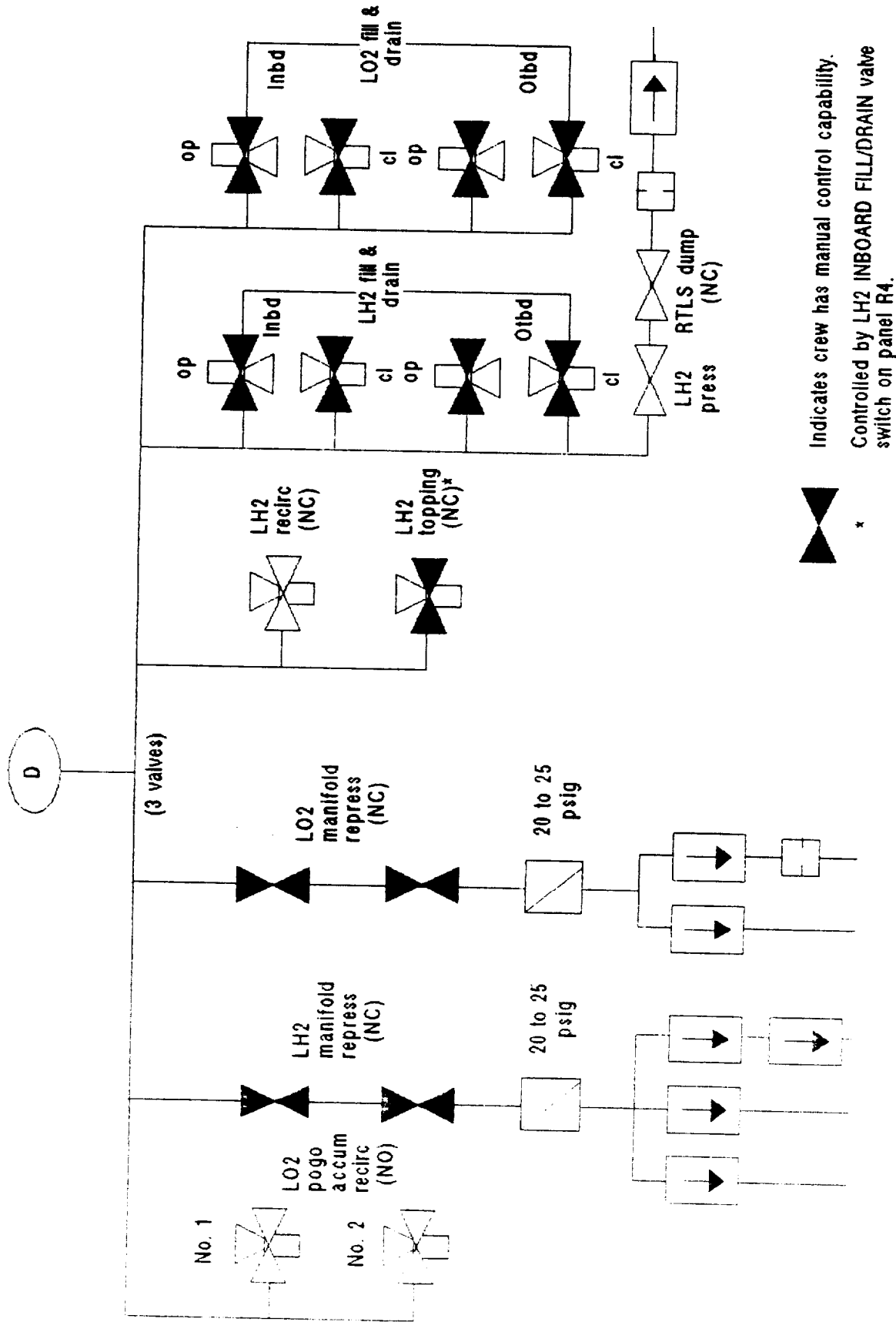
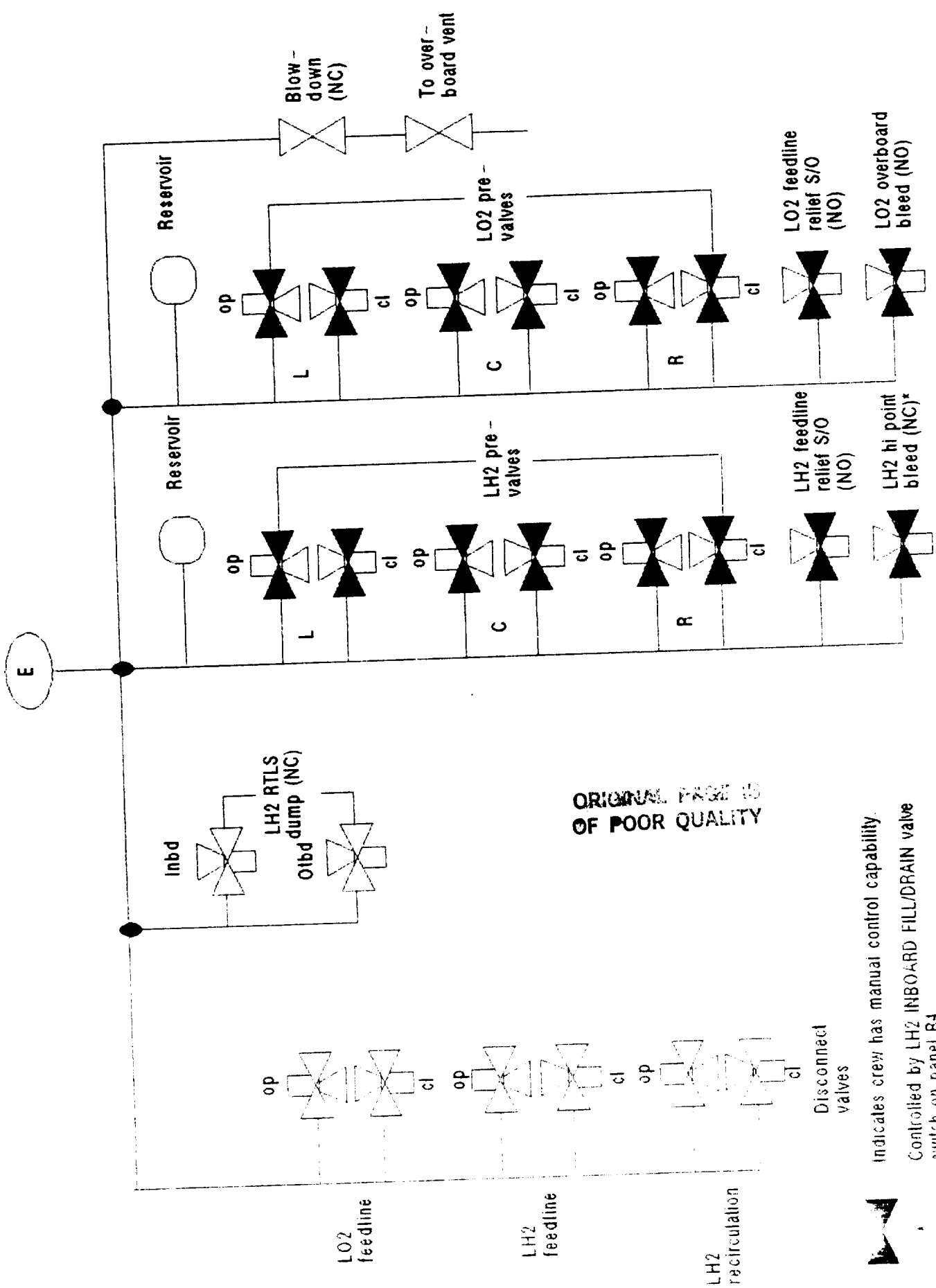


Figure 6A - PNEUMATIC HELIUM DISTRIBUTION



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Indicates crew has manual control capability.
 Controlled by LH2 INBOARD FILL/DRAIN valve switch on panel R4.

Figure 6B - PNEUMATIC HELIUM DISTRIBUTION (Concluded)

- C. Supply Tank Isolation Valves - There are 8 supply tank isolation valves in the helium subsystem. The valves are connected in parallel to each engine helium supply tank cluster and to the pneumatic supply tank in pairs. In the case of the engine helium supply tanks, each pair of isolation valves control helium flow through 1 leg of a dual helium supply regulator circuit. Each helium supply circuit contains 2 check valves, a filter, an isolation valve, a regulator, and a relief valve.

The 2 isolation valves connected to the pneumatic supply tank are also connected in parallel. The rest of the corresponding helium supply circuit consists of a filter, the 2 isolation valves, a regulator, a relief valve, and a single check valve.

Each isolation valve (with the exception of the 2 pneumatic helium isolation valves) can be individually controlled by its own cockpit switch. The 2 pneumatic helium isolation valves are controlled by a single switch on Panel R2.

- D. Interconnect Valves - Each engine helium supply tank cluster has 2 interconnect valves. Each valve in the pair of interconnect valves is connected in series with a check valve. Because of the check valves, helium can flow through the interconnect valves in 1 direction only. The interconnect valves are oriented in such a manner that 1 interconnect valve controls helium flow into the circuit and the other interconnect valve controls helium flow out of the circuit. The "in" interconnect valve controls the flow into the associated engine helium distribution lines from the pneumatic helium supply tank. The "out" interconnect valve controls helium flow out of the associated engine helium supply tank cluster to the pneumatic helium distribution lines.

Each pair of interconnect valves (per engine) is controlled by a single cockpit switch. This switch has 3 positions: IN OPEN/OUT CLOSE, GPC, and IN CLOSE/OUT OPEN. With the switch in the IN OPEN/OUT CLOSE position, the "in" interconnect valve will be opened and the "out" interconnect valve closed. The IN CLOSE/ OUT OPEN switch position will do the reverse. With the switch in the GPC position, both valves are closed unless commanded to the open position by the GPCs. In the event of an RTLS during a normal flight the GPC will signal the "in" interconnect valve to open automatically at MECO and close automatically 20 seconds later. The "out" interconnect valve is opened automatically at the beginning of the LO₂ dump and closed automatically at

the end of the LH₂ dump. If an engine was shut down prior to MECO, however, the corresponding "in" interconnect valve will remain closed at MECO. At any other time, placing the switch in the GPC position results in both interconnect valves closing and remaining closed.

There is an additional crossover (interconnect) valve connected downstream of the left engine helium supply regulators to the pneumatic helium distribution system. In the event of a pneumatic helium regulator failure (Note: only 1 regulator in this line), this crossover valve would be opened, the pneumatic helium isolation valve would be closed, and the left engine helium supply would then provide regulated helium pressure through the crossover valve to the pneumatic helium distribution system. This crossover valve is controlled by its own 3-position cockpit switch. The 3 switch positions are labeled OPEN, GPC, and CLOSE.

- E. Manifold Pressurization Valves - (Figure 6A) - The manifold pressurization valves are located downstream of the pneumatic helium pressure regulator and are used to control the flow of helium to the propellant manifolds during nominal propellant dumps and manifold repressurization. There are 4 of these valves, grouped in pairs. One pair of valves controls helium pressure to the LO₂ propellant manifolds, and the other pair controls helium pressure to the LH₂ propellant manifolds.
- F. LH₂ RTLS Dump Pressurization Valves (Figure 6B) - The LH₂ RTLS dump pressurization valves are located downstream of the pneumatic helium pressure regulator and are used to control the pressurization of the LH₂ propellant manifolds during an RTLS LH₂ dump. There are 2 of these valves, connected in series. Unlike the LH₂ manifold pressurization valves, the LH₂ RTLS dump pressurization valves cannot be controlled from the cockpit. During an RTLS abort, valves will be opened and closed automatically by GPC commands.

One additional difference between the nominal and the RTLS LH₂ dumps is in the routing of the helium and the location at which it enters the LH₂ feedline manifold. For the nominal LH₂ dump, helium passes through the LH₂ manifold pressurization valves and enters the feedline manifold in the vicinity of the LH₂ feedline disconnect valve. For the RTLS LH₂ dump, helium passes through the LH₂ RTLS dump pressurization valves and enters the feedline manifold in the vicinity of the LH₂ inboard fill/drain valve (on the inboard side).

- G. Pressure Regulators - Each engine helium supply tank cluster has 2 pressure regulators, operating in parallel. Each regulator controls pressure in 1 leg of a dual-redundant helium supply circuit. The pressure regulators for the helium supply tanks are set to provide outlet pressures in the range of 715 psig to 770 psig. Downstream of this regulator are 2 more regulators, the LH₂ manifold pressure regulator and the LO₂ manifold pressure regulator. These regulators are used only during MPS propellant dump and manifold repressurization. Both regulators are set to provide outlet pressures in the range of 20 to 25 psig. Flow through the regulators is controlled by the appropriate set (2) of normally closed manifold pressurization valves (Figure 6).
- H. Relief Valves - Downstream of each pressure regulator (with the exception of the 2 manifold repress regulators) is a relief valve. The purpose of the relief valve is to protect the downstream helium distribution lines from the overpressurization (and rupture) in the event the associated pressure regulator fails fully open. The relief valves in the helium supply circuits are set to relieve at 825 +/- 25 psig and reseal at 785 psig.

3.2 Interfaces and Locations

The MPS system hardware is located in the aft fuselage compartment behind the payload bay but forward of the main engines. The MPS system interfaces with the Orbiter's 3 main engines, the external tank, and the ground during prelaunch and post landing.

3.3 Hierarchy

Figure 2 illustrates the hierarchy of the MPS hardware components.

4.0 ASSESSMENT RESULTS

The IOA analysis of the MPS hardware initially generated 690 failure mode worksheets and identified 371 Potential Critical Items (PCIs) before starting the assessment process. In order to facilitate comparison, 573 additional failure mode analysis worksheets were generated. These analysis results were compared to the proposed NASA Post 51-L baseline of 1264 FMEAs and 749 CIL items. Upon completion of the assessment, 865 of the 1264 FMEAs were in agreement. Schedule and budget constraints prevented resolution of those that were not in agreement.

A summary of the quantity of NASA FMEAs assessed, versus the recommended IOA baseline, and any issues identified is presented in Table I.

Table I Summary of IOA FMEA Assessment			
Component	NASA	IOA	Issues
Mechanical	606	623	179
Electrical	658	742	220
TOTAL	1264	1365	399

A summary of the quantity of NASA CIL items assessed, versus the recommended IOA baseline, and any issues identified is presented in Table II. The issues count shown accounts for those cases where a RI/NASA analysis was matched to more than one IOA analysis and thus may have been declared an issue on more than one assessment sheet. When the multiple IOA recommended criticalities generated in this way agree, only one issue is included in the count.

Table II: Summary of IOA CIL Assessment			
Component	NASA	IOA	Issues
Mechanical	475	410	86
Electrical	274	301	105
TOTAL	749	711	191

Appendix C presents the detailed assessment worksheets for each failure mode identified and assessed. Appendix D highlights the NASA Critical Items and corresponding IOA worksheet ID. Appendix E contains IOA analysis worksheets supplementing previous analysis results reported in Space Transportation System Engineering and Operations Support (STSEOS) Working Paper No.1.0-WP-VA86001-22, Analysis of the Main Propulsion System, 16 January 1987. Appendix F provides a cross reference between the NASA FMEA and corresponding IOA worksheet(s). IOA recommendations are also summarized.

Table III presents a summary of the IOA recommended failure criticalities for the Post 51-L FMEA baseline.

TABLE III: Summary of IOA Recommended Failure Criticalities							
Criticality:	1/1	2/1R	2/2	3/1R	3/2R	3/3	TOTAL
Mechanical	229	124	2	57	0	211	623
Electrical	10	106	0	360	3	263	742
TOTAL	239	230	2	417	3	474	1365

Of the failure modes analyzed, 714 were determined to be critical items. A summary of the IOA recommended critical items is presented in Table IV.

TABLE IV: Summary of IOA Recommended Critical Items							
Criticality:	1/1	2/1R	2/2	3/1R	3/2R	3/3	TOTAL
Mechanical	229	124	2	35	0	20	410
Electrical	10	106	0	183	0	2	301
TOTAL	239	230	2	218	0	22	711

The scheme for assigning IOA assessment (Appendix C) and analysis (Appendix E) worksheet numbers is shown in Table V.

Table V IOA Worksheet Numbers	
Components	IOA ID Number
LO ₂ Mechanical	1001 - 1292
LH ₂ Mechanical	2001 - 2393
Helium Mechanical	3010 - 4666
LO ₂ Electrical	5000 - 5779
LH ₂ Electrical	6011 - 6160
Helium Electrical	7100 - 7610
Supplemental Electrical	1 - 200, 401 - 838
Supplemental Mechanical	201 - 400, 901 - 924

4.1 Assessment Results - Mechanical Components

The IOA Assessment of the RI/NASA MPS mechanical component FMEA/CIL review resulted in 412 issues, or differences, in analysis results.

Differences between IOA and RI/NASA are attributable to several factors. The Instructions for Preparation of FMEA/CIL (NSTS 22206) document is in many places subject to varying interpretation. IOA and RI/NASA differed on several points.

The RI/NASA team tended to have a broader view of an item's function than did IOA. This led, in many cases, to different criticalities.

Another difficulty was the matter of redundancy. (This is related to the issue of function, noted above.) Again, the RI/NASA team adopted a broader view of redundancy than did IOA. The RI/NASA team, for example, viewed sequential main engine failures as loss of redundancy. IOA believes engines are not redundant to each other because, while they perform identical functions, they do not perform the same function. That is, when one engine is shut down, the remaining engines cannot provide the thrust that has been lost. (An exception would be periods of reduced throttle level, but these are excluded by the FMEA/CIL "worst case" requirement.)

The NSTS 22206 document, however, requires (2.3.3L) that a functional criticality of 1R be assigned to any failure(s) that result in an engine shutdown. A single engine shutdown will result in an intact abort, thus the logical functional criticality assignment would be 2R, for loss of mission. The RI/NASA analysis arrived at a 1R functional criticality not because of the requirement, but because of an interpretation of redundancy that differs from that of the IOA.

Yet another area of differing opinions was the RI/NASA practice of introducing criticality 1/1 failures, such as line breaks or leaks, as a second failure, thereby creating a 2/1R criticality regardless of the first failure. IOA concludes that, in most cases, this is not consistent with the NSTS 22206 methodology or definitions.

The foregoing differences of opinion and interpretation are the primary causes of the different results of the IOA and RI/NASA FMEA/CIL. Figure 1 presents a comparison of the proposed Post 51-L NASA baseline, with the IOA recommended baseline, and any issues.

4.2 Assessment Results - Electrical/Electronic Components

Analyses of electrical/electronic components are a reflection of their corresponding mechanical components. As such, the same differences of opinion and interpretation resulted in similar differences in criticality assignment as for the mechanical components. These are explained in Section 4.1 above.

5.0 REFERENCES

Reference documentation available from NASA and Rockwell was used in the analysis. The documentation used included the following:

1. Main Propulsion System Workbook, 3/01/82
2. Main Propulsion System - Fluid Flows, 10/25/78
3. Shuttle Flight Operations Manual, Volume 8A, MPS, 8/31/81
4. Booster Systems Briefs, 10/01/84
5. SSME Training Data, Engine Orientation, 5/31/80
6. Instructions for Preparation of FMEA and CIL for the STS, NSTS 22206, 10/10/86
7. Space Shuttle Systems Handbook, Volumes 1-2, Revision C, DNC-5, 9/13/85
8. Integrated System Schematic, MPS, OV-099, 103, 104, 5/27/86
9. STS Mission Problem Tracking List
10. OV-099 Operational Configuration CIL, Mechanical/Fluid Systems, Book 1 of 4, 3/01/82
11. OV-099 Operational Configuration CIL, ECLSS/Power Systems, Book 2 of 4, 3/01/82
12. OV Operational Configuration CIL, Propulsion Systems, Book 3 of 4, 11/01/82
13. OV Operational Configuration CIL, Avionics Systems, Book 4 of 4, 11/01/82
14. Operations and Maintenance Requirements and Specifications, 12/17/85
15. Operations and Maintenance Requirements and Specification Document, 3/06/86
16. Problem Records, 7/22/86
17. Shuttle Orbiter OV-102 CDR, Safety Analysis Report, Volume 1, Management Summary, 4/27/77
18. Shuttle Orbiter OV-102 CDR, Safety Analysis Report, Volume II, Structures Systems, 4/27/77
19. Shuttle Orbiter OV-102 CDR, Safety Analysis Report, Volume III, Mechanical Systems, 4/27/77
20. Shuttle Orbiter OV-102 CDR, Safety Analysis Report, Volume IV, Propulsion Systems, 4/27/77
21. Shuttle Orbiter OV-102 CDR, Safety Analysis Report, Volume V, Power System, 4/27/77
22. Shuttle Orbiter OV-102 CDR, Safety Analysis Report, Volume VII, ECLSS, 4/27/77
23. Shuttle Orbiter OV-102 CDR, Safety Analysis Report, Volume VIII, Crew Station Systems, 4/27/77
24. FMEA - Lightweight and Heavyweight Tanks, 7/20/81
25. Integrated System Schematic, OV-102, MPS, 10/26/79
26. Crew Software Interface, CSI 2102, 9/30/84

27. Rockwell International Component Specifications:

- a. MC271-0073, LH₂ Engine Feed Line Assembly, 10/26/83
- b. MC271-0074, LO₂ Engine Feed Line Assembly, 11/07/83
- c. MC271-0075, LH₂ Line Assembly, 5/28/80
- d. MC271-0076, LH₂/LO₂ Fill & Drain Line Assembly, 12/02/83
- e. MC276-0003, 1 Inch GHE & GN2 Disconnect, 1/11/85
- f. MC276-0004, 1.5 Inch LO₂/LH₂ Disconnect, 1/04/85
- g. MC276-0005, LO₂/LH₂ Orbiter to Ground Fill & Drain Disconnect, 4/18/83
- h. MC276-0032, Test Point Couplings, 2/10/75
- i. MC280-0017, H₂ & O₂ Pressurant Flow Control Valve 4/11/84
- j. MC281-0030, LH₂ Recirculation Pump Assembly, 4/12/82
- k. MC284-0389, LH₂/LO₂ Orbiter to Tank Feed System Disconnect, 2/01/82
- l. MC284-0390, LH₂ Orbiter to Tank Recirculation Disconnect, 7/27/79
- m. MC284-0391, GH₂/GO₂ Orbiter to Tank Disconnect, 10/25/79
- n. MC284-0395, LO₂/LH₂ 1.5/2 Inch Shutoff Valve, 6/27/79
- o. MC284-0396, Propellant Shutoff Prevalve, 7/24/82
- p. MC284-0397, Propellant Fill & Drain Valve, 6/22/84
- q. MC284-0403, Two Way Solenoid Valve, 6/24/80
- r. MC284-0406, LO₂/LH₂ Relief Shutoff Valve, 5/05/76
- s. ME284-0479, Engine Isolation Check Valve, 8/20/80
- t. MC284-0501, Engine Isolation Check Valve, 1/31/83
- u. MC284-0515, Dual Check Valve, 11/11/82
- v. MC432-0205, LO₂/LH₂ Level Point Sensor, 4/15/81
- w. ME284-0472, HE Check Valve, 4/04/80
- x. MC284-0404, 3 Way HE Solenoid Valve, 4/01/75
- y. MC284-0533, HE Regulator, 11/13/79
- z. MC284-0399, LO₂ Manif Repress Regulator
- aa. MC284-0398, HE Relief Valve, 12/14/77
- bb. MC282-0082, HE Supply Tank, 12/14/76
- cc. MC282-0070, LO₂ Prevalve Pneu Accumulator, 10/31/75
- dd. ME276-0032, Test Point Coupling, 2/10/75
- ee. ME284-0474, LH₂ 3/8 Inch Relief Valve, 9/10/74
- ff. ME286-0056, HE Supply Filter, 11/04/74
- gg. VO70-451756, Pneu HE Panel 4 Test Port
- hh. VO70-415532, LH₂ Repress Reg Outlet Test Port, 12/08/75
- ii. VO70-415568, LO₂ Repress Reg Outlet Test Port, 5/17/76
- jj. VO70-415585, Helium Fill Disc. Check Valve Test Port, 4/16/76
- kk. VO70-415446, LO₂ Prepress Disc. Check Valve Test Port, 3/11/76

- ll. VO70-415790, HE Supply Test Port, 4/13/78
- mm. VO70-415133, Check Valve CV24 Leakage Test Port, 8/21/80
- nn. VO70-415545, LH₂ Feed Manif RTLS Repress Orifice, 12/19/75
- oo. VO70-414548, LH₂ Pressurization System Test Port Fittings, 3/25/76
- pp. VO70-415468, LO₂ Relief System Test Port Fitting, 7/13/77
- qq. VO70-415552, GO₂ Pressurization Manifold Orifice Assembly, 3/05/76

**APPENDIX A
ACRONYMS**

AFV	-	Anti-Flood Valve
ASI	-	Augmented Spark Igniter
ATVC	-	Ascent Thrust Vector Control
CCV	-	Chamber Coolant Valve
CCVA	-	Chamber Coolant Valve Assembly
EIU	-	Engine Interface Unit
EMR	-	Engine Mixture Ratio
ET	-	External Tank
FBV	-	Fuel Bleed Valve
FPB	-	Fuel Preburner
FPL	-	Full Power Level
FPOV	-	Fuel Preburner Oxidizer Valve
GCV	-	Gaseous Oxygen Control Valve
GH2	-	Gaseous Hydrogen
GHe	-	Gaseous Helium
GN2	-	Gaseous Nitrogen
GND	-	Ground
GO2	-	Gaseous Oxygen
GSE	-	Ground Support Equipment
H2	-	Hydrogen
He	-	Helium
HEX	-	Heat Exchanger
HGM	-	Hot Gas Manifold
HPFT	-	High Pressure Fuel Turbopump
HPOT	-	High Pressure Oxidizer Turbopump
HPV	-	Helium Precharge Valve
I/C	-	Interconnect
ISP	-	Specific Impulse
LH2	-	Liquid Hydrogen
LO2	-	Liquid Oxygen
LOX	-	Liquid Oxygen
LPFT	-	Low Pressure Fuel Turbopump
LPOT	-	Low Pressure Oxidizer Turbopump
LPS	-	Launch Processor System
		Launch Processing System
MANF	-	Manifold
MCC	-	Main Combustion Chamber
ME	-	Main Engine
MEC	-	Master Events Controller
MECO	-	Main Engine Cutoff
MFV	-	Main Fuel Valve
MOV	-	Main Oxidizer Valve
MPL	-	Minimum Power Level
MPS	-	Main Propulsion System
MVA	-	Main Valve Actuator
NC	-	Normally Closed
NO	-	Normally Open
NPSP	-	Net Positive Suction Pressure

ACRONYMS

OBV	-	Oxidizer Bleed Valve
OPB	-	Oxidizer Preburner
OPOV	-	Oxidizer Preburner Oxidizer Valve
PAV	-	Pressure Actuated Valve
P/B	-	Preburner
PBVA	-	Propellant Bleed Valve Assembly
Pc	-	Chamber Pressure
PCI	-	Potential Critical Item
PCV	-	Purge Check Valves
PMS	-	Propellant Management Subsystem
POP	-	Preburner Oxidizer Pump
RIV	-	Recirculation Isolation Valve
RPC	-	Remote Power Controller
RPL	-	Rated Power Level
SRB	-	Solid Rocket Booster
SSME	-	Space Shuttle Main Engine
SSMEC	-	SSME Controller

APPENDIX B

DEFINITIONS, GROUND RULES, AND ASSUMPTIONS

- B.1 Definitions
- B.2 Project Level Ground Rules and Assumptions
- B.3 Subsystem-Specific Ground Rules and Assumptions

**APPENDIX B
DEFINITIONS, GROUND RULES, AND ASSUMPTIONS**

B.1 Definitions

Definitions contained in NSTS 22206, Instructions For Preparation of FMEA/CIL, 10 October 1986, were used with the following amplifications and additions.

INTACT ABORT DEFINITIONS:

RTLS - begins at transition to OPS 6 and ends at transition to OPS 9, post-flight

TAL - begins at declaration of the abort and ends at transition to OPS 9, post-flight

AOA - begins at declaration of the abort and ends at transition to OPS 9, post-flight

ATO - begins at declaration of the abort and ends at transition to OPS 9, post-flight

CREDIBLE (CAUSE) - an event that can be predicted or expected in anticipated operational environmental conditions. Excludes an event where multiple failures must first occur to result in environmental extremes

CONTINGENCY CREW PROCEDURES - procedures that are utilized beyond the standard malfunction procedures, pocket checklists, and cue cards

EARLY MISSION TERMINATION - termination of onorbit phase prior to planned end of mission

EFFECTS/RATIONALE - description of the case which generated the highest criticality

HIGHEST CRITICALITY - the highest functional criticality determined in the phase-by-phase analysis

MAJOR MODE (MM) - major sub-mode of software operational sequence (OPS)

MC - Memory Configuration of Primary Avionics Software System (PASS)

MISSION - assigned performance of a specific Orbiter flight with payload/objective accomplishments including orbit phasing and altitude (excludes secondary payloads such as GAS cans, middeck P/L, etc.)

MULTIPLE ORDER FAILURE - describes the failure due to a single cause or event of all units which perform a necessary (critical) function

OFF-NOMINAL CREW PROCEDURES - procedures that are utilized beyond the standard malfunction procedures, pocket checklists, and cue cards

OPS - software operational sequence

PRIMARY MISSION OBJECTIVES - worst case primary mission objectives are equal to mission objectives

PHASE DEFINITIONS:

PRELAUNCH PHASE - begins at launch count-down Orbiter power-up and ends at moding to OPS Major Mode 102 (liftoff)

LIFTOFF MISSION PHASE - begins at SRB ignition (MM 102) and ends at transition out of OPS 1 (Synonymous with ASCENT)

ONORBIT PHASE - begins at transition to OPS 2 or OPS 8 and ends at transition out of OPS 2 or OPS 8

DEORBIT PHASE - begins at transition to OPS Major Mode 301 and ends at first main landing gear touchdown

LANDING/SAFING PHASE - begins at first main gear touchdown and ends with the completion of post-landing safing operations

APPENDIX B
DEFINITIONS, GROUND RULES, AND ASSUMPTIONS

B.2 IOA Project Level Ground Rules and Assumptions

The philosophy embodied in NSTS 22206, Instructions for Preparation of FMEA/CIL, 10 October 1986, was employed with the following amplifications and additions.

1. The operational flight software is an accurate implementation of the Flight System Software Requirements (FSSRs).

RATIONALE: Software verification is out-of-scope of this task.

2. After liftoff, any parameter which is monitored by system management (SM) or which drives any part of the Caution and Warning System (C&W) will support passage of Redundancy Screen B for its corresponding hardware item.

RATIONALE: Analysis of on-board parameter availability and/or the actual monitoring by the crew is beyond the scope of this task.

3. Any data employed with flight software is assumed to be functional for the specific vehicle and specific mission being flown.

RATIONALE: Mission data verification is out-of-scope of this task.

4. All hardware (including firmware) is manufactured and assembled to the design specifications/drawings.

RATIONALE: Acceptance and verification testing is designed to detect and identify problems before the item is approved for use.

5. All Flight Data File crew procedures will be assumed performed as written, and will not include human error in their performance.

RATIONALE: Failures caused by human operational error are out-of-scope of this task.

6. All hardware analyses will, as a minimum, be performed at the level of analysis existent within NASA/Prime Contractor Orbiter FMEA/CILs, and will be permitted to go to greater hardware detail levels but not lesser.

RATIONALE: Comparison of IOA analysis results with other analyses requires that both analyses be performed to a comparable level of detail.

7. Verification that a telemetry parameter is actually monitored during AOS by ground-based personnel is not required.

RATIONALE: Analysis of mission-dependent telemetry availability and/or the actual monitoring of applicable data by ground-based personnel is beyond the scope of this task.

8. The determination of criticalities per phase is based on the worst case effect of a failure for the phase being analyzed. The failure can occur in the phase being analyzed or in any previous phase, whichever produces the worst case effects for the phase of interest.

RATIONALE: Assigning phase criticalities ensures a thorough and complete analysis.

9. Analysis of wire harnesses, cables, and electrical connectors to determine if FMEAs are warranted will not be performed nor FMEAs assessed.

RATIONALE: Analysis was substantially complete prior to NSTS 22206 ground rule redirection.

10. Analysis of welds or brazed joints that cannot be inspected will not be performed nor FMEAs assessed.

RATIONALE: Analysis was substantially complete prior to NSTS 22206 ground rule redirection.

11. Emergency system or hardware will include burst discs and will exclude the EMU Secondary Oxygen Pack (SOP), pressure relief valves and the landing gear pyrotechnics.

RATIONALE: Clarify definition of emergency systems to ensure consistency throughout IOA project.

APPENDIX B

B.3 SUBSYSTEM SPECIFIC GROUND RULES AND ASSUMPTIONS

The IOA was performed to the component/assembly level of the subsystem of the MPS. The analysis considered the worst case effects of the hardware/functional failure on the subsystem, mission, and crew/vehicle safety.

1. All like and unlike redundancy will be considered in determining functional criticality. The MPS function is to provide delta V for the vehicle to reach orbit. Since loss of 1 main engine during the early part of ascent requires a mission abort, any failure that results in the loss of 1 main engine will be considered loss of mission (Crit 2). Since, for most of the ascent, 2 engines are required for a successful abort, loss of 2 or 3 engines will be considered loss of life/vehicle (Crit 1).

RATIONALE: These failure modes are directly applicable to worst case MPS subsystem component analyses.

2. Only MPS Orbiter items will be analyzed for the MPS interface to the Ground, External Tank, and the Main Engines.

RATIONALE: Non-orbiter program hardware are not within the scope of this task.

3. Aborts are assumed to be caused by loss of an engine. Any failure within a component that can shut down an engine could leave only 1 engine in operation and therefore could lead to loss of vehicle (Crit 1).

RATIONALE: This failure mode is directly applicable to worst case MPS subsystem component analysis.

**APPENDIX C
DETAILED ASSESSMENT**

This section contains the IOA assessment worksheets generated during the assessment of this subsystem. The information on these worksheets resulted from the comparison of the RI/NASA FMEA/CIL (Post 51-L) to the IOA analysis worksheets in MDAC Working Paper 1.0-WP-VA86001-22 with additional worksheets in Appendix E. Each of these worksheets identifies the NASA FMEA being assessed, corresponding MDAC Analysis Worksheet ID (Appendix E), hardware item, criticality, redundancy screens, and recommendations. For each failure mode, the highest assessed hardware and functional criticality is compared and discrepancies noted as "N" in the compare row under the column where the discrepancy occurred.

LEGEND FOR IOA ASSESSMENT WORKSHEETS

Hardware Criticalities:

- 1 = Loss of life or vehicle
- 2 = Loss of mission or next failure of any redundant item (like or unlike) could cause loss of life/vehicle
- 3 = All others

Functional Criticalities:

- 1R = Redundant hardware items (like or unlike) all of which, if failed, could cause loss of life or vehicle
- 2R = Redundant hardware items (like or unlike) all of which, if failed, could cause loss of mission

Redundancy Screens A, B and C:

- P = Passed Screen
- F = Failed Screen
- NA = Not Applicable

NASA Data :

- Baseline = NASA FMEA/CIL
- New = Baseline with Proposed Post 51-L Changes

CIL Item :

- X = Included in CIL

Compare Row :

- N = Non compare for that column (deviation)

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/05/88
 ASSESSMENT ID: MPS-001X
 NASA FMEA #: 2025-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 1
 ITEM: FUSE (DIFFERENTIAL PRESSURE TRANSDUCER CIRCUIT)
 LEAD ANALYST: B. SLAUGHTER

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)

REMARKS:

ADEQUATE []
 INADEQUATE []

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/08/88
 ASSESSMENT ID: MPS-002X
 NASA FMEA #: 2000-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 2
 ITEM: REMOTE POWER CONTROLLERS, 3A (4)

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

ONLY AVAIL REF: MPS/EPDC FMEA REVIEW SUMMARY 8-17-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/08/88
 ASSESSMENT ID: MPS-003X
 NASA FMEA #: 2001-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 3
 ITEM: DIODES, 12A (2)

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

ONLY AVAIL REF: MPS/EPDC FMEA REVIEW SUMMARY 8-17-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/08/88
 ASSESSMENT ID: MPS-004X
 NASA FMEA #: 2001-3

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 4
 ITEM: DIODE, 12A (2)

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

ONLY AVAIL REF: MPS/EPDC FMEA REVIEW SUMMARY 8-17-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/08/88
 ASSESSMENT ID: MPS-005X
 NASA FMEA #: 2002-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 5
 ITEM: DIODES, 12A (2)

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

ONLY AVAIL REF: MPS/EPDC FMEA REVIEW SUMMARY 8-17-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/08/88
 ASSESSMENT ID: MPS-006X
 NASA FMEA #: 2002-3

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 6
 ITEM: DIODE, 12A (2)

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

ONLY AVAIL REF: MPS/EPDC FMEA REVIEW SUMMARY 8-17-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/08/88
 ASSESSMENT ID: MPS-007X
 NASA FMEA #: 2003-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 7
 ITEM: HYBRID DRIVER CONTROLLERS, TYPE I (2)

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

ONLY AVAIL REF: MPS/EPDC FMEA REVIEW SUMMARY 8-17-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/08/88
 ASSESSMENT ID: MPS-008X
 NASA FMEA #: 2004-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 8
 ITEM: HYBRID DRIVER CONTROLLERS, TYPE III (4)

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

ONLY AVAIL REF: MPS/EPDC FMEA REVIEW SUMMARY 8-17-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/09/88
 ASSESSMENT ID: MPS-009X
 NASA FMEA #: 2381-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 9
 ITEM: DIODES, 12A (2)

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

ONLY AVAIL REF: MPS/EPDC FMEA REVIEW SUMMARY 8-17-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/09/88
ASSESSMENT ID: MPS-010X
NASA FMEA #: 2381-3

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: EPD&C/MPS
MDAC ID: 10
ITEM: DIODE

LEAD ANALYST: B. SLAUGHTER

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)

[3 /1R] [P] [P] [P] [D]
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:
THE FAILURE IS READILY DETECTABLE.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/09/88
 ASSESSMENT ID: MPS-011X
 NASA FMEA #: 2038-5

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 11
 ITEM: TOGGLE SWITCH

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [X]
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/22/88
 ASSESSMENT ID: MPS-012X
 NASA FMEA #: 2263-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 12
 ITEM: HIGH POINT OPEN HDC (2)

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/25/88
ASSESSMENT ID: MPS-013X
NASA FMEA #: 2263-2

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: EPD&C/MPS
MDAC ID: 13
ITEM: HYBRID DRIVER CONTROLLER

LEAD ANALYST: B. SLAUGHTER

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)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:
FAILRUE IS DETECTABLE.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/25/88
 ASSESSMENT ID: MPS-014X
 NASA FMEA #: 2267-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 14
 ITEM: FILL AND DRAIN OPEN SWITCH BLOCKING DIODE

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/25/88
 ASSESSMENT ID: MPS-015X
 NASA FMEA #: 2267-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 15
 ITEM: FILL AND DRAIN OPEN SWITCH BLOCKING DIODE

LEAD ANALYST: B. SLAUGHTER

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:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/25/88
 ASSESSMENT ID: MPS-016X
 NASA FMEA #: 2272-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 16
 ITEM: HIGH POINT OPEN SWITCH BLOCKING DIODES (2)

LEAD ANALYST: B. SLAUGHTER

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)

[3 /1R] [P] [P] [P] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

ONLY REF AVAIL: MPS/EPDC FMEA REVIEW SUMMARY 8-17-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/25/88
 ASSESSMENT ID: MPS-017X
 NASA FMEA #: 2272-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 17
 ITEM: HIGH POINT OPEN SWITCH BLOCKING DIODES (2)

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[P]	[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:

SECOND FAILURE COULD ALLOW GH2 TO ENTER SSME's AT IGNITION.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/25/88
ASSESSMENT ID: MPS-018X
NASA FMEA #: 2275-1

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: EPD&C/MPS
MDAC ID: 18
ITEM: FILL AND DRAIN LA1 MDM BLOCKING DIODE (1)

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

[3 /1R] [P] [P] [P] [D]
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

FAILURE WILL ELIMINATE REDUNDANCY AGAINST A PREMATURE CLOSE OF THE F/D VALVE. SECOND FAILURE CANNOT CLOSE THE VALVE BECAUSE OF BLOCKING DIODES AND MDM OPEN COMMANDS.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/25/88
 ASSESSMENT ID: MPS-019X
 NASA FMEA #: 2275-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 19
 ITEM: FILL AND DRAIN LA1 MDM BLOCKING DIODE (1)

LEAD ANALYST: B. SLAUGHTER

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:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/25/88
ASSESSMENT ID: MPS-020X
NASA FMEA #: 2278-1

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: EPD&C/MPS
MDAC ID: 20
ITEM: HIGH POINT LA1 MDM BLOCKING DIODE (2)

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:
SECOND FAILURE COULD LEAD TO GH2 INGESTION AT SSME START.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/25/88
 ASSESSMENT ID: MPS-021X
 NASA FMEA #: 2278-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 21
 ITEM: HIGH POINT LA1 MDM BLOCKING DIODE (2)

LEAD ANALYST: B. SLAUGHTER

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:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/25/88
 ASSESSMENT ID: MPS-022X
 NASA FMEA #: 202600-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 22
 ITEM: HIGH POINT MONITOR RESISTORS, 5.1K (3)

LEAD ANALYST: B. SLAUGHTER

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:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/25/88
ASSESSMENT ID: MPS-023X
NASA FMEA #: NA

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: EPD&C/MPS
MDAC ID: 23
ITEM: MDM OA1

LEAD ANALYST: B. SLAUGHTER

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 FAILURE INHIBITS MONITORING

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/26/88
 ASSESSMENT ID: MPS-024X
 NASA FMEA #: 2056A-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 24
 ITEM: OPEN SWITCH BLOCKING DIODE

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/26/88
 ASSESSMENT ID: MPS-025X
 NASA FMEA #: 2354A-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 25
 ITEM: LA1 MDM ISOLATION DIODE

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[P]	[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:

DIODE NOT SHOWN ON VS72-941102, SHT 14.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/26/88
ASSESSMENT ID: MPS-026X
NASA FMEA #: 2354A-2

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: EPD&C/MPS
MDAC ID: 26
ITEM: LA1 MDM ISOLATION DIODE

LEAD ANALYST: B. SLAUGHTER

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:

DIODE NOT SHOWN ON VS72-941102, SHT 14.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/25/88
 ASSESSMENT ID: MPS-027X
 NASA FMEA #: 2355A-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 27
 ITEM: OPEN SWITCH BLOCKING DIODE

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

DIODE NOT SHOWN ON VS72-941102, SHT 14.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/25/88
 ASSESSMENT ID: MPS-028X
 NASA FMEA #: 2355A-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 28
 ITEM: OPEN SWITCH BLOCKING DIODE

LEAD ANALYST: B. SLAUGHTER

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:

SHORTING OF THE OPEN CONTACT TO GROUND IN THIS SWITCH IS
 INFEASIBLE.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/25/88
 ASSESSMENT ID: MPS-029X
 NASA FMEA #: 2356A-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 29
 ITEM: OPEN MDM ISOLATION DIODE

LEAD ANALYST: B. SLAUGHTER

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:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/25/88
 ASSESSMENT ID: MPS-030X
 NASA FMEA #: 2357A-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 30
 ITEM: CLOSE SWITCH ISOLATION DIODE

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/26/88
 ASSESSMENT ID: MPS-031X
 NASA FMEA #: 2358A-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 31
 ITEM: CLOSE MDM ISOLATION DIODE

LEAD ANALYST: B. SLAUGHTER

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:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/26/88
 ASSESSMENT ID: MPS-032X
 NASA FMEA #: 2359A-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 32
 ITEM: TRANSIENT SUPPRESSION DIODES (2)

LEAD ANALYST: B. SLAUGHTER

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:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/26/88
 ASSESSMENT ID: MPS-033X
 NASA FMEA #: 2359A-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 33
 ITEM: TRANSIENT SUPPRESSION DIODES (2)

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

SHORT IN DIODE COULD LEAD TO LOSS OF VEHICLE.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/26/88
 ASSESSMENT ID: MPS-034X
 NASA FMEA #: 2360A-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 34
 ITEM: MONITORING RESISTORS, 2.2K (2)

LEAD ANALYST: B. SLAUGHTER

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:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/26/88
 ASSESSMENT ID: MPS-035X
 NASA FMEA #: 2372A-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 35
 ITEM: SWITCH SCAN BLEED RESISTORS, 1.8K (2)

LEAD ANALYST: B. SLAUGHTER

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:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/26/88
 ASSESSMENT ID: MPS-036X
 NASA FMEA #: NA

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 36
 ITEM: MDM OA2

LEAD ANALYST: B. SLAUGHTER

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-037X
 NASA FMEA #: NA

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 37
 ITEM: MDM LA1

LEAD ANALYST: B. SLAUGHTER

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)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

MDM LA1 NOT SHOWN ON VS72-941102, SHT 14.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/27/88
 ASSESSMENT ID: MPS-038X
 NASA FMEA #: 2060-5

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 38
 ITEM: TOGGLE SWITCH

LEAD ANALYST: B. SLAUGHTER

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:

LOSS OF ALL REDUNDANCY WILL ALLOW VALVE TO OPEN.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/27/88
 ASSESSMENT ID: MPS-039X
 NASA FMEA #: 2062-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 39
 ITEM: CLOSE HDC (2)

LEAD ANALYST: B. SLAUGHTER

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:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/27/88
 ASSESSMENT ID: MPS-040X
 NASA FMEA #: 2039-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 40
 ITEM: RPC C OUTPUT DIODE

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/27/88
 ASSESSMENT ID: MPS-041X
 NASA FMEA #: 2039-3

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 41
 ITEM: RPC C OUTPUT DIODE

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/28/88
 ASSESSMENT ID: MPS-042X
 NASA FMEA #: 2240A-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 42
 ITEM: DIODE, RPC CROSSOVER

LEAD ANALYST: B. SLAUGHTER

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:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/28/88
 ASSESSMENT ID: MPS-043X
 NASA FMEA #: 2240-3

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 43
 ITEM: DIODE, RPC CROSSOVER

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/28/88
ASSESSMENT ID: MPS-044X
NASA FMEA #: 2397-2

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: EPD&C/MPS
MDAC ID: 44
ITEM: RPC A OUTPUT DIODE

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

THE DIODE MIGHT BE CAPABLE OF CHECKOUT DURING NORMAL GROUND
TURNAROUND WITH NO DESIGN MODIFICATION.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/28/88
 ASSESSMENT ID: MPS-045X
 NASA FMEA #: 2397-3

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 45
 ITEM: RPC A OUTPUT DIODE

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/28/88
 ASSESSMENT ID: MPS-046X
 NASA FMEA #: N/A

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 46
 ITEM: POSITION INDICATOR SWITCH

LEAD ANALYST: B. SLAUGHTER

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: 1/20/88
 ASSESSMENT ID: MPS-047X
 NASA FMEA #: 2247-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 47
 ITEM: CLOSE HDC (TYPE I)

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

SERIES CONFIGURATION AND BISTABLE FEATURE PREVENT VALVE CLOSURE ON A SECOND FAILURE.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/20/88
 ASSESSMENT ID: MPS-048X
 NASA FMEA #: 2246-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 48
 ITEM: OPEN HDC (TYPE I)

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/20/88
 ASSESSMENT ID: MPS-049X
 NASA FMEA #: 2245-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 49
 ITEM: CLOSE HDC, TYPE III (2)

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/20/88
 ASSESSMENT ID: MPS-050X
 NASA FMEA #: 2249-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 50
 ITEM: DIODE, CLOSE RPC B OUTPUT

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/20/88
 ASSESSMENT ID: MPS-051X
 NASA FMEA #: 2249-3

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 51
 ITEM: DIODE, CLOSE RPC B OUTPUT

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/21/88
 ASSESSMENT ID: MPS-052X
 NASA FMEA #: 2251-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 52
 ITEM: DIODE, CLOSING CROSSOVER

LEAD ANALYST: B. SLAUGHTER

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:
 FAILURE MAY NOT BE DETECTED.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/20/88
 ASSESSMENT ID: MPS-053X
 NASA FMEA #: 2251-3

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 53
 ITEM: DIODE, CLOSING CROSSOVER

LEAD ANALYST: B. SLAUGHTER

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)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

FAILURE CAN SHORT ALL CLOSING COMMANDS TO GROUND, PREVENTING VALVE CLOSURE. ET SEP WITH VALVE OPEN CAN CAUSE LOSS OF VEHICLE. MECHANICAL LINKAGE PROVIDES REDUNDANCY.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/20/88
 ASSESSMENT ID: MPS-054X
 NASA FMEA #: 2248-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 54
 ITEM: DIODE, OPEN RPC B OUTPUT

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

02

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/21/88
 ASSESSMENT ID: MPS-055X
 NASA FMEA #: 2248-3

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 55
 ITEM: DIODE, OPEN RPC B OUTPUT

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/21/88
 ASSESSMENT ID: MPS-056X
 NASA FMEA #: 2250-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 56
 ITEM: DIODE, OPEN CROSSOVER

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [X]
 INADEQUATE []

REMARKS:

ASSESSMENT IS FOR 1 OPEN CROSSOVER DIODE, 12A.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/21/88
 ASSESSMENT ID: MPS-057X
 NASA FMEA #: 2250-3

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 57
 ITEM: DIODE, OPEN CROSSOVER

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

FAILURE CAN SHORT ALL OPEN COMMANDS TO GROUND, VENTING OPENING PRESSURE AND ALLOWING VALVE TO CLOSE DURING MAIN ENGINE BURN. BISTABLE FEATURE IS THE ONLY REDUNDANCY AGAINST PREMATURE CLOSURE.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/21/88
 ASSESSMENT ID: MPS-058X
 NASA FMEA #: 2254-1

NASA DATA:
 BASELINE []
 NEW []

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 58
 ITEM: OPEN POSITION SWITCH MONITOR RESISTOR (1)

LEAD ANALYST: B. SLAUGHTER

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:
 RESISTOR NOT SHOWN ON VS72-941102, SHT 15.
 REF: 05-6J-200900-1

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/21/88
 ASSESSMENT ID: MPS-059X
 NASA FMEA #: 2244-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 59
 ITEM: OPEN HDC, TYPE III (2)

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [X]
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/21/88
 ASSESSMENT ID: MPS-060X
 NASA FMEA #: 2398-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 60
 ITEM: DIODE, CLOSE RPC C OUTPUT

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/21/88
 ASSESSMENT ID: MPS-061X
 NASA FMEA #: 2398-3

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 61
 ITEM: DIODE, CLOSE RPC C OUTPUT

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

SECOND FAILURE CAN SHORT ALL CLOSE COMMANDS TO GROUND, PREVENTING VALVE CLOSURE. MECAHNICAL LINKAGE PROVIDES REDUNDANCY.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/21/88
 ASSESSMENT ID: MPS-062X
 NASA FMEA #: 2399-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 62
 ITEM: DIODE, OPEN RPC C OUTPUT

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/21/88
 ASSESSMENT ID: MPS-063X
 NASA FMEA #: 2399-3

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 63
 ITEM: DIODE, OPEN RPC C OUTPUT

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

ONLY REF: MPS/EPDC FMEA REVIEW SUMMARY 8/17/87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/08/88
 ASSESSMENT ID: MPS-064X
 NASA FMEA #: 2100-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 64
 ITEM: OPEN HDC

LEAD ANALYST: B. SLAUGHTER

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)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

THE FAILURE WILL PREVENT VALVE CLOSURE DURING ET SEPARATION. A
 FAILURE OF MECHANICAL REDUNDANCY COULD CAUSE ET/ORBITER
 RECONTACT.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/08/88
 ASSESSMENT ID: MPS-065X
 NASA FMEA #: 2100-3

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 65
 ITEM: OPEN HDC

LEAD ANALYST: B. SLAUGHTER

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:

ANALYSIS IS FOR ABORT ONLY. THE FAILURE PREVENTS PROPELLANT ISOLATION FROM FAILED MAIN ENGINE.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/08/88
 ASSESSMENT ID: MPS-066X
 NASA FMEA #: 2102-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 66
 ITEM: CLOSE HDC

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/08/88
ASSESSMENT ID: MPS-067X
NASA FMEA #: 2101-3

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: EPD&C/MPS
MDAC ID: 67
ITEM: CLOSE HDC

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

FMEA NO. 05-6J-2101-3 REV 10/10/87 IS FOR THE ABORT CASE ONLY.
THIS ASSESSMENT IS FOR THE ABORT CASE ONLY. INADVERTENT POWER TO
THE CLOSE SOLENOID DOES NOT CAUSE A LOSS OF CLOSE SOLENOID POWER.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/08/88
 ASSESSMENT ID: MPS-068X
 NASA FMEA #: NA

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 68
 ITEM: MDM OA3

LEAD ANALYST: B. SLAUGHTER

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: 1/27/88
 ASSESSMENT ID: MPS-070X
 NASA FMEA #: 2026-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 70
 ITEM: HDC - GND C/O COMMAND POWER (5)

LEAD ANALYST: B. SLAUGHTER

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:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/27/88
 ASSESSMENT ID: MPS-071X
 NASA FMEA #: 2030-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 71
 ITEM: MONITOR RESISTORS (3)

LEAD ANALYST: B. SLAUGHTER

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:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/27/88
 ASSESSMENT ID: MPS-072X
 NASA FMEA #: 2031-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 72
 ITEM: TRANSIENT SUPPRESSION DIODES (3)

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/27/88
 ASSESSMENT ID: MPS-073X
 NASA FMEA #: 2031-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 73
 ITEM: ZENER DIODES (3)

LEAD ANALYST: B. SLAUGHTER

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:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/27/88
 ASSESSMENT ID: MPS-074X
 NASA FMEA #: 2032-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 74
 ITEM: HDC, RELAY CONTROL POWER (3)

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/27/88
 ASSESSMENT ID: MPS-075X
 NASA FMEA #: 2032-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 75
 ITEM: HDC, RELAY CONTROL POWER (3)

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

NASA DOES NOT CALL THE FAILURE OF A TRANSDUCER AND THE SWITCH TO
 STANDBY TRANSDUCER A FAILURE.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/27/88
 ASSESSMENT ID: MPS-076X
 NASA FMEA #: 2033-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 76
 ITEM: RELAY (3)

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/27/88
 ASSESSMENT ID: MPS-077X
 NASA FMEA #: 2033-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 77
 ITEM: RELAY (3)

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/27/88
 ASSESSMENT ID: MPS-078X
 NASA FMEA #: 2034-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 78
 ITEM: BLOCKING DIODE

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

A SECOND FAILURE WILL NOT OVERPRESSURIZE THE ET.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/27/88
ASSESSMENT ID: MPS-079X
NASA FMEA #: 2034-2

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: EPD&C/MPS
MDAC ID: 79
ITEM: BLOCKING DIODE

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[F]	[F]	[P]	[X] *
IOA	[3 /1R]	[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 SECOND FAILURE WILL NOT OVERPRESSURIZE THE ET, BUT A THIRD FAILURE COULD CAUSE ET OVERPRESSURIZATION.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/27/88
 ASSESSMENT ID: MPS-080X
 NASA FMEA #: 2035-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 80
 ITEM: TOGGLE SWITCH

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/27/88
 ASSESSMENT ID: MPS-081X
 NASA FMEA #: 2035-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 81
 ITEM: TOGGLE SWITCH

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/27/88
 ASSESSMENT ID: MPS-082X
 NASA FMEA #: 2035-3

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 82
 ITEM: TOGGLE SWITCH

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/27/88
 ASSESSMENT ID: MPS-083X
 NASA FMEA #: 2036-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 83
 ITEM: SWITCH BLOCKING DIODES (6)

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/27/88
 ASSESSMENT ID: MPS-084X
 NASA FMEA #: 2036-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 84
 ITEM: SWITCH BLOCKING DIODE

LEAD ANALYST: B. SLAUGHTER

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:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/27/88
 ASSESSMENT ID: MPS-085X
 NASA FMEA #: 2042-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 85
 ITEM: SWITCH SCAN MONITOR RESISTOR

LEAD ANALYST: B. SLAUGHTER

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:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/27/88
 ASSESSMENT ID: MPS-086X
 NASA FMEA #: 2043-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 86
 ITEM: SWITCH SCAN BLEED RESISTOR

LEAD ANALYST: B. SLAUGHTER

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:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/27/88
 ASSESSMENT ID: MPS-087X
 NASA FMEA #: 2235-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 87
 ITEM: SW SCAN DIODES (3)

LEAD ANALYST: B. SLAUGHTER

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:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/27/88
 ASSESSMENT ID: MPS-088X
 NASA FMEA #: 2235-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 88
 ITEM: SWITCH SCAN DIODES (3)

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/27/88
 ASSESSMENT ID: MPS-089X
 NASA FMEA #: 2236-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 89
 ITEM: MDM INHIBIT COMMAND DIODES (6)

LEAD ANALYST: B. SLAUGHTER

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)

[3 /1R] [P] [P] [P] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/27/88
 ASSESSMENT ID: MPS-090X
 NASA FMEA #: 2236-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 90
 ITEM: MDM INHIBIT COMMAND DIODES (6)

LEAD ANALYST: B. SLAUGHTER

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:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/09/88
 ASSESSMENT ID: MPS-091X
 NASA FMEA #: 2340-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 91
 ITEM: LOCK RPC (2)

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

NASA FMEA NO. 05-6J-2340-1 REV. 10/10/87 CONTAINS TEXT EXPLAINING THAT THIS ITEM FAILS SCREEN B. THIS TEXT SHOULD BE DELETED.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/10/88
 ASSESSMENT ID: MPS-092X
 NASA FMEA #: 2340-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 92
 ITEM: LOCK RPC (2)

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

NASA FMEA NO. 05-6J-2340-2 REV. 10/10/87 CONTAINS TEXT EXPLAINING
 THAT THIS ITEM FAILS SCREEN B. THIS TEXT SHOULD BE DELETED.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/10/88
 ASSESSMENT ID: MPS-093X
 NASA FMEA #: 2341-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 93
 ITEM: UNLOCK RPC (2)

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

NASA FMEA NO. 05-6J-2341-1 REV. 10/10/87 CONTAINS TEXT EXPLAINING THAT THIS ITEM FAILS SCREEN B. THIS TEXT SHOULD BE DELETED.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/10/88
ASSESSMENT ID: MPS-094X
NASA FMEA #: 2341-2

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: EPD&C/MPS
MDAC ID: 94
ITEM: UNLOCK RPC (2)

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

NASA FMEA NO. 05-6J-2341-2 REV. 10/10/87 CONTAINS TEXT EXPLAINING THAT THIS ITEM FAILS SCREEN B. THIS TEXT SHOULD BE DELETED.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/10/88
 ASSESSMENT ID: MPS-095X
 NASA FMEA #: 2342-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 95
 ITEM: LOCK HDC I

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

NASA FMEA NO. 05-6J-2342-1 REV. 10/10/87 CONTAINS TEXT EXPLAINING THAT THIS ITEM FAILS SCREEN B. THIS TEXT SHOULD BE DELETED.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/10/88
 ASSESSMENT ID: MPS-096X
 NASA FMEA #: 2342-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 96
 ITEM: LOCK HDC I

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

NASA FMEA NO. 05-6J-2342-2 REV. 10/10/87 CONTAINS TEXT EXPLAINING THAT THIS ITEM FAILS SCREEN B. THIS TEXT SHOULD BE DELETED.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/10/88
 ASSESSMENT ID: MPS-097X
 NASA FMEA #: 2343-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 97
 ITEM: UNLOCK HDC I

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

NASA FMEA NO. 05-6J-2343-1 REV. 10/10/87 CONTAINS TEXT EXPLAINING THAT THIS ITEM FAILS SCREEN B. THIS TEXT SHOULD BE DELETED.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/10/88
 ASSESSMENT ID: MPS-098X
 NASA FMEA #: 2343-2

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 98
 ITEM: UNLOCK HDC I

LEAD ANALYST: B. SLAUGHTER

NASA DATA:
 BASELINE []
 NEW [X]

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

NASA FMEA NO. 05-6J-2343-2 REV. 10/10/87 CONTAINS TEXT EXPLAINING THAT THIS ITEM FAILS SCREEN B. THIS TEXT SHOULD BE DELETED.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/10/88
 ASSESSMENT ID: MPS-099X
 NASA FMEA #: 2344-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 99
 ITEM: LOCK HDC III (2)

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/10/88
 ASSESSMENT ID: MPS-100X
 NASA FMEA #: 2344-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 100
 ITEM: LOCK HDC III (2)

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/10/88
 ASSESSMENT ID: MPS-101X
 NASA FMEA #: 2345-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 101
 ITEM: UNLOCK HDC III (2)

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/10/88
ASSESSMENT ID: MPS-102X
NASA FMEA #: 2345-2

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: EPD&C/MPS
MDAC ID: 102
ITEM: UNLOCK HDC III (2)

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/10/88
 ASSESSMENT ID: MPS-103X
 NASA FMEA #: 2346-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 103
 ITEM: LOCK RPC C OUTPUT DIODE

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/10/88
 ASSESSMENT ID: MPS-104X
 NASA FMEA #: 2346-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 104
 ITEM: LOCK RPC C OUTPUT DIODE

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/10/88
 ASSESSMENT ID: MPS-105X
 NASA FMEA #: 2346-3

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 105
 ITEM: LOCK RPC C OUTPUT DIODE

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

NASA FMEA NO 05-6J-2346-3 REV 11/4/87 CONTAINS TEXT EXPLAINING THAT THIS ITEM FAILS SCREEN B. THIS TEXT SHOULD BE DELETED.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/10/88
 ASSESSMENT ID: MPS-106X
 NASA FMEA #: 2347-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 106
 ITEM: UNLOCK RPC B OUTPUT DIODE

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/10/88
 ASSESSMENT ID: MPS-107X
 NASA FMEA #: 2347-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 107
 ITEM: UNLOCK RPC B OUTPUT DIODE

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/10/88
 ASSESSMENT ID: MPS-108X
 NASA FMEA #: 2347-3

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 108
 ITEM: UNLOCK RPC B OUTPUT DIODE

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

NASA FMEA NO 05-6J-2347-3 REV 11/19/87 CONTAINS TEXT EXPLAINING
 THAT THIS ITEM FAILS SCREEN B. THIS TEXT SHOULD BE DELETED.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/10/88
 ASSESSMENT ID: MPS-109X
 NASA FMEA #: 2348-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 109
 ITEM: LOCK RPC CROSSOVER DIODE

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/10/88
ASSESSMENT ID: MPS-110X
NASA FMEA #: 2348-2

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: EPD&C/MPS
MDAC ID: 110
ITEM: LOCK RPC CROSSOVER DIODE

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/10/88
 ASSESSMENT ID: MPS-111X
 NASA FMEA #: 2348-3

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 111
 ITEM: LOCK RPC CROSSOVER DIODE

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

NASA FMEA NO 05-6J-2348-3 REV 11/04/87 CONTAINS TEXT EXPLAINING THAT THIS ITEM FAILS SCREEN B. THIS TEXT SHOULD BE DELETED.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/10/88
 ASSESSMENT ID: MPS-112X
 NASA FMEA #: 2349-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 112
 ITEM: UNLOCK RPC CROSSOVER DIODE

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/10/88
 ASSESSMENT ID: MPS-113X
 NASA FMEA #: 2349-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 113
 ITEM: UNLOCK RPC CROSSOVER DIODE

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/10/88
 ASSESSMENT ID: MPS-114X
 NASA FMEA #: 2349-3

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 114
 ITEM: UNLOCK RPC CROSSOVER DIODE

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/10/88
 ASSESSMENT ID: MPS-115X
 NASA FMEA #: 2350-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 115
 ITEM: TRANSIENT SUPPRESSION DIODES (2)

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 /3]	[NA]	[NA]	[NA]	[] *
IOA	[3 /1R]	[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:
 REF: MPS-115X

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/10/88
ASSESSMENT ID: MPS-116X
NASA FMEA #: 2351-1

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: EPD&C/MPS
MDAC ID: 116
ITEM: UNLOCK POSITION SWITCH MONITOR RESISTORS (2)

LEAD ANALYST: B. SLAUGHTER

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

ONLY AVAIL REF: MPS/EPDC FMEA REVIEW SUMMARY 8-17-87. THE
FAILURE CAUSES A LOSS OF MONITORING CAPABILITY.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/10/88
 ASSESSMENT ID: MPS-117X
 NASA FMEA #: 2352-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 117
 ITEM: LOCK POSITION SWITCH MONITOR RESISTORS (2)

LEAD ANALYST: B. SLAUGHTER

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:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/10/88
 ASSESSMENT ID: MPS-118X
 NASA FMEA #: 2353-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 118
 ITEM: RPC AND SOLENOID POWER MONITOR RESISTORS (6)

LEAD ANALYST: B. SLAUGHTER

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:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/10/88
 ASSESSMENT ID: MPS-119X
 NASA FMEA #: 2376-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 119
 ITEM: LOCK RPC B OUTPUT DIODE

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/11/88
 ASSESSMENT ID: MPS-120X
 NASA FMEA #: 2376-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 120
 ITEM: LOCK RPC B OUTPUT DIODE

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/11/88
ASSESSMENT ID: MPS-121X
NASA FMEA #: 2376-3

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: EPD&C/MPS
MDAC ID: 121
ITEM: LOCK RPC B OUTPUT DIODE

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

NASA FMEA NO 05-6J-2376-3 REV 11/04/87 CONTAINS TEXT EXPLAINING THAT THIS ITEM FAILS SCREEN B. THIS TEXT SHOULD BE DELETED.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/11/88
 ASSESSMENT ID: MPS-122X
 NASA FMEA #: 2377-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 122
 ITEM: UNLOCK RPC C OUTPUT DIODE

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/11/88
 ASSESSMENT ID: MPS-123X
 NASA FMEA #: 2377-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 123
 ITEM: UNLOCK RPC C OUTPUT DIODE

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/11/88
 ASSESSMENT ID: MPS-124X
 NASA FMEA #: 2377-3

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 124
 ITEM: UNLOCK RPC C OUTPUT DIODE

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/10/88
 ASSESSMENT ID: MPS-125X
 NASA FMEA #: 2378-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 125
 ITEM: BLEED RESISTORS (4)

LEAD ANALYST: B. SLAUGHTER

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:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
 ASSESSMENT ID: MPS-128X
 NASA FMEA #: 2198-4

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 128
 ITEM: LH2 PREVALVE TOGGLE SWITCHES (3)

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
 ASSESSMENT ID: MPS-129X
 NASA FMEA #: 2198-5

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 129
 ITEM: LH2 PREVALVE TOGGLE SWITCHES (3)

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
 ASSESSMENT ID: MPS-130X
 NASA FMEA #: 2205-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 130
 ITEM: LH2 PREVALVES OPEN COMMAND B RPC OUTPUT DIODES,
 12A (3)

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
 ASSESSMENT ID: MPS-131X
 NASA FMEA #: 2205-3

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 131
 ITEM: LH2 PREVALVES OPEN COMMAND B RPC OUTPUT DIODES,
 12A (3)

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
 ASSESSMENT ID: MPS-132X
 NASA FMEA #: 2206-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 132
 ITEM: LH2 PREVALVE OPEN RPC CROSSOVER DIODES, 12A (3)

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
 ASSESSMENT ID: MPS-133X
 NASA FMEA #: 2206-3

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 133
 ITEM: LH2 PREVALVE OPEN RPC CROSSOVER DIODES, 12A (3)

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
 ASSESSMENT ID: MPS-134X
 NASA FMEA #: 2207-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 134
 ITEM: LH2 PREVALVE CLOSE COMMAND A RPC OUTPUT DIODES,
 12A (3)

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
 ASSESSMENT ID: MPS-135X
 NASA FMEA #: 2207-3

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 135
 ITEM: LH2 PREVALVE CLOSE COMMAND A RPC OUTPUT DIODES,
 12A (3)

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
 ASSESSMENT ID: MPS-136X
 NASA FMEA #: 2208-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 136
 ITEM: LH2 PREVALVES CLOSE RPC CROSSOVER DIODES, 12A
 (3)

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
 ASSESSMENT ID: MPS-138X
 NASA FMEA #: 2209-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 138
 ITEM: LH2 PREVALVES OPEN MDM BLOCKING DIODES (3)

LEAD ANALYST: B. SLAUGHTER

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:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
 ASSESSMENT ID: MPS-139X
 NASA FMEA #: 2210-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 139
 ITEM: LH2 PREVALVES CLOSE MDM BLOCKING DIODES (3)

LEAD ANALYST: B. SLAUGHTER

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:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
 ASSESSMENT ID: MPS-140X
 NASA FMEA #: 2211-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 140
 ITEM: LH2 PREVALVES OPEN MDM BLOCKING DIODES (3)

LEAD ANALYST: B. SLAUGHTER

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:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
 ASSESSMENT ID: MPS-141X
 NASA FMEA #: 2212-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 141
 ITEM: LH2 PREVALVE CLOSE MDM BLOCKING DIODES (3)

LEAD ANALYST: B. SLAUGHTER

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:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
 ASSESSMENT ID: MPS-142X
 NASA FMEA #: 2213-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 142
 ITEM: LH2 PREVALVES MAINSTAGE BLOCKING DIODES (6)

LEAD ANALYST: B. SLAUGHTER

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:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/01/88
 ASSESSMENT ID: MPS-143X
 NASA FMEA #: 2214-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 143
 ITEM: LH2 PREVALVES BLOCKING DIODE

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

[3 /1R] [P] [F] [P] [A]
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:
 THE FAILURE IS NOT DETECTABLE.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/01/88
 ASSESSMENT ID: MPS-144X
 NASA FMEA #: 2215-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 144
 ITEM: LH2 PREVALVE CLOSE SWITCH COMMAND A BLOCKING
 DIODES (3)

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

[3 /1R] [P] [F] [P] [A]
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

THE FAILURE IS NOT DETECTABLE

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/01/88
 ASSESSMENT ID: MPS-145X
 NASA FMEA #: 2216-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 145
 ITEM: LH2 PREVALVES OPEN SWITCH COMMAND C BLOCKING
 DIODES (3)

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

[3 /1R] [P] [F] [P] [A]
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/01/88
ASSESSMENT ID: MPS-146X
NASA FMEA #: 2217-2

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: EPD&C/MPS
MDAC ID: 146
ITEM: LH2 PREVALVES OPEN SWITCH COMMAND B BLOCKING
DIODES (3)

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

[3 /1R] [P] [F] [P] [A]
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:
THE FAILURE IS NOT DETECTABLE.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/01/88
ASSESSMENT ID: MPS-147X
NASA FMEA #: 2218-2

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: EPD&C/MPS
MDAC ID: 147
ITEM: LH2 PREVALVES CLOSE SWITCH B&C BLOCKING DIODES
(6)

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

[3 /1R] [P] [F] [P] [A]
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:
THE FAILURE IS NOT DETECTABLE.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/01/88
 ASSESSMENT ID: MPS-148X
 NASA FMEA #: 2219-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 148
 ITEM: LH2 PREVALVES OPEN SWITCH BLOCKING DIODES (6)

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

[3 /1R] [P] [F] [P] [A]
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:
 THE FAILURE IS NOT DETECTABLE.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/01/88
 ASSESSMENT ID: MPS-149X
 NASA FMEA #: 2220-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 149
 ITEM: LH2 PREVALVES OPEN SWITCH SCAN DIODES (9)

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/01/88
 ASSESSMENT ID: MPS-150X
 NASA FMEA #: 2221-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 150
 ITEM: LH2 PREVALVES CLOSE SWITCH SCAN DIODES (9)

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/01/88
ASSESSMENT ID: MPS-151X
NASA FMEA #: 2392-2

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: EPD&C/MPS
MDAC ID: 151
ITEM: LH2 PREVALVES OPEN COMMAND A RPC OUTPUT DIODES
(3)

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/01/88
ASSESSMENT ID: MPS-152X
NASA FMEA #: 2392-3

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: EPD&C/MPS
MDAC ID: 152
ITEM: LH2 PREVALVES OPEN COMMAND A RPC OUTPUT DIODES
(3)

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/01/88
 ASSESSMENT ID: MPS-153X
 NASA FMEA #: 2393-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 153
 ITEM: LH2 PREVALVES CLOSE COMMAND B RPC OUTPUT DIODES
 (3)

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/01/88
 ASSESSMENT ID: MPS-154X
 NASA FMEA #: 2393-3

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 154
 ITEM: LH2 PREVALVES CLOSE COMMAND B RPC OUTPUT DIODES
 (3)

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/20/88
ASSESSMENT ID: MPS-201X
NASA FMEA #: 0518-3

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 201
ITEM: LO2 TANK PRE-PRESS CHECK VALVE (CV16)

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]	[]
COMPARE	[/]	[]	[]	[]	[N]

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

EXTERNAL LEAKAGE OF GO2 FROM THIS CHECK VALVE WOULD CAUSE OVERPRESSURIZATION OF THE AFT COMPARTMENT AND BUCKLING OF THE LO2 TANK DUE TO ATMOSPHERIC FORCES ACTING ON AN UNPRESSURIZED TANK. 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-202X
NASA FMEA #: 0451-3

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 202
ITEM: LO2 BLEED CHECK VALVE (CV31, 33, 35)

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:

RI/NASA ANALYSIS APPLIES TO REENTRY PURGE. FAILURE MAY ALLOW
CONTAMINATION TO ENTER THE SYSTEM.
NASA INFORMATION IS BASED ON NASA FMEA/CIL REVIEW MEETING NOTES
(REF. J.E. BORCHES).

**APPENDIX C
ASSESSMENT WORKSHEET**

ASSESSMENT DATE: 1/20/88
 ASSESSMENT ID: MPS-203X
 NASA FMEA #: 0451-4

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 203
 ITEM: LO2 BLEED CHECK VALVE (CV31,33,35)

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]	[]
COMPARE	[/]	[]	[]	[]	[N]

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

NASA INFORMATION IS BASED ON THE RI/NASA CRITICAL ITEMS LIST OF 12-23-87 AND THE RI/NASA CIL WORKSHEET DATED 9-16-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/20/88
 ASSESSMENT ID: MPS-204X
 NASA FMEA #: 0519-5

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 204
 ITEM: GO2 PRESSURE FLOW CONTROL VALVE (LV53,54,55)

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]	[]
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: 1/21/88
 ASSESSMENT ID: MPS-205X
 NASA FMEA #: 0408-5

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 205
 ITEM: LO2 FEED (ORB/ET) DISCONNECT (PD1)

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]	[]
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: 1/21/88
 ASSESSMENT ID: MPS-206X
 NASA FMEA #: 0408-9

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 206
 ITEM: LO2 FEED (ORB/ET) DISCONNECT (PD1)

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]	[]
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: 1/21/88	NASA DATA:
ASSESSMENT ID: MPS-207X	BASELINE []
NASA FMEA #: 0408-10	NEW [X]

SUBSYSTEM: MPS
MDAC ID: 207
ITEM: LO2 FEED (ORB/ET) DISCONNECT (PD1)

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)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE	[]
INADEQUATE	[]

REMARKS:

FAILURE TO CLOSE IS ADDRESSED ON 0408-6. FAILURE OF THE INDICATOR WILL HAVE 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: 1/21/88
 ASSESSMENT ID: MPS-208X
 NASA FMEA #: 0408-12

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 208
 ITEM: LO2 FEED DISCONNECT (PD1)

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]	[]
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: 1/21/88
ASSESSMENT ID: MPS-209X
NASA FMEA #: 0803-1

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 209
ITEM: LO2 FEED DISCONNECT (PD1)

LEAD ANALYST: W.J. MCNICOLL

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

THIS FAILURE MODE SHOULD BE CONSIDERED UNDER 0408-5, LOSS OF POSITION INDICATION, OR 0408-10, ERRONEOUS INDICATION.
REF: RI/NASA CIL OF 12-23-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/21/88
 ASSESSMENT ID: MPS-210X
 NASA FMEA #: 0454-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 210
 ITEM: LO2 AND LH2 FEED DISCONNECT LATCH ASSEMBLY (ORB ONLY)

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]	[]
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 12-14-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/21/88
ASSESSMENT ID: MPS-211X
NASA FMEA #: 0454-3

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 211
ITEM: LO2 AND LH2 FEED DISCONNECT LATCH ASSEMBLY (ORB ONLY)

LEAD ANALYST: W.J. MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[P]	[P]	[X] *
IOA	[2 /1R]	[P]	[P]	[P]	[]
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: 1/21/88
ASSESSMENT ID: MPS-212X
NASA FMEA #: 0454-4

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 212
ITEM: LO2 AND LH2 FEED DISCONNECT LATCH ASSEMBLY (ORB ONLY)

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]	[]
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: 1/21/88
ASSESSMENT ID: MPS-213X
NASA FMEA #: 0454-5

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 213
ITEM: LO2 AND LH2 FEED DISCONNECT LATCH ASSEMBLY (ORB ONLY)

LEAD ANALYST: W.J. MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[P]	[P]	[X] *
IOA	[2 /1R]	[P]	[P]	[P]	[]
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: 1/21/88
ASSESSMENT ID: MPS-214X
NASA FMEA #: 0454-6

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 214
ITEM: LO2 AND LH2 FEED DISCONNECT LATCH ASSEMBLY (ORB ONLY)

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)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

FAILURE TO UNLOCK IS ADDRESSED ON 0454-3. FAILURE OF THE INDICATOR 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: 1/21/88
ASSESSMENT ID: MPS-215X
NASA FMEA #: 0454-7

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 215
ITEM: LO2 AND LH2 FEED DISCONNECT LATCH ASSEMBLY (ORB ONLY)

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]	[]
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: 1/21/88
 ASSESSMENT ID: MPS-216X
 NASA FMEA #: 0454-8

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 216
 ITEM: LO2 AND LH2 FEED DISCONNECT LATCH ASSEMBLY (ORB ONLY)

LEAD ANALYST: W.J. MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[NA]	[P]	[X] *
IOA	[2 /1R]	[P]	[NA]	[P]	[]
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: 1/21/88
ASSESSMENT ID: MPS-217X
NASA FMEA #: 0805-1

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 217
ITEM: LO2 AND LH2 FEED DISCONNECT LATCH ASSEMBLY (ORB ONLY)

LEAD ANALYST: W.J. MCNICOLL

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

THIS FAILURE SHOULD BE COVERED UNDER 0454-5, LOSS OF POSITION INDICATION, OR 0454-6, ERRONEOUS INDICATION. REF: RI/NASA CIL OF 12-23-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/22/88
 ASSESSMENT ID: MPS-218X
 NASA FMEA #: 0303-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 218
 ITEM: LO2 FILL AND DRAIN DISCONNECT (PD12)

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]	[]
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 12-14-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/22/88
 ASSESSMENT ID: MPS-219X
 NASA FMEA #: 0303-3

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 219
 ITEM: LO2 FILL AND DRAIN DISCONNECT (PD12)

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 (J.E. BORCHES).

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/22/88
 ASSESSMENT ID: MPS-220X
 NASA FMEA #: 0303-4

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 220
 ITEM: LO2 FILL AND DRAIN DISCONNECT (PD12)

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 (J.E. BORCHES).

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/22/88
 ASSESSMENT ID: MPS-221X
 NASA FMEA #: 0303-5

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 221
 ITEM: LO2 FILL AND DRAIN DISCONNECT (PD12)

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 (J.E. BORCHES).

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/25/88
 ASSESSMENT ID: MPS-222X
 NASA FMEA #: 0401-6

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 222
 ITEM: LO2 PREVALVE (PV1, 2, 3)

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 (J.E. BORCHES).

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/25/88
 ASSESSMENT ID: MPS-223X
 NASA FMEA #: 0401-10

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 223
 ITEM: LO2 PREVALVE (PV1, 2, 3)

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]	[]
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: 1/25/88
ASSESSMENT ID: MPS-224X
NASA FMEA #: 0801-1

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 224
ITEM: LO2 PREVALVE (PV1, 2, 3)

LEAD ANALYST: W.J. MCNICOLL

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:
THIS FAILURE MODE SHOULD BE ADEQUATELY ADDRESSED UNDER ERRONEOUS
INDICATION (0401-6).
REF: RI/NASA CIL OF 12-23-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/25/88
ASSESSMENT ID: MPS-225X
NASA FMEA #: 0414-4

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 225
ITEM: LO2 FEEDLINE RELIEF SHUTOFF VALVE (PV7)

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 OF THE VALVE TO REMAIN CLOSED IS ADDRESSED ON 0414-3.
FAILURE OF THE INDICATION SYSTEM ONLY WILL HAVE NO EFFECT.
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-226X
 NASA FMEA #: 0414-5

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 226
 ITEM: LO2 FEEDLINE RELIEF SHUTOFF VALVE (PV7)

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: 1/25/88
 ASSESSMENT ID: MPS-227X
 NASA FMEA #: 0414-6

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 227
 ITEM: LO2 FEEDLINE RELIEF SHUTOFF VALVE (PV7)

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: 1/25/88
 ASSESSMENT ID: MPS-228X
 NASA FMEA #: 0311-3

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 228
 ITEM: LO2 OUTBOARD FILL AND DRAIN VALVE (PV9)

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 OF THE VALVE TO REMAIN CLOSED IS ADDRESSED ON 0311-4.
 FAILURE OF THE POSITION INDICATOR ALONE WILL HAVE NO EFFECT.
 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-229X
 NASA FMEA #: 0311-7

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 229
 ITEM: LO2 OUTBOARD FILL AND DRAIN VALVE (PV9)

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]	[]
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 12-10-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/25/88
ASSESSMENT ID: MPS-230X
NASA FMEA #: 0311-8

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 230
ITEM: LO2 OUTBOARD FILL AND DRAIN VALVE (PV9)

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: 1/25/88
 ASSESSMENT ID: MPS-231X
 NASA FMEA #: 0311-10

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 231
 ITEM: LO2 OUTBOARD FILL AND DRAIN VALVE (PV9)

LEAD ANALYST: W.J. MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[P]	[P]	[X] *
IOA	[2 /1R]	[P]	[P]	[P]	[]
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 12-10-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/25/88
 ASSESSMENT ID: MPS-232X
 NASA FMEA #: 0310-3

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 232
 ITEM: LO2 INBOARD FILL AND DRAIN VALVE (PV10)

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)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

FAILURE OF THE VALVE TO REMAIN CLOSED IS ADDRESSED ON 0310-4.
 FAILURE OF THE POSITION INDICATOR ALONE WILL HAVE NO EFFECT.
 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-233X
 NASA FMEA #: 0310-5

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 233
 ITEM: LO2 INBOARD FILL AND DRAIN VALVE (PV10)

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]	[]
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 12-9-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/25/88
 ASSESSMENT ID: MPS-234X
 NASA FMEA #: 0310-8

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 234
 ITEM: LO2 INBOARD FILL AND DRAIN VALVE (PV10)

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]	[]
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 12-9-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/25/88
 ASSESSMENT ID: MPS-235X
 NASA FMEA #: 0310-9

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 235
 ITEM: LO2 INBOARD FILL AND DRAIN VALVE (PV10)

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: 1/25/88
 ASSESSMENT ID: MPS-236X
 NASA FMEA #: 0310-11

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 236
 ITEM: LO2 INBOARD FILL AND DRAIN VALVE (PV10)

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]	[]
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 12-9-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/25/88
 ASSESSMENT ID: MPS-237X
 NASA FMEA #: 0806-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 237
 ITEM: LO2 INBOARD FILL AND DRAIN VALVE (PV10)

LEAD ANALYST: W.J. MCNICOLL

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

THIS FAILURE MODE SHOULD BE ADEQUATELY ADDRESSED UNDER ERRONEOUS INDICATION (0310-3) AND LOSS OF POSITION INDICATION (0310-9).
 REF: RI/NASA CIL OF 12-23-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/25/88
 ASSESSMENT ID: MPS-238X
 NASA FMEA #: 0452-6

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 238
 ITEM: LO2 BLEED SHUTOFF VALVE (PV19)

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: 1/25/88
 ASSESSMENT ID: MPS-239X
 NASA FMEA #: 0452-8

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 239
 ITEM: LO2 BLEED SHUTOFF VALVE (PV19)

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]	[]
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 11-13-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/26/88
ASSESSMENT ID: MPS-240X
NASA FMEA #: 0453-4

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 240
ITEM: LO2 POGO ACCUMULATOR RECIRC VALVE (PV20, 21)

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 REMAIN OPEN IS ADDRESSED ON 0453-1. FAILURE OF THE INDICATOR ALONE WILL HAVE NO EFFECT.
REF: RI/NASA 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-241X
NASA FMEA #: 0453-5

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 241
ITEM: LO2 POGO ACCUMULATOR RECIRC VALVE (PV20, 21)

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: 1/26/88
 ASSESSMENT ID: MPS-243X
 NASA FMEA #: 0427-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 243
 ITEM: LH2/LO2 PROPELLANT LEVEL SENSORS

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]	[F]	[P]	[]
COMPARE	[N /]	[]	[]	[]	[N]

RECOMMENDATIONS: (If different from NASA)

[3 /1R] [P] [F] [P] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

THIS ASSESSMENT ALSO COVERS LH2 SENSORS. MULTIPLE SENSORS
 PROVIDE REDUNDANCY TO PREVENT UNDERFILL.
 REF: RI/NASA CIL OF 12-23-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/26/88
 ASSESSMENT ID: MPS-244X
 NASA FMEA #: 0427-3

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 244
 ITEM: LH2/LO2 PROPELLANT LEVEL SENSORS

LEAD ANALYST: W.J. MCNICOLL

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

THIS ASSESSMENT ALSO COVERS LH2 SENSORS. MULTIPLE SENSORS
 PROVIDE REDUNDANCY TO PREVENT OVERFILL.
 REF: RI/NASA CIL OF 12-23-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/26/88
ASSESSMENT ID: MPS-247X
NASA FMEA #: 0410-3

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 247
ITEM: LH2 DELTA-P TRANSDUCER (MT44)

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]	[]
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: 1/26/88
 ASSESSMENT ID: MPS-248X
 NASA FMEA #: 0420-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 248
 ITEM: LO2 12 INCH FEEDLINE (FH 3, 4, 5)

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: 1/26/88
 ASSESSMENT ID: MPS-249X
 NASA FMEA #: 0460-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 249
 ITEM: LO2 12 INCH FEEDLINE (FH 3, 4, 5)

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:

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-250X
 NASA FMEA #: 0609-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 250
 ITEM: GO2 PRESSURE MANIFOLD REPRESS ORIFICE (RP1)

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]	[]
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: 1/26/88
ASSESSMENT ID: MPS-251X
NASA FMEA #: 0422-1

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 251
ITEM: LO2 BLEED LINE, 1.5" DIA

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]	[]
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: 1/26/88
ASSESSMENT ID: MPS-252X
NASA FMEA #: 0424-1

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 252
ITEM: LO2 RELIEF LINE (PV7 TO RV5)

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]	[]
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 8-24-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/26/88
 ASSESSMENT ID: MPS-253X
 NASA FMEA #: 0455-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 253
 ITEM: LO2 RELIEF LINE, 1" DIA (RV5 TO EXIT)

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]	[]
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 8-23-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/26/88
ASSESSMENT ID: MPS-254X
NASA FMEA #: 0456-1

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 254
ITEM: LO2 RELIEF SENSE LINE, .38" DIA

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]	[]
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 8-24-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/26/88
ASSESSMENT ID: MPS-255X
NASA FMEA #: 0456-2

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 255
ITEM: LO2 RELIEF SENSE LINE, .38" DIA

LEAD ANALYST: W.J. MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[/]	[]	[]	[]	[] *
IOA	[3 /1R]	[P]	[F]	[P]	[X]
COMPARE	[N /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 MAY PREVENT RELIEF VALVE FROM OPENING. REDUNDANCY EXISTS TO RELIEVE MANIFOLD PRESSURE.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/26/88
ASSESSMENT ID: MPS-256X
NASA FMEA #: 0428-1

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 256
ITEM: LO2 BLEED RECIRC & POGO SUPPRESSION LINE, 1,
1.5, 2" DIA

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]	[]
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 10-6-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/26/88
ASSESSMENT ID: MPS-257X
NASA FMEA #: 0428-2

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 257
ITEM: LO2 BLEED RECIRC & POGO SUPPRESSION LINE, 1,
1.5, 2" DIA

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	[/]	[]	[]	[]	[]
COMPARE	[N / N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:
FAILURE MODE IS ADDRESSED ON 0428-1. THIS FMEA/CIL SHOULD BE DELETED.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/26/88
ASSESSMENT ID: MPS-258X
NASA FMEA #: 0433-1

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 258
ITEM: LO2 DELTA PRESSURE LINE, .25" DIA

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]	[]
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 12-14-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/26/88
ASSESSMENT ID: MPS-259X
NASA FMEA #: 0434-1

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 259
ITEM: LO2 FEEDLINE SCREEN

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]	[]
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: 1/26/88
 ASSESSMENT ID: MPS-260X
 NASA FMEA #: 0434-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 260
 ITEM: LO2 FEEDLINE SCREEN

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]	[]
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: 1/26/88
 ASSESSMENT ID: MPS-261X
 NASA FMEA #: 0458-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 261
 ITEM: LO2 LINE ASSEMBLY (PD1 TO CV12 & RP1 TO CV10)

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]	[]
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 MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/26/88
 ASSESSMENT ID: MPS-262X
 NASA FMEA #: 0507-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 262
 ITEM: GO2 PRESSURIZATION SUPPLY LINE, .63" DIA, CV TO FCV

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]	[]
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 MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/26/88
 ASSESSMENT ID: MPS-263X
 NASA FMEA #: 0509-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 263
 ITEM: GO2 PRESSURIZATION SUPPLY LINE (LV53, 54, 55 TO PD4)

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]	[]
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 MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/27/88
 ASSESSMENT ID: MPS-264X
 NASA FMEA #: 0510-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 264
 ITEM: GO2 PRESSURIZATION SUPPLY LINE (CV16 TO PD9)

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]	[P]	[]
COMPARE	[N /]	[]	[]	[]	[N]

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

SECOND FAILURE WILL ALLOW LEAKAGE OF GO2 INTO AFT COMPARTMENT.
 REF: RI/NASA CIL OF 12-23-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/27/88
ASSESSMENT ID: MPS-265X
NASA FMEA #: 0515-1

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 265
ITEM: LO2 ULLAGE PRESSURE SIGNAL CONDITIONER

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]	[]
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: 1/27/88
 ASSESSMENT ID: MPS-266X
 NASA FMEA #: 0515-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 266
 ITEM: LO2 ULLAGE PRESSURE SIGNAL CONDITIONER

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:

THE RI/NASA ANALYSIS INDICATES THAT THE 2/1R CRITICALITY APPLIES TO THE LH2 ULLAGE PRESSURE SIGNAL CONDITIONER ONLY. FOR LO2 THERE WOULD BE NO EFFECT. REF: RI/NASA CIL OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/27/88
ASSESSMENT ID: MPS-267X
NASA FMEA #: 0515-3

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 267
ITEM: LO2 ULLAGE PRESSURE SIGNAL CONDITIONER

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]	[]
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: 1/27/88
 ASSESSMENT ID: MPS-268X
 NASA FMEA #: 0522-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 268
 ITEM: GO2 PRESSURIZATION SUPPLY LINE

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]	[]
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: 1/27/88
 ASSESSMENT ID: MPS-269X
 NASA FMEA #: 0607-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 269
 ITEM: LO2 SENSE LINE (PD1 TO PR5)

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]	[]
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 12-14-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/27/88
 ASSESSMENT ID: MPS-270X
 NASA FMEA #: 0626-5

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 270
 ITEM: LO2 ENGINE INLET PRESSURE TRANSDUCER

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: 1/27/88
ASSESSMENT ID: MPS-271X
NASA FMEA #: 0626-6

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 271
ITEM: LO2 MANIFOLD PRESSURE TRANSDUCER

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	[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:

RELIEF SYSTEM WILL PROTECT AGAINST MANIFOLD RUPTURE. NO
REDUNDANCY FOR TRANSDUCER FAILURE.
REF: RI/NASA CIL OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING
NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/27/88
 ASSESSMENT ID: MPS-272X
 NASA FMEA #: 0626-7

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 272
 ITEM: GO2 DISCONNECT PRESSURE TRANSDUCER

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: 1/27/88
ASSESSMENT ID: MPS-273X
NASA FMEA #: 0627-3

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 273
ITEM: LO2 ENGINE INLET TEMPERATURE TRANSDUCER

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]	[]
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: 1/27/88
ASSESSMENT ID: MPS-274X
NASA FMEA #: 0627-4

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 274
ITEM: GO2 ENGINE OUTLET TEMPERATURE TRANSDUCER

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]	[F]	[P]	[]
COMPARE	[N /]	[]	[]	[]	[N]

RECOMMENDATIONS: (If different from NASA)

[3 /1R] [P] [F] [P] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

RI/NASA FMEA/CIL REVIEW MEETING NOTES POSTULATE LEAKAGE OF THE ANTI-FLOOD VALVE IN COMBINATION WITH TRANSDUCER FAILURE. THIS VIOLATES NSTS 22206 2.3.2d, THE REQUIREMENT THAT INTERFACING SUBSYSTEMS WILL BE CONSIDERED TO BE OPERATING WITHIN THEIR SPECIFIED TOLERANCES. MULTIPLE FAILURES CAN ALLOW ENGINE START WHEN CONDITIONS ARE NOT ACTUALLY WITHIN LIMITS. REF: RI/NASA CIL OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/27/88
 ASSESSMENT ID: MPS-275X
 NASA FMEA #: 0627-5

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 275
 ITEM: LO2 FEED MANIFOLD DISCONNECT TEMPERATURE
 TRANSDUCER

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)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

RI/NASA ANALYSIS INDICATES 3/1R FOR A PAD ABORT (PRELAUNCH).
 THIS ASSUMED FAILURE OF THE ENGINE BLEED VALVE, WHICH VIOLATES
 NSTS 22206 2.3.2d, THE REQUIREMENT THAT INTERFACING SUBSYSTEMS
 WILL BE CONSIDERED TO BE OPERATING WITHIN THEIR SPECIFIED
 TOLERANCES. REF: RI/NASA CIL OF 12-23-87 AND RI/NASA FMEA/CIL
 REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/27/88
 ASSESSMENT ID: MPS-277X
 NASA FMEA #: 0702-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 277
 ITEM: LO2/LH2 METALLIC BOSS SEALS (K SEALS)

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]	[]
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 12-14-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/27/88
 ASSESSMENT ID: MPS-278X
 NASA FMEA #: 0703-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 278
 ITEM: GO2/GH2 K SEALS

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]	[]
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 FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/27/88
ASSESSMENT ID: MPS-279X
NASA FMEA #: 0707-1

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 279
ITEM: GO2/GH2 NAFLEX FLANGE FACE SEALS

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]	[]
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: 1/27/88
 ASSESSMENT ID: MPS-280X
 NASA FMEA #: 0301-8

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 280
 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 / 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: 1/27/88
 ASSESSMENT ID: MPS-281X
 NASA FMEA #: 0301-9

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 281
 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]	[F]	[X] *
IOA	[2 /1R]	[P]	[F]	[F]	[]
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: 1/27/88
 ASSESSMENT ID: MPS-283X
 NASA FMEA #: 0808-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 283
 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	[/1R]	[NA]	[NA]	[NA]	[X] *
IOA	[/]	[]	[]	[]	[]
COMPARE	[/N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

THIS FAILURE MODE SHOULD BE ADEQUATELY ADDRESSED UNDER ERRONEOUS INDICATION (0301-3) AND LOSS OF POSITION INDICATION (0301-8).

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/27/88
 ASSESSMENT ID: MPS-284X
 NASA FMEA #: 0302-7

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 284
 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	[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: 1/27/88
 ASSESSMENT ID: MPS-285X
 NASA FMEA #: 0302-8

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 285
 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]	[F]	[X] *
IOA	[2 /1R]	[P]	[F]	[F]	[]
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 11-24-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/28/88
ASSESSMENT ID: MPS-286X
NASA FMEA #: 0302-10

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 286
ITEM: LH2 OUTBOARD FILL & DRAIN VALVE (PV11)

LEAD ANALYST: W.J. MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[P]	[P]	[X] *
IOA	[2 /1R]	[P]	[P]	[P]	[]
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 11-24-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/28/88
 ASSESSMENT ID: MPS-287X
 NASA FMEA #: 0807-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 287
 ITEM: LH2 OUTBOARD FILL & DRAIN VALVE (PV11)

LEAD ANALYST: W.J. MCNICOLL

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

THIS FAILURE MODE SHOULD BE ADEQUATELY ADDRESSED UNDER ERRONEOUS INDICATION (0302-3) AND LOSS OF POSITION INDICATION (0302-7).
 REF: RI/NASA CIL OF 12-23-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/28/88
 ASSESSMENT ID: MPS-288X
 NASA FMEA #: 0303-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 288
 ITEM: LH2 FILL & DRAIN DISCONNECT (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]	[]
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 12-14-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/28/88
 ASSESSMENT ID: MPS-289X
 NASA FMEA #: 0303-3

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 289
 ITEM: LH2 FILL & DRAIN DISCONNECT (PD11)

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-290X
 NASA FMEA #: 0303-4

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 290
 ITEM: LH2 FILL & DRAIN DISCONNECT (PD11)

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-291X
 NASA FMEA #: 0303-5

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 291
 ITEM: LH2 FILL & DRAIN DISCONNECT (PD11)

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-292X
 NASA FMEA #: 0432-4

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 292
 ITEM: LH2 HI POINT BLEED DISCONNECT (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]	[]
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 11-13-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/28/88
 ASSESSMENT ID: MPS-293X
 NASA FMEA #: 0432-6

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 293
 ITEM: LH2 HI POINT BLEED DISCONNECT (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]	[]
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 11-13-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/28/88
 ASSESSMENT ID: MPS-294X
 NASA FMEA #: 0304-3

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 294
 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-295X
 NASA FMEA #: 0304-6

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 295
 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-296X
NASA FMEA #: 0304-11

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 296
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]	[]
COMPARE	[/]	[]	[N]	[]	[N]

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

HELIUM TANK PRESSURE INDICATOR AND ALARMS SUPPORT PASSAGE OF
SCREEN B. REF: RI/NASA CIL OF 12-23-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/28/88
 ASSESSMENT ID: MPS-297X
 NASA FMEA #: 0431-3

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 297
 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-298X
 NASA FMEA #: 0431-6

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 298
 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	[/]	[]	[]	[]	[]
COMPARE	[N / N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

THIS ANALYSIS IS A DUPLICATE OF 0431-5. THIS CIL SHOULD BE DELETED. REF: RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/28/88
ASSESSMENT ID: MPS-299X
NASA FMEA #: 0431-7

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 299
ITEM: LH2 HI POINT BLEED VALVE

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.

C-4

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/28/88
 ASSESSMENT ID: MPS-300X
 NASA FMEA #: 0431-5

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 300
 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]	[]
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 11-12-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/28/88
 ASSESSMENT ID: MPS-301X
 NASA FMEA #: 0410-3

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 301
 ITEM: LH2 SYSTEM DELTA-P TRANSDUCER (MT44)

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]	[]
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 REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/28/88
 ASSESSMENT ID: MPS-303X
 NASA FMEA #: 0433-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 303
 ITEM: LH2 DELTA-P LINE, .25" DIA

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]	[]
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: 1/28/88
 ASSESSMENT ID: MPS-304X
 NASA FMEA #: NA

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 304
 ITEM: LH2 HI POINT BLEED LINE (PV22 TO PD17)

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:

AN INCREASE IN PRESSURE CAUSED BY THE LOSS OF INSULATION WILL BE RELIEVED BY THE HI POINT BLEED VALVE RELIEF FEATURE.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: MPS-305X
NASA FMEA #: NA

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 305
ITEM: LH2 HI POINT BLEED LINE (PV22 TO PD17)

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)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
 ASSESSMENT ID: MPS-306X
 NASA FMEA #: 0457-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 306
 ITEM: LH2 LINE ASSEMBLY (PD2 TO RV7, CV15)

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]	[]
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 9-18-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
 ASSESSMENT ID: MPS-307X
 NASA FMEA #: 0405-4

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 307
 ITEM: LH2 RECIRCULATION DISCONNECT VLAVE (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)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

FAILURE OF THE VALVE TO REMAIN OPEN IS ADDRESSED ON 0405-2.
 FAILURE OF THE INDICATOR ALONE WILL HAVE NO EFFECT.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
 ASSESSMENT ID: MPS-308X
 NASA FMEA #: 0405-7

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 308
 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]	[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 FOR ABORT. FAILURE OF THE VALVE TO CLOSE IS COVERED ON 0405-6. FAILURE OF THE INDICATOR WILL HAVE NO EFFECT. REF: RI/NASA CIL OF 12-23-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
 ASSESSMENT ID: MPS-309X
 NASA FMEA #: 0405-8

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 309
 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-310X
NASA FMEA #: 0405-9

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 310
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	[2 /1R]	[P]	[F]	[P]	[]
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: 1/29/88
 ASSESSMENT ID: MPS-311X
 NASA FMEA #: NA

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 311
 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]	[]
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.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
 ASSESSMENT ID: MPS-312X
 NASA FMEA #: 0403-3

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 312
 ITEM: LH2 RECIRCULATION PUMP VALVE (PV14, 15, 16)

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-313X
NASA FMEA #: 0403-4

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 313
ITEM: LH2 RECIRCULATION PUMP VALVE (PV14, 15, 16)

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	[/]	[]	[]	[]	[]
COMPARE	[N / N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [D]
INADEQUATE []

REMARKS:

FAILURE MODE IS NOT IDENTIFIED IN THE RI/NASA CIL OF 12-23-87.
THIS FMEA/CIL SHOULD BE DROPPED.
REF: RI/NASA CIL OF 12-23-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
 ASSESSMENT ID: MPS-314X
 NASA FMEA #: 0403-7

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 314
 ITEM: LH2 RECIRCULATION PUMP VALVE (PV14, 15, 16)

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]	[]
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.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
 ASSESSMENT ID: MPS-315X
 NASA FMEA #: 0404-3

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 315
 ITEM: LH2 RECIRCULATION PUMP (PP1, 2, 3)

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-316X
NASA FMEA #: 0505-2

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 316
ITEM: GH2 PRESSURIZATION ISOLATION CHECK VALVE (CV21,
22, 23)

LEAD ANALYST: W.J. MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[NA]	[F]	[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:

THE RI/NASA ANALYSIS ADDRESSES ABORT ONLY. FAILURE OF BOTH SERIES REDUNDANT CHECK VALVES ON A SHUTDOWN ENGINE (ABORT) AS WELL AS ANOTHER FAILURE (i.e., MFV FAILS TO CLOSE/REMAIN CLOSED) WILL ALLOW ULLAGE PRESSURE TO BE LOST. ABORT CRITICALITY SHOULD BE 3/1R.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
 ASSESSMENT ID: MPS-317X
 NASA FMEA #: 0505-3

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 317
 ITEM: GH2 PRESSURIZATION ISOLATION CHECK VALVE (CV21,
 22, 23)

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-318X
 NASA FMEA #: 0504-3

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 318
 ITEM: GH2 PRESSURIZATION FLOW CONTROL VALVE (LV56, 57,
 58)

LEAD ANALYST: W.J. MCNICOLL

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

[2 /1R] [F] [P] [F] []
 (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-319X
 NASA FMEA #: 0407-5

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 319
 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]	[]
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: 2/01/88
 ASSESSMENT ID: MPS-320X
 NASA FMEA #: 0407-9

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 320
 ITEM: LH2 FEED DISCONNECT VALVE (PD2)

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]	[]
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: 2/01/88
ASSESSMENT ID: MPS-321X
NASA FMEA #: 0407-10

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 321
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	[2 /1R]	[P]	[F]	[F]	[]
COMPARE	[N /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:

FAILURE OF THE VALVE TO CLOSE IS ADDRESSED ON 0407-6. FAILURE TO CLOSE IS SECONDARY TO THE FAILURE OF THE POSITION INDICATOR.
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-322X
 NASA FMEA #: 0407-12

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 322
 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]	[]
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: 2/01/88
ASSESSMENT ID: MPS-323X
NASA FMEA #: 0804-1

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 323
ITEM: LH2 FEED DISCONNECT VALVE (PD2)

LEAD ANALYST: W.J. MCNICOLL

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

THIS FAILURE MODE IS ADEQUATELY ADDRESSED UNDER LOSS OF POSITION INDICATION (0407-5) AND ERRONEOUS INDICATION (0407-10).
REF: RI/NASA CIL OF 12-23-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/01/88
 ASSESSMENT ID: MPS-324X
 NASA FMEA #: 0402-7

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 324
 ITEM: LH2 PREVALVE (PV4, 5, 6)

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	[2 /1R]	[P]	[F]	[F]	[]
COMPARE	[N /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:

VALVE FAILURE TO OPEN IS ADDRESSED ON 0402-5. FAILURE OF THE VALVE AND FAILURE OF THE INDICATOR ARE BOTH REQUIRED TO CAUSE A LOSS OF CREW OR VEHICLE.

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-325X
 NASA FMEA #: 0402-11

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 325
 ITEM: LH2 PREVALVE (PV4, 5, 6)

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]	[]
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: 2/01/88
 ASSESSMENT ID: MPS-326X
 NASA FMEA #: 0802-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 326
 ITEM: LH2 PREVALVE (PV4, 5, 6)

LEAD ANALYST: W.J. MCNICOLL

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

THIS FAILURE SHOULD BE ADQUATELY ADDRESSED UNDER LOSS OF POSITION INDICATION (0402-6) AND ERRONEOUS INDICATION (0402-7). THIS ANALYSIS SHOULD BE DELETED.

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

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/01/88
 ASSESSMENT ID: MPS-327X
 NASA FMEA #: 0434-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 327
 ITEM: LH2 FEEDLINE SCREEN

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]	[]
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: 2/01/88
 ASSESSMENT ID: MPS-328X
 NASA FMEA #: 0434-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 328
 ITEM: LH2 FEEDLINE SCREEN

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]	[]
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: 2/01/88
ASSESSMENT ID: MPS-329X
NASA FMEA #: 0437-5

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 329
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	[3 /1R]	[P]	[F]	[P]	[]
COMPARE	[N /]	[]	[]	[]	[N]

RECOMMENDATIONS: (If different from NASA)

[3 /1R] [P] [F] [P] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

FAILURE OF THE VALVE TO REMAIN CLOSED IS ADDRESSED ON 0437-5.
FAILURE OF THE INDICATOR, THE VALVE AND THE RELIEF VALVE ARE ALL
REQUIRED BEFORE A LOSS OF CREW OR VEHICLE IS POSSIBLE.
REF: RI/NASA CIL OF 12-23-87 AND RI/NASA CIL WORKSHEET OF 10-5-
87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/01/88
 ASSESSMENT ID: MPS-330X
 NASA FMEA #: 0437-6

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 330
 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	[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-331X
 NASA FMEA #: 0437-7

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 331
 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]	[]
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 OF 10-5-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/02/88
 ASSESSMENT ID: MPS-332X
 NASA FMEA #: 0435-3

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 332
 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	[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 ABORT.
 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-333X
 NASA FMEA #: 0435-4

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 333
 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	[1 / 1]	[NA]	[NA]	[NA]	[]
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 8-23-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/02/88
ASSESSMENT ID: MPS-334X
NASA FMEA #: 0651-5

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 334
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	[1 /1]	[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:

THE RI/NASA ANALYSIS INDICATES A 1/1 CRITICALITY FOR ABORT ONLY.
RUPTURE OF THE LINE CAN CAUSE LOSS OF VEHICLE DURING A NOMINAL
MISSION.

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-335X
 NASA FMEA #: 0651-6

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 335
 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)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

THE RI/NASA ANALYSIS INDICATES A 1/1 CRITICALITY FOR ABORT ONLY.
 IOA BELIEVES A 3/3 APPLIES.
 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-336X
 NASA FMEA #: 0651-7

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 336
 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	[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 OF THE VALVE TO CLOSE IS ADDRESSED ON 0651-4. FAILURE OF THE INDICATOR ALONE WILL HAVE NO EFFECT OTHER THAN A POSSIBLE LAUNCH SCRUB.
 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-337X
 NASA FMEA #: 0651-8

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 337
 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]	[] *
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-338X
 NASA FMEA #: 0651-7

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 338
 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	[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 OF THE VALVE TO CLOSE IS ADDRESSED ON 0651-4. FAILURE OF THE INDICATOR ALONE WILL HAVE NO EFFECT OTHER THAN A POSSIBLE LAUNCH SCRUB.
 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	NASA DATA:
ASSESSMENT ID: MPS-339X	BASELINE []
NASA FMEA #: 0651-8	NEW [X]

SUBSYSTEM: MPS
MDAC ID: 339
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]	[] *
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-340X
 NASA FMEA #: 0423-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 340
 ITEM: LH2 RELIEF LINE (FROM PV8 TO 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	[1 /1]	[NA]	[NA]	[NA]	[]
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 8-23-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/02/88
 ASSESSMENT ID: MPS-341X
 NASA FMEA #: 0461-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 341
 ITEM: LH2 RELIEF LINE (RV6 TO 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	[1 / 1]	[NA]	[NA]	[NA]	[]
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 8-23-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/02/88
 ASSESSMENT ID: MPS-342X
 NASA FMEA #: 0462-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 342
 ITEM: LH2 RELIEF SENSE LINE

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]	[]
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 8-23-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/02/88
 ASSESSMENT ID: MPS-343X
 NASA FMEA #: 0462-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 343
 ITEM: LH2 RELIEF SENSE LINE

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]	[]
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 8-23-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/02/88
 ASSESSMENT ID: MPS-344X
 NASA FMEA #: 0506-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 344
 ITEM: GH2 PRESSURIZATION SUPPLY LINE (CV21 TO LV56,
 CV22 TO LV57, CV23 TO 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]	[]
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: 2/02/88
 ASSESSMENT ID: MPS-345X
 NASA FMEA #: 0508-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 345
 ITEM: GH2 PRESSURIZATION SUPPLY LINE (LV56, 57, 58 TO 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]	[]
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: 2/02/88
 ASSESSMENT ID: MPS-346X
 NASA FMEA #: 0511-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 346
 ITEM: GH2 PRESSURIZATION SUPPLY LINE (PD10 TO 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]	[]
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: 2/02/88
ASSESSMENT ID: MPS-347X
NASA FMEA #: 0520-1

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 347
ITEM: GH2 PRESSURIZATION SUPPLY LINE (MANIFOLD ASSEMBLY)

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]	[]
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: 2/02/88
ASSESSMENT ID: MPS-348X
NASA FMEA #: 0521-1

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 348
ITEM: GH2 PRESSURIZATION SUPPLY LINE (LV52 TO 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]	[]
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: 2/02/88
 ASSESSMENT ID: MPS-349X
 NASA FMEA #: 0607-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 349
 ITEM: LH2 SENSE LINE (PD2 TO PR6)

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]	[]
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 12-14-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/02/88
 ASSESSMENT ID: MPS-350X
 NASA FMEA #: XXXXXX

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 350
 ITEM: LH2 RTLS DUMP LINE (PD2 TO 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]	[]
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.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/02/88
 ASSESSMENT ID: MPS-351X
 NASA FMEA #: 0652-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 351
 ITEM: LH2 RTLS DUMP LINE (PV17 TO 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]	[]
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: 2/02/88
 ASSESSMENT ID: MPS-352X
 NASA FMEA #: 0628-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 352
 ITEM: LH2 RTLS DUMP LINE (PV18 TO OUTLET)

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]	[]
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: 2/02/88
 ASSESSMENT ID: MPS-354X
 NASA FMEA #: 0515-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 354
 ITEM: LH2 ULLAGE PRESSURE SIGNAL CONDITIONER

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]	[]
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: 2/02/88
ASSESSMENT ID: MPS-355X
NASA FMEA #: 0515-3

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 355
ITEM: LH2 ULLAGE PRESSURE SIGNAL CONDITIONER

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]	[]
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: 2/02/88
 ASSESSMENT ID: MPS-360X
 NASA FMEA #: 0626-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 360
 ITEM: LH2 INLET PRESSURE TRANSDUCER

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-361X
NASA FMEA #: 0626-2

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 361
ITEM: LH2 ENGINE MANIFOLD PRESSURE TRANSDUCER

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:

RELIEF SYSTEM WILL PROTECT AGAINST MANIFOLD RUPTURE. NO
REDUNDANCY FOR TRANSDUCER FAILURE.
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-362X
 NASA FMEA #: 0626-3

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 362
 ITEM: GH2 OUTLET PRESSURE TRANSDUCER

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	[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:

TRANSDUCER FAILURE HAS NO EFFECT. NO REDUNDANCY.
 REF: RI/NASA CIL OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING
 NOTES.

**APPENDIX C
ASSESSMENT WORKSHEET**

ASSESSMENT DATE:	2/02/88	NASA DATA:	
ASSESSMENT ID:	MPS-363X	BASELINE	[]
NASA FMEA #:	0626-4	NEW	[X]

SUBSYSTEM: MPS
MDAC ID: 363
ITEM: GH2 DISCONNECT PRESSURE TRANSDUCER

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)
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* **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-364X
NASA FMEA #: 0627-1

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 364
ITEM: LH2 FEED MANIFOLD DISCONNECT TEMPERATURE
TRANSDUCER

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]	[]
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: 2/02/88
 ASSESSMENT ID: MPS-365X
 NASA FMEA #: 0627-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 365
 ITEM: LH2 ENGINE INLET TEMPERATURE TRANSDUCER

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: 2/03/88
ASSESSMENT ID: MPS-366X
NASA FMEA #: 0202-3

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 366
ITEM: ENGINE HELIUM SUPPLY CHECK VALVE (CV1, 2, 3)

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]	[]
COMPARE	[N /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 WILL DEplete ALL 3 TANKS FOR THE AFFECTED ENGINE SYSTEM,
CAUSING THE ENGINE TO SHUT DOWN (CRIT 2). ESCAPING HELIUM MAY
OVERPRESSURIZE THE AFT COMPARTMENT (CRIT 1).
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-367X
 NASA FMEA #: 0201-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 367
 ITEM: HELIUM SUPPLY DISCONNECT (PD8)

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: 2/03/88
 ASSESSMENT ID: MPS-369X
 NASA FMEA #: 0258-4

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 369
 ITEM: ENGINE HELIUM SUPPLY CHECK VALVE
 (CV25,26,36,37,41,42)

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]	[]
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: 2/03/88
 ASSESSMENT ID: MPS-370X
 NASA FMEA #: 0205-3

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 370
 ITEM: ENGINE HELIUM PRESSURE REGULATOR (PR1,2,3,7,8,9)

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	[/]	[]	[]	[]	[]
COMPARE	[N /N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

THE REGULATOR IS NOT REQUIRED TO REMAIN CLOSED.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/03/88
 ASSESSMENT ID: MPS-371X
 NASA FMEA #: 0207-3

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 371
 ITEM: ENGINE REGULATOR OUTLET CHECK VALVE
 (CV5,6,7,29,40,45)

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]	[]
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: 2/04/88
ASSESSMENT ID: MPS-372X
NASA FMEA #: 0262-2

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 372
ITEM: ENGINE HELIUM SUPPLY INTERCONNECT OUT VALVE
(LV60, 62, 64)

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	[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:

FAILURE WILL HAVE NO EFFECT. RI/NASA CITES A LEAK AS A SECOND FAILURE, BUT A LEAK IS A 1/1 FAILURE IN ISOLATION AND THUS SKEWS THE ANALYSIS. ENGINES ARE NOT REDUNDANT.

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

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/04/88
 ASSESSMENT ID: MPS-373X
 NASA FMEA #: 0261-3

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 373
 ITEM: ENGINE HELIUM INTERCONNECT OUT CHECK VALVE
 (CV28,39,44)

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]	[]
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: 2/04/88
 ASSESSMENT ID: MPS-374X
 NASA FMEA #: 0259-3

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 374
 ITEM: ENGINE HELIUM INTERCONNECT IN CHECK VALVE
 (CV27,38,43)

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]	[]
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: 2/04/88
ASSESSMENT ID: MPS-375X
NASA FMEA #: 0202-3

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 375
ITEM: PNEUMATIC HELIUM SUPPLY CHECK VALVE (CV4)

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]	[]
COMPARE	[N /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.

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-376X
NASA FMEA #: 0631-4

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 376
ITEM: GO2 PRESSURIZATION MANIFOLD REPRESSURIZATION
CHECK VALVE (CV10)

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]	[]
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: 2/04/88
 ASSESSMENT ID: MPS-377X
 NASA FMEA #: 0603-4

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 377
 ITEM: LO2 FEED MANIFOLD REPRESSURIZATION CHECK VALVE
 (CV12)

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]	[]
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: 2/04/88
ASSESSMENT ID: MPS-378X
NASA FMEA #: 0605-2

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 378
ITEM: GH2 PRESSURIZATION MANIFOLD REPRESSURIZATION
CHECK VALVE (CV13)

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:

PRESSURIZATION IS NOT REQUIRED. DEGRADED DUMP.
REF: RI/NASA CIL OF 12-23-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/04/88
ASSESSMENT ID: MPS-379X
NASA FMEA #: 0605-4

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 379
ITEM: GH2 PRESSURIZATION MANIFOLD REPRESSURIZATION
CHECK VALVE (CV13)

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 FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/04/88
 ASSESSMENT ID: MPS-380X
 NASA FMEA #: 0632-4

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 380
 ITEM: LH2 RECIRCULATION MANIFOLD REPRESSURIZATION
 CHECK VALVE (CV14)

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]	[]
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: 2/05/88
 ASSESSMENT ID: MPS-381X
 NASA FMEA #: 0630-4

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 381
 ITEM: LH2 FEED MANIFOLD NOMINAL REPRESS CHECK VALVE
 (CV15)

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]	[]
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: 2/05/88
ASSESSMENT ID: MPS-382X
NASA FMEA #: 0605-2

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 382
ITEM: GH2 PRESSURIZATION MANIFOLD REPRESSURIZATION
CHECK VALVE (CV24)

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:

LOSS OF REPRESS TO GH2 MANIFOLD. 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: 2/05/88
 ASSESSMENT ID: MPS-383X
 NASA FMEA #: 0605-4

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 383
 ITEM: GH2 PRESSURIZATION MANIFOLD REPRESSURIZATION
 CHECK VALVE (CV24)

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]	[]
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: 2/05/88
 ASSESSMENT ID: MPS-384X
 NASA FMEA #: 0248-3

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 384
 ITEM: LH2 FEED MANIFOLD RTLS REPRESSURIZATION CHECK
 VALVE (CV30)

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]	[]
COMPARE	[/]	[]	[]	[]	[N]

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

H2 LEAKAGE INOT AFT COMPARTMENT AFTER ISOLATION VALVE IS OPENED.
 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-385X
NASA FMEA #: 0238-4

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 385
ITEM: PNEUMATIC HELIUM SUPPLY ISOLATION VALVE (LV7, 8)

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]	[]
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: 2/05/88
 ASSESSMENT ID: MPS-386X
 NASA FMEA #: 0290-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 386
 ITEM: VALVE ACTUATION SOLENOIDS DOWNSTREAM OF CV9
 (LV12, 14, 16, 18, 20, 22, 47, 49, 50, 65, 66, 67, 68, 79, 83, 84, 85)

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]	[]
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 12-14-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/05/88
ASSESSMENT ID: MPS-387X
NASA FMEA #: 0290-2

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 387
ITEM: VALVE ACTUATION SOLENOIDS DOWNSTREAM OF CV9
(LV12,14,16,18,20,22,47,49,50,65,66,67,68,79,83,84,85)

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]	[]
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 12-14-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/08/88
ASSESSMENT ID: MPS-388X
NASA FMEA #: 0291-1

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 388
ITEM: VALVE ACTUATION SOLENOID VALVES UPSTREAM OF CV9
(LV28, 29, 30, 31, 32, 33, 34, 36, 38, 77, 78)

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]	[]
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 12-9-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/08/88
ASSESSMENT ID: MPS-389X
NASA FMEA #: 0291-2

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 389
ITEM: VALVE ACTUATION SOLENOID VALVES UPSTREAM OF CV9
(LV28, 29, 30, 31, 32, 33, 34, 36, 38, 77, 78)

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]	[]
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 12-9-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/10/88
 ASSESSMENT ID: MPS-390X
 NASA FMEA #: 0606-4

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 390
 ITEM: LH2 MANIFOLD REPRESSURIZATION VALVES (LV42, 43)

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]	[]
COMPARE	[/]	[]	[]	[]	[N]

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

INBOARD VALVE (LV42) IS 1/1. OUTBOARD VALVE (LV43) IS 2/1R.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/11/88
 ASSESSMENT ID: MPS-391X
 NASA FMEA #: 0215-4

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 391
 ITEM: LH2 RECIRCULATION DISCONNECT VALVE OPENING
 SOLENOID (LV50)

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]	[]
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.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/11/88
ASSESSMENT ID: MPS-393X
NASA FMEA #: 0263-2

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 393
ITEM: LATCH LOCKING SOLENOIDS (OV65, 67)

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	[3 /1R]	[P]	[F]	[P]	[]
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: 2/11/88
ASSESSMENT ID: MPS-394X
NASA FMEA #: 0263-3

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 394
ITEM: LATCH HOOK

LEAD ANALYST: W.J. MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[P]	[P]	[X] *
IOA	[2 /1R]	[P]	[P]	[P]	[]
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: 2/11/88
 ASSESSMENT ID: MPS-395X
 NASA FMEA #: 0263-4

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 395
 ITEM: LATCH LOCK SOLENOID (LV65, 67)

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]	[]
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: 2/11/88
 ASSESSMENT ID: MPS-396X
 NASA FMEA #: 0264-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 396
 ITEM: LATCH UNLOCK SOLENOID (LV66, 68)

LEAD ANALYST: W.J. MCNICOLL

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[P]	[P]	[P]	[X] *
IOA	[2 /1R]	[P]	[P]	[P]	[]
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 12-12-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/11/88
ASSESSMENT ID: MPS-397X
NASA FMEA #: 0264-2

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 397
ITEM: LATCH UNLOCK SOLENOID (LV66, 68)

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	[3 /1R]	[P]	[F]	[P]	[]
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 12-12-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/11/88
 ASSESSMENT ID: MPS-398X
 NASA FMEA #: 0264-4

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 398
 ITEM: LATCH UNLOCK SOLENOID (LV66, 68)

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	[3 /1R]	[P]	[F]	[P]	[]
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 12-12-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/12/88
ASSESSMENT ID: MPS-399X
NASA FMEA #: 0246-3

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 399
ITEM: LH2 FEED MANIFOLD RTLS PRESSURIZATION VALVE
(LV74, 75)

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]	[]
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: 2/15/88
ASSESSMENT ID: MPS-400X
NASA FMEA #: 0602-3

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 400
ITEM: LO2 MANIFOLD REPRESSURIZATION REGULATOR (PR5)

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	[3 /1R]	[P]	[F]	[P]	[]
COMPARE	[/]	[]	[]	[]	[N]

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

FAILURE OF REGULATOR FOLLOWED BY FAILURE OF BOTH SOLENOID VALVES (LV40, 41) WILL RESULT IN HELIUM INJECTION INTO THE LO2 MANIFOLD. REF: RI/NASA CIL OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/28/88
 ASSESSMENT ID: MPS-401X
 NASA FMEA #: 2071-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 401
 ITEM: TOGGLE SWITCH (3)

LEAD ANALYST: R. O'DONNELL

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

3 TOGGLE SWITCHES. THIS FMEA FAILURE MODE (NO OUTPUT IN OPEN POSITION) WAS NOT NOTED DURING THE ORIGINAL IOA ANALYSIS. FEEDLINE PRESSURE RELIEF, AFTER MECO, WILL EXIST THROUGH THE ENGINE. REFERENCE ASSESSMENT MPS-4150 (REMARKS).

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/28/88
 ASSESSMENT ID: MPS-402X
 NASA FMEA #: 2072-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 402
 ITEM: CLOSE RPC

LEAD ANALYST: R. O'DONNELL

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

12 CLOSE RPC'S. THIS FMEA FAILURE MODE (INADVERTENT OUTPUT) WAS NOT NOTED DURING THE ORIGINAL IOA ANALYSIS.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/28/88
ASSESSMENT ID: MPS-403X
NASA FMEA #: 2073-2

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: EPD&C/MPS
MDAC ID: 403
ITEM: CLOSE RPC OUTPUT DIODE

LEAD ANALYST: R. O'DONNELL

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

12 DIODES. THIS FMEA FAILURE MODE (DIODE SHORT, CURRENT LEAKAGE)
WAS NOT NOTED DURING THE ORIGINAL IOA ANALYSIS.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/28/88
 ASSESSMENT ID: MPS-404X
 NASA FMEA #: 2073-3

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 404
 ITEM: CLOSE RPC OUTPUT DIODE

LEAD ANALYST: R. O'DONNELL

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

12 DIODES. THIS FMEA FAILURE MODE (DIODE SHORT TO GND) WAS NOT NOTED DURING THE ORIGINAL IOA ANALYSIS. FAILURE WILL BE REFLECTED AS AN RPC FAIL OPEN.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/28/88
 ASSESSMENT ID: MPS-405X
 NASA FMEA #: 2074-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 405
 ITEM: CLOSE HDC III

LEAD ANALYST: R. O'DONNELL

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

12 HDC III DRIVERS. THIS FMEA FAILURE MODE (CLOSE HDC III DRIVER FAIL ON) WAS NOT NOTED DURING THE ORIGINAL IOA ANALYSIS. FUNCTIONAL CRITICALITY DETERMINED BY LIKE AND UNLIKE REDUNDANCY.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/28/88
ASSESSMENT ID: MPS-406X
NASA FMEA #: 2075-2

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: EPD&C/MPS
MDAC ID: 406
ITEM: CLOSE HDC I

LEAD ANALYST: R. O'DONNELL

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

3 CLOSE HDC Is. THIS FMEA FAILURE MODE (CLOSE HDC I DRIVER FAIL ON) WAS NOT NOTED DURING THE ORIGINAL IOA ANALYSIS. FUNCTIONAL CRITICALITY DETERMINED BY LIKE AND UNLIKE REDUNDANCY.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/28/88
 ASSESSMENT ID: MPS-407X
 NASA FMEA #: 2076-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 407
 ITEM: OPEN RPC

LEAD ANALYST: R. O'DONNELL

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

12 OPEN RPCs. THIS FMEA FAILURE MODE (LO2 OPEN PREVALVE RPC "LOSS OF OUTPUT") WAS NOT NOTED DURING THE ORIGINAL IOA ANALYSIS. FUNCTIONAL CRITICALITY DETERMINED BY LIKE AND UNLIKE REDUNDANCY.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/28/88
 ASSESSMENT ID: MPS-408X
 NASA FMEA #: 2077-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 408
 ITEM: OPEN RPC OUTPUT DIODE

LEAD ANALYST: R. O'DONNELL

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

12 OPEN DIODES. THIS FMEA FAILURE MODE (ISOLATION DIODE SHORTED) WAS NOT NOTED DURING THE ORIGINAL IOA ANALYSIS. FUNCTIONAL CRITICALITY DETERMINED BY LIKE AND UNLIKE REDUNDANCY.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/28/88
ASSESSMENT ID: MPS-409X
NASA FMEA #: 2077-3

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: EPD&C/MPS
MDAC ID: 409
ITEM: OPEN RPC OUTPUT DIODE

LEAD ANALYST: R. O'DONNELL

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)

[3 /1R] [P] [P] [P] [D]
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

12 OPEN DIODES. THE FMEA FAILURE MODE (DIODE SHORTED TO GROUND) WAS NOT NOTED DURING THE ORIGINAL IOA ANALYSIS. SHORTED DIODE WILL BE REFLECTED BY THE RPC "ON MEASUREMENT" TURNING OFF.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/28/88
 ASSESSMENT ID: MPS-410X
 NASA FMEA #: 2079-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 410
 ITEM: OPEN HDC I

LEAD ANALYST: R. O'DONNELL

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

3 OPEN HDC Is. THE FMEA FAILURE MODE (DRIVER FAIL ON) WAS NOT NOTED DURING THE ORIGINAL IOA ANALYSIS. FUNCTIONAL CRITICALITY DETERMINED BY LIKE AND UNLIKE REDUNDANCY.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/28/88
 ASSESSMENT ID: MPS-411X
 NASA FMEA #: 2180-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 411
 ITEM: OPEN MDM BLOCKING DIODE

LEAD ANALYST: R. O'DONNELL

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:

12 OPEN MDM BLOCKING DIODES. THIS FMEA FAILURE MODE (DIODE SHORTED) WAS NOT NOTED DURING THE ORIGINAL IOA ANALYSIS.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/28/88
 ASSESSMENT ID: MPS-412X
 NASA FMEA #: 2181-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 412
 ITEM: CLOSE MDM BLOCKING DIODE

LEAD ANALYST: R. O'DONNELL

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:

12 CLOSE MDM BLOCKING DIODES. THIS FMEA FAILURE MODE (DIODE SHORTED) WAS NOT NOTED DURING THE ORIGINAL IOA ANALYSIS.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/28/88
 ASSESSMENT ID: MPS-413X
 NASA FMEA #: 2183-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 413
 ITEM: CLOSE MDM BLOCKING DIODE

LEAD ANALYST: R. O'DONNELL

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 CLOSE MDM BLOCKING DIODES. THIS FMEA FAILURE MODE (DIODE SHORTS) WAS NOT NOTED DURING THE ORIGINAL IOA ANALYSIS.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/28/88
ASSESSMENT ID: MPS-414X
NASA FMEA #: 2185-2

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: EPD&C/MPS
MDAC ID: 414
ITEM: OPEN SWITCH BLOCKING DIODE

LEAD ANALYST: R. O'DONNELL

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

[3 /1R] [P] [F] [P] [A]
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

12 OPEN SWITCH BLOCKING DIODES. DIODE FAILS B SCREEN BECAUSE REDUNDANCY MASKS THE FAILURE, AND LACK OF INSTRUMENTATION. THIS FMEA FAILURE MODE (DIODE SHORTS) WAS NOT NOTED DURING THE ORIGINAL IOA ANALYSIS.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/28/88
ASSESSMENT ID: MPS-415X
NASA FMEA #: 2186-2

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: EPD&C/MPS
MDAC ID: 415
ITEM: CLOSE SWITCH BLOCKING DIODE

LEAD ANALYST: R. O'DONNELL

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

[3 /1R] [P] [F] [P] [A]
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

12 CLOSE SWITCH BLOCKING DIODES. LOSS OF ALL REDUNDANCY (GPC AND MANUAL) IN CLOSING THE L02 PREVALVE COULD POSSIBLY CAUSE LOSS OF VEHICLE/CREW. FAILS B SCREEN BECAUSE REDUNDANCY MASKS THE FAILURE. THIS FMEA FAILURE MODE (DIODE SHORTS) WAS NOT NOTED DURING THE ORIGINAL IOA ANALYSIS.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/28/88
ASSESSMENT ID: MPS-416X
NASA FMEA #: 2188-2

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: EPD&C/MPS
MDAC ID: 416
ITEM: CLOSE SWITCH BLOCKING DIODE

LEAD ANALYST: R. O'DONNELL

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

12 CLOSE SWITCH BLOCKING DIODES. LOSS OF ALL REDUNDANCY (GPC AND MANUAL) IN CLOSING THE L02 PREVALVE COULD POSSIBLY CAUSE LOSS OF VEHICLE/CREW. FAILS B SCREEN BECAUSE REDUNDANCY MASKS THE FAILURE. THIS FMEA FAILURE MODE (DIODE SHORTS) WAS NOT NOTED DURING THE ORIGINAL IOA ANALYSIS.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/28/88
 ASSESSMENT ID: MPS-417X
 NASA FMEA #: 2011-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 417
 ITEM: LO2 TOGGLE SWITCH

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

THIS SWITCH IS NOT USED DURING NOMINAL ASCENT.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/28/88
 ASSESSMENT ID: MPS-418X
 NASA FMEA #: 2011-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 418
 ITEM: LO2 TOGGLE SWITCH

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

THIS SWITCH IS NOT USED BY THE CREW DURING NOMINAL ASCENT.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/28/88
 ASSESSMENT ID: MPS-419X
 NASA FMEA #: 2011-4

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 419
 ITEM: LO2 TOGGLE SWITCH

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/28/88
 ASSESSMENT ID: MPS-420X
 NASA FMEA #: 2011-5

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 420
 ITEM: LO2 TOGGLE SWITCH

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/28/88
 ASSESSMENT ID: MPS-421X
 NASA FMEA #: 2238B-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 421
 ITEM: BLOCKING DIODE, SWITCH

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

[3 /1R] [P] [F] [P] [A]
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

ASSESSMENT IS FOR ONE DIODE. THE BLOCKING PROTECTION OF THE DIODE IS NOT STANDBY REDUNDANT.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/28/88
 ASSESSMENT ID: MPS-422X
 NASA FMEA #: 2239-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 422
 ITEM: BLOCKING DIODE, MDM TO RPC

LEAD ANALYST: B. SLAUGHTER

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:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/28/88
 ASSESSMENT ID: MPS-423X
 NASA FMEA #: 2039-3

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 423
 ITEM: DIODE RPC C OUTPUT, 12A

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/28/88
 ASSESSMENT ID: MPS-424X
 NASA FMEA #: 2240-3

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 424
 ITEM: DIODE, RPC CROSSOVER, 12A

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/28/88
 ASSESSMENT ID: MPS-425X
 NASA FMEA #: 2397-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 425
 ITEM: RPC A OUTPUT DIODE, 12A

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

NOT ENOUGH DATA AVAILABLE TO RESOLVE SCREEN A.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/28/88
 ASSESSMENT ID: MPS-426X
 NASA FMEA #: 2397-3

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 426
 ITEM: RPC A OUTPUT DIODE, 12A

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/15/88
ASSESSMENT ID: MPS-427X
NASA FMEA #: 2056B-2

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: EPD&C/MPS
MDAC ID: 427
ITEM: DIODE, OP SW BLOCK (LCA)

LEAD ANALYST: B. SLAUGHTER

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)

[3 /1R] [P] [P] [P] [D]
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

PASSES SCREEN B DUE TO LO2 OUTBOARD F/D OPEN SW SCAN.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/15/88
 ASSESSMENT ID: MPS-428X
 NASA FMEA #: 2058B-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 428
 ITEM: HYBRID DRIVER, TYPE 3 (CLOSE)

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/15/88
 ASSESSMENT ID: MPS-429X
 NASA FMEA #: 2354B-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 429
 ITEM: DIODE, LA1 MDM ISOLATION

LEAD ANALYST: B. SLAUGHTER

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:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/15/88
ASSESSMENT ID: MPS-430X
NASA FMEA #: 2355B-2

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: EPD&C/MPS
MDAC ID: 430
ITEM: DIODE, OP SW BLOCK (MODULE)

LEAD ANALYST: B. SLAUGHTER

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 [X]

REMARKS:

THERE IS NO ELECTRICAL GROUND ON S6. NASA SCENARIO IS
INFEASIBLE.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/15/88
 ASSESSMENT ID: MPS-431X
 NASA FMEA #: 2356B-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 431
 ITEM: DIODE, OPEN MDM ISOLATION

LEAD ANALYST: B. SLAUGHTER

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:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/15/88
 ASSESSMENT ID: MPS-432X
 NASA FMEA #: 2359B-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 432
 ITEM: TRANSIENT SUPPRESSION DIODE

LEAD ANALYST: B. SLAUGHTER

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)

[3 /1R] [P] [P] [P] [A]
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

IOA ANALYSIS IS POSSIBLE AND MORE CRITICAL.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/15/88
 ASSESSMENT ID: MPS-433X
 NASA FMEA #: 2037-5

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 433
 ITEM: LO2 INBOARD FILL & DRAIN TOGGLE SWITCH

LEAD ANALYST: B. SLAUGHTER

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)

[3 /1R] [P] [P] [P] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [X]
 INADEQUATE []

REMARKS:

PASS SCREEN B DUE TO DETECTION BY CLOSE SW SCAN.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/15/88
 ASSESSMENT ID: MPS-434X
 NASA FMEA #: 2281-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 434
 ITEM: DIODE (2), OPEN SW BLOCK (MODULE)

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [X]
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/15/88
 ASSESSMENT ID: MPS-435X
 NASA FMEA #: 2282-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 435
 ITEM: DIODE (3A), OPEN BLOCK A (LCA)

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [X]
 INADEQUATE []

REMARKS:
 NOT DETECTABLE.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/14/88
 ASSESSMENT ID: MPS-436X
 NASA FMEA #: 2283-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 436
 ITEM: DIODE (3A), OPEN SW BLOCK B (LCA)

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/15/88
 ASSESSMENT ID: MPS-437X
 NASA FMEA #: 2284-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 437
 ITEM: DIODE (3A), FA1 MDM BLOCK

LEAD ANALYST: B. SLAUGHTER

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:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/15/88
 ASSESSMENT ID: MPS-438X
 NASA FMEA #: 2285-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 438
 ITEM: DIODE (3A), FA4 MDM BLOCK

LEAD ANALYST: B. SLAUGHTER

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:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/15/88
ASSESSMENT ID: MPS-439X
NASA FMEA #: 2286-2

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: EPD&C/MPS
MDAC ID: 439
ITEM: DIODE (3A), CL SW BLOCK

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

[3 /1R] [P] [F] [P] [A]
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:
FAILURE NOT DETECTABLE.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/15/88
 ASSESSMENT ID: MPS-440X
 NASA FMEA #: 2287-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 440
 ITEM: DIODE (3A), FA2 MDM BLOCK

LEAD ANALYST: B. SLAUGHTER

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:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/15/88
 ASSESSMENT ID: MPS-441X
 NASA FMEA #: 2288-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 441
 ITEM: DIODE, LA1 MDM BLOCK

LEAD ANALYST: B. SLAUGHTER

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:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/20/88
 ASSESSMENT ID: MPS-442X
 NASA FMEA #: 2247-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 442
 ITEM: HYBRID DRIVER, TYPE 1, CL

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/20/88
 ASSESSMENT ID: MPS-443X
 NASA FMEA #: 2246-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 443
 ITEM: HYBRID DRIVER, TYPE 1, OP

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/20/88
 ASSESSMENT ID: MPS-444X
 NASA FMEA #: 2245-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 444
 ITEM: HYBRID DRIVER, TYPE 3, CL

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [X]
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/19/88
 ASSESSMENT ID: MPS-445X
 NASA FMEA #: 2245-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 445
 ITEM: HYBRID DRIVER, TYPE 3, CL

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [X]
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/15/88
 ASSESSMENT ID: MPS-446X
 NASA FMEA #: 2249-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 446
 ITEM: DIODE (12A), CL RPC "B" OUT

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [X]
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/20/88
 ASSESSMENT ID: MPS-447X
 NASA FMEA #: 2249-3

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 447
 ITEM: DIODE (12A), CL RPC "B" OUT

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/20/88
 ASSESSMENT ID: MPS-448X
 NASA FMEA #: 2251-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 448
 ITEM: DIODE (12A), CL XOVER

LEAD ANALYST: B. SLAUGHTER

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 [X]
 INADEQUATE []

REMARKS:
 THE FAILURE MAY NOT BE DETECTED.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/20/88
 ASSESSMENT ID: MPS-449X
 NASA FMEA #: 2251-3

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 449
 ITEM: DIODE (12A), CL XOVER

LEAD ANALYST: B. SLAUGHTER

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)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [X]
 INADEQUATE []

REMARKS:

FAILURE CAN SHORT ALL CLOSING COMMANDS TO GROUND, PREVENTING VALVE CLOSURE. ET SEP WITH VALVE OPEN CAN CAUSE LOSS OF VEHICLE. MECHANICAL LINKAGE PROVIDES REDUNDANCY.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/20/88
 ASSESSMENT ID: MPS-450X
 NASA FMEA #: 2254-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 450
 ITEM: RESISTOR OP POS SW MONITOR

LEAD ANALYST: B. SLAUGHTER

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:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/20/88
ASSESSMENT ID: MPS-451X
NASA FMEA #: 2255-1

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: EPD&C/MPS
MDAC ID: 451
ITEM: RESISTOR CL POS SW MONITOR

LEAD ANALYST: B. SLAUGHTER

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

LOSS OF MONITORING. ONLY REF AVAIL: MPS/EPDC FMEA REVIEW SUMMARY
8-17-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/20/88
 ASSESSMENT ID: MPS-452X
 NASA FMEA #: 2244-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 452
 ITEM: HYBRID DRIVER, TYPE 3, OP

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [X]
 INADEQUATE []

REMARKS:
 ASSESSMENT IS FOR 1 HDC.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/20/88
 ASSESSMENT ID: MPS-453X
 NASA FMEA #: 2244-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 453
 ITEM: HYBRID DRIVER, TYPE 3, OP

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [X]
 INADEQUATE []

REMARKS:
 ASSESSMENT IS FOR 1 HDC.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/20/88
 ASSESSMENT ID: MPS-454X
 NASA FMEA #: 2398-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 454
 ITEM: DIODE CL RPC "C" OUT (12A)

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [X]
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/21/88
ASSESSMENT ID: MPS-455X
NASA FMEA #: 2398-3

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: EPD&C/MPS
MDAC ID: 455
ITEM: DIODE CL RPC "C" OUT (12A)

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

SECOND FAILURE CAN SHORT ALL CLOSE COMMANDS TO GROUND, PREVENTING VALVE CLOSURE. MECHANICAL LINKAGE PROVIDES REDUNDANCY.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/26/88
 ASSESSMENT ID: MPS-456X
 NASA FMEA #: 2026-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 456
 ITEM: HDC I-GND C/O CMD PWR

LEAD ANALYST: B. SLAUGHTER

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:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/26/88
 ASSESSMENT ID: MPS-457X
 NASA FMEA #: 2026-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 457
 ITEM: HDC I-GND C/O CMD PWR

LEAD ANALYST: B. SLAUGHTER

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:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/26/88
 ASSESSMENT ID: MPS-458X
 NASA FMEA #: 2031-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 458
 ITEM: TRANSIENT SUPPRESSION DIODES

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

THE IOA SCENARIO IS POSSIBLE.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/26/88
 ASSESSMENT ID: MPS-459X
 NASA FMEA #: 2031-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 459
 ITEM: ZENER DIODES

LEAD ANALYST: B. SLAUGHTER

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:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/26/88
 ASSESSMENT ID: MPS-460X
 NASA FMEA #: 2032-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 460
 ITEM: HDC I-RELAY CONTROL PWR

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/26/88
 ASSESSMENT ID: MPS-461X
 NASA FMEA #: 2032-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 461
 ITEM: HDC I-RELAY CONTROL PWR

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

NASA DOES NOT CALL THE FIALURE OF A TRANSDUCER AND THE SWITCH TO
 STANDBY TRANSDUCER A FAILURE.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/26/88
 ASSESSMENT ID: MPS-462X
 NASA FMEA #: 2033-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 462
 ITEM: RELAY

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

INADEQUATE ADEQUATE []
 REMARKS: []

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/26/88
 ASSESSMENT ID: MPS-463X
 NASA FMEA #: 2033-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 463
 ITEM: RELAY

LEAD ANALYST: B. SLAUGHTER

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:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/09/88
 ASSESSMENT ID: MPS-464X
 NASA FMEA #: 2225-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 464
 ITEM: HDC III

LEAD ANALYST: B. SLAUGHTER

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:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/02/88
 ASSESSMENT ID: MPS-465X
 NASA FMEA #: 2090-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 465
 ITEM: CL HDC III

LEAD ANALYST: B. SLAUGHTER

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)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:
 THE IOA SCENARIO IS MORE CRITICAL.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/02/88
 ASSESSMENT ID: MPS-466X
 NASA FMEA #: 2090-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 466
 ITEM: CL HDC III

LEAD ANALYST: B. SLAUGHTER

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)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:
 THE IOA SCENARIO IS MORE CRITICAL.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/02/88
 ASSESSMENT ID: MPS-467X
 NASA FMEA #: 2091-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 467
 ITEM: CL HDC I

LEAD ANALYST: B. SLAUGHTER

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)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:
 THE IOA SCENARIO IS MORE CRITICAL.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/03/88
 ASSESSMENT ID: MPS-468X
 NASA FMEA #: 2092-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 468
 ITEM: CL RPC

LEAD ANALYST: B. SLAUGHTER

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)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:
 THE IOA SCENARIO IS MORE CRITICAL.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/03/88
 ASSESSMENT ID: MPS-469X
 NASA FMEA #: 2092-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 469
 ITEM: CL RPC

LEAD ANALYST: B. SLAUGHTER

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)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

THE IOA SCENARIO IS MORE CRITICAL.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/03/88
 ASSESSMENT ID: MPS-470X
 NASA FMEA #: 2094-3

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 470
 ITEM: CL RPC B OUTPUT DIODE

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/03/88
 ASSESSMENT ID: MPS-471X
 NASA FMEA #: 2095-3

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 471
 ITEM: XOVER DIODE

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/03/88
 ASSESSMENT ID: MPS-472X
 NASA FMEA #: 2093-3

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 472
 ITEM: CL RPC C OUTPUT DIODE

LEAD ANALYST: B. SLAUGHTER

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)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:
 INSTRUMENTATION WILL DETECT THE FAILURE.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/03/88
 ASSESSMENT ID: MPS-473X
 NASA FMEA #: 2387-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 473
 ITEM: POS SW MONITOR RESISTOR

LEAD ANALYST: B. SLAUGHTER

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:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/11/88
 ASSESSMENT ID: MPS-474X
 NASA FMEA #: 2340-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 474
 ITEM: LOCK RPC (2)

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

NASA FMEA NO 05-6J-2340-1 REV 10/10/87 CONTAINS TEXT EXPLAINING THAT THIS ITEM FAILS SCREEN B. THIS TEXT SHOULD BE DELETED.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/11/88
 ASSESSMENT ID: MPS-475X
 NASA FMEA #: 2340-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 475
 ITEM: LOCK RPC (2)

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

NASA FMEA NO 05-6J-2340-2 REV 10/10/87 CONTAINS TEXT EXPLAINING THAT THIS ITEM FAILS SCREEN B. THIS TEXT SHOULD BE DELETED.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/11/88
 ASSESSMENT ID: MPS-476X
 NASA FMEA #: 2341-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 476
 ITEM: UNLOCK RPC (2)

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

NASA FMEA NO 05-6J-2341-1 REV 10/10/87 CONTAINS TEXT EXPLAINING
 THAT THIS ITEM FAILS SCREEN B. THIS TEXT SHOULD BE DELETED.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/11/88
 ASSESSMENT ID: MPS-477X
 NASA FMEA #: 2341-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 477
 ITEM: UNLOCK RPC (2)

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

NASA FMEA NO 05-6J-2341-2 REV 10/10/87 CONTAINS TEXT EXPLAINING THAT THIS ITEM FAILS SCREEN B. THIS TEXT SHOULD BE DELETED.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/11/88
 ASSESSMENT ID: MPS-478X
 NASA FMEA #: 2342-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 478
 ITEM: LOCK HDC I

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

NASA FMEA NO 05-6J-2342-1 REV 10/10/87 CONTAINS TEXT EXPLAINING THAT THIS ITEM FAILS SCREEN B. THIS TEXT SHOULD BE DELETED.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/11/88
 ASSESSMENT ID: MPS-479X
 NASA FMEA #: 2342-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 479
 ITEM: LOCK HDC I

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

NASA FMEA NO 05-6J-2342-2 REV 10/10/87 CONTAINS TEXT EXPLAINING THAT THIS ITEM FAILS SCREEN B. THIS TEXT SHOULD BE DELETED.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/11/88
 ASSESSMENT ID: MPS-480X
 NASA FMEA #: 2343-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 480
 ITEM: UNLOCK HDC I

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

NASA FMEA NO 05-6J-2343-1 REV 10/10/87 CONTAINS TEXT EXPLAINING
 THAT THIS ITEM FAILS SCREEN B. THIS TEXT SHOULD BE DELETED.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/11/88
ASSESSMENT ID: MPS-481X
NASA FMEA #: 2343-2

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: EPD&C/MPS
MDAC ID: 481
ITEM: UNLOCK HDC I

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

NASA FMEA NO 05-6J-2343-2 REV 10/10/87 CONTAINS TEXT EXPLAINING THAT THIS ITEM FAILS SCREEN B. THIS TEXT SHOULD BE DELETED.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/11/88
 ASSESSMENT ID: MPS-482X
 NASA FMEA #: 2344-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 482
 ITEM: LOCK HDC III (2)

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/11/88
 ASSESSMENT ID: MPS-483X
 NASA FMEA #: 2344-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 483
 ITEM: LOCK HDC III (2)

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/11/88
 ASSESSMENT ID: MPS-484X
 NASA FMEA #: 2345-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 484
 ITEM: UNLOCK HDC III (2)

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/11/88
ASSESSMENT ID: MPS-485X
NASA FMEA #: 2345-2

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: EPD&C/MPS
MDAC ID: 485
ITEM: UNLOCK HDC III (2)

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/11/88
 ASSESSMENT ID: MPS-486X
 NASA FMEA #: 2346-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 486
 ITEM: LOCK RPC C OUTPUT DIODE

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/11/88
 ASSESSMENT ID: MPS-487X
 NASA FMEA #: 2346-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 487
 ITEM: LOCK RPC C OUTPUT DIODE

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/11/88
 ASSESSMENT ID: MPS-488X
 NASA FMEA #: 2346-3

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 488
 ITEM: LOCK RPC C OUTPUT DIODE

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

NASA FMEA NO 05-6J-2346-3 REV 11/4/87 CONTAINS TEXT EXPLAINING
 THAT THIS ITEM FAILS SCREEN B. THIS TEXT SHOULD BE DELETED.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/11/88
 ASSESSMENT ID: MPS-489X
 NASA FMEA #: 2347-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 489
 ITEM: UNLOCK RPC B OUTPUT DIODE

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/11/88
 ASSESSMENT ID: MPS-490X
 NASA FMEA #: 2347-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 490
 ITEM: UNLOCK RPC B OUTPUT DIODE

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/12/88
ASSESSMENT ID: MPS-491X
NASA FMEA #: 2347-3

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: EPD&C/MPS
MDAC ID: 491
ITEM: UNLOCK RPC B OUTPUT DIODE

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

NASA FMEA NO 05-6J-2347-3 REV 11/19/87 CONTAINS TEXT EXPLAINING THAT THIS ITEM FAILS SCREEN B. THIS TEXT SHOULD BE DELETED.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/12/88
 ASSESSMENT ID: MPS-492X
 NASA FMEA #: 2348-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 492
 ITEM: LOCK RPC XOVER DIODE

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/12/88
ASSESSMENT ID: MPS-493X
NASA FMEA #: 2348-2

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: EPD&C/MPS
MDAC ID: 493
ITEM: LOCK RPC XOVER DIODE

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/12/88
 ASSESSMENT ID: MPS-494X
 NASA FMEA #: 2348-3

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 494
 ITEM: LOCK RPC XOVER DIODE

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

NASA FMEA NO 05-6J-2348-3 REV 11/04/87 CONTAINS TEXT EXPLAINING THAT THIS ITEM FAILS SCREEN B. THIS TEXT SHOULD BE DELETED.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/12/88
 ASSESSMENT ID: MPS-495X
 NASA FMEA #: 2349-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 495
 ITEM: UNLOCK RPC XOVER DIODE

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/12/88
 ASSESSMENT ID: MPS-496X
 NASA FMEA #: 2349-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 496
 ITEM: UNLOCK RPC XOVER DIODE

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/12/88
 ASSESSMENT ID: MPS-497X
 NASA FMEA #: 2349-3

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 497
 ITEM: UNLOCK RPC XOVER DIODE

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/12/88
 ASSESSMENT ID: MPS-498X
 NASA FMEA #: 2350-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 498
 ITEM: TRANSIENT SUPPRESSOR DIODES (2)

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 /3]	[NA]	[NA]	[NA]	[] *
IOA	[3 /1R]	[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:
 REF: MPS-498X.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/12/88
 ASSESSMENT ID: MPS-499X
 NASA FMEA #: 2351-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 499
 ITEM: UNLOCK POS SW MONITOR RESISTORS (2)

LEAD ANALYST: B. SLAUGHTER

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

ONLY AVAIL REF: MPS/EPDC FMEA REVIEW SUMMARY 8-17-87. THE
 FAILURE CAUSES A LOSS OF MONITORING CAPABILITY.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/12/88
 ASSESSMENT ID: MPS-500X
 NASA FMEA #: 2352-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 500
 ITEM: LOCK POS SW MON RESISTOR (2)

LEAD ANALYST: B. SLAUGHTER

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:

6

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/12/88
 ASSESSMENT ID: MPS-501X
 NASA FMEA #: 2353-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 501
 ITEM: RPC AND SOL PWR MON RESISTORS (6)

LEAD ANALYST: B. SLAUGHTER

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:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/12/88
 ASSESSMENT ID: MPS-502X
 NASA FMEA #: 2376-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 502
 ITEM: LOCK RPC B OUTPUT DIODE

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/12/88
 ASSESSMENT ID: MPS-503X
 NASA FMEA #: 2376-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 503
 ITEM: LOCK RPC B OUTPUT DIODE

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/12/88
 ASSESSMENT ID: MPS-504X
 NASA FMEA #: 2376-3

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 504
 ITEM: LOCK RPC B OUTPUT DIODE

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

NASA FMEA NO 05-6J-2376-3 REV 11/04/87 CONTAINS TEXT EXPLAINING
 THAT THIS ITEM FAILS SCREEN B. THIS TEXT SHOULD BE DELETED.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/12/88
 ASSESSMENT ID: MPS-505X
 NASA FMEA #: 2377-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 505
 ITEM: UNLOCK RPC C OUTPUT DIODE

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/12/88
 ASSESSMENT ID: MPS-506X
 NASA FMEA #: 2377-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 506
 ITEM: UNLOCK RPC C OUTPUT DIODE

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/12/88
 ASSESSMENT ID: MPS-507X
 NASA FMEA #: 2377-3

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 507
 ITEM: UNLOCK RPC C OUTPUT DIODE

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/12/88
 ASSESSMENT ID: MPS-508X
 NASA FMEA #: 2378-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 508
 ITEM: BLEED RESISTORS (4)

LEAD ANALYST: B. SLAUGHTER

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:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/15/88
ASSESSMENT ID: MPS-601X
NASA FMEA #: 2167-1

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: EPD&C/MPS
MDAC ID: 601
ITEM: TOGGLE SWITCH

LEAD ANALYST: B. SLAUGHTER

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)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

ONLY AVAIL REF: MPS/EPDC FMEA REVIEW SUMMARY 8-17-87. THE
TOGGLE SWITCH IS NOT USED AT MECO.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/15/88
 ASSESSMENT ID: MPS-602X
 NASA FMEA #: 2167-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 602
 ITEM: TOGGLE SWITCH

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

ONLY AVAIL REF: MPS/EPDC FMEA REVIEW SUMMARY 8-17-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/15/88
 ASSESSMENT ID: MPS-603X
 NASA FMEA #: 2167-3

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 603
 ITEM: TOGGLE SWITCH

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[3 /1R]	[F]	[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:

ONLY AVAIL REF: MPS/EPDC FMEA REVIEW SUMMARY 8-17-87. THE TOGGLE SWITCH IS NOT USED AT MECO.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/15/88
 ASSESSMENT ID: MPS-604X
 NASA FMEA #: 2168-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 604
 ITEM: CIRCUIT BREAKER

LEAD ANALYST: B. SLAUGHTER

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:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/15/88
 ASSESSMENT ID: MPS-605X
 NASA FMEA #: 2168-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 605
 ITEM: CIRCUIT BREAKER

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

[3 /1R] [P] [F] [P] [A]
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

ONLY AVAIL REF: MPS/EPDC FMEA REVIEW SUMMARY 8-17-87. THE
 FAILURE OF SOME BUT NOT ALL CIRCUIT BREAKERS CAN BE DETECTED.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/15/88
 ASSESSMENT ID: MPS-606X
 NASA FMEA #: 2169-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 606
 ITEM: SW SCAN RESISTOR

LEAD ANALYST: B. SLAUGHTER

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:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/15/88
 ASSESSMENT ID: MPS-607X
 NASA FMEA #: 201300-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 607
 ITEM: CONTROLLER HEATER CIRCUIT

LEAD ANALYST: B. SLAUGHTER

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:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/15/88
 ASSESSMENT ID: MPS-615X
 NASA FMEA #: 2165-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 615
 ITEM: TOGGLE SWITCH

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

ONLY AVAIL REF: MPS/EPDC FMEA REVIEW SUMMARY 8-17-88

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/15/88
ASSESSMENT ID: MPS-616X
NASA FMEA #: 2165-2

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: EPD&C/MPS
MDAC ID: 616
ITEM: TOGGLE SWITCH

LEAD ANALYST: B. SLAUGHTER

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

ONLY AVAIL REF: MPS/EPDC FMEA REVIEW SUMMARY 8-17-87. NASA USES A FAILURE UNRELATED TO THE SWITCH TO CAUSE AN ABORT. THE ABORT CRITICALITY IS 2/1R.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/15/88
 ASSESSMENT ID: MPS-617X
 NASA FMEA #: 2165-3

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 617
 ITEM: TOGGLE SWITCH

LEAD ANALYST: B. SLAUGHTER

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

ONLY AVAIL REF: MPS/EPDC FMEA REVIEW SUMMARY 8-17-87. NASA USES
 A FAILURE UNRELATED TO THE SWITCH TO CAUSE AN ABORT. THE ABORT
 CRITICALITY IS 2/1R.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/15/88
 ASSESSMENT ID: MPS-618X
 NASA FMEA #: 2165-4

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 618
 ITEM: TOGGLE SWITCH

LEAD ANALYST: B. SLAUGHTER

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

ONLY AVAIL REF: MPS/EPDC FMEA REVIEW SUMMARY 8-17-87. NASA'S
 ANALYSIS IS FOR THE ABORT CASE.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/15/88
 ASSESSMENT ID: MPS-619X
 NASA FMEA #: 2166-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 619
 ITEM: FUSE

LEAD ANALYST: B. SLAUGHTER

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

ONLY AVAIL REF: MPS/EPDC FMEA REVIEW SUMMARY 8-17-87. NASA'S
 ANALYSIS IS FOR THE ABORT CASE.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/15/88
ASSESSMENT ID: MPS-620X
NASA FMEA #: 2170-1

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: EPD&C/MPS
MDAC ID: 620
ITEM: FUSE

LEAD ANALYST: B. SLAUGHTER

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:

ONLY AVAIL REF: MPS/EPDS FMEA REVIEW SUMMARY 8-17-87. NASA'S ANALYSIS IS FOR AN ABORT. THE MANUAL SHUTDOWN CAPABILITY IS USED WHEN LIMIT CONTROL IS INHIBITED AND AN ENGINE HELIUM SHUTDOWN LIMIT VIOLATION OCCURS (I.E., ABORT CASE).

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/15/88
ASSESSMENT ID: MPS-621X
NASA FMEA #: 2171-1

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: EPD&C/MPS
MDAC ID: 621
ITEM: PUSHBUTTON SWITCH

LEAD ANALYST: B. SLAUGHTER

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:

ONLY AVAIL REF: MPS/EPDC FMEA REVIEW SUMMARY 8-17-87. NASA'S ANALYSIS IS FOR AN ABORT. THE MANUAL SHUTDOWN CAPABILITY IS USED WHEN LIMIT CONTROL IS INHIBITED AND AN ENGINE HELIUM SHUTDOWN LIMIT VIOLATION OCCURS (I.E., ABORT CASE).

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/15/88
ASSESSMENT ID: MPS-622X
NASA FMEA #: 2171-2

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: EPD&C/MPS
MDAC ID: 622
ITEM: PUSHBUTTON SWITCH

LEAD ANALYST: B. SLAUGHTER

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:

ONLY AVAIL REF: MPS/EPDC FMEA REVIEW SUMMARY 8-17-87. NASA ASSUMES THE FAILURE OF A SINGLE WIPER WITHIN THE SWITCH. THIS IS INCONSISTENT WITH PRIOR DEFINITIONS OF THIS FAILURE MODE. IOA ASSUMES PREMATURE CLOSURE OF THE SWITCH.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/15/88
 ASSESSMENT ID: MPS-625X
 NASA FMEA #: 2226-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 625
 ITEM: ALL ECO SIM OPEN CMD HDC

LEAD ANALYST: B. SLAUGHTER

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:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/17/88
 ASSESSMENT ID: MPS-626X
 NASA FMEA #: 2226-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 626
 ITEM: ALL ECO SIM OPEN CMD HDC

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

ONLY AVAIL REF: MPS/EPDC FMEA REVIEW SUMMARY 8-17-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/17/88
 ASSESSMENT ID: MPS-627X
 NASA FMEA #: 2227-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 627
 ITEM: ALL ECO SIM DRY CMD HDC

LEAD ANALYST: B. SLAUGHTER

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:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/17/88
 ASSESSMENT ID: MPS-628X
 NASA FMEA #: 2227-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 628
 ITEM: ALL ECO SIM DRY CMD HDC

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

ONLY AVAIL REF: MPS/EPDS FMEA REVIEW SUMMARY 8-17-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/17/88
 ASSESSMENT ID: MPS-629X
 NASA FMEA #: 2228-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 629
 ITEM: ECO SIM WET CMD 1-4 HDC

LEAD ANALYST: B. SLAUGHTER

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:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/17/88
 ASSESSMENT ID: MPS-630X
 NASA FMEA #: 2228-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 630
 ITEM: ECO SIM WET CMD 1-4 HDC

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

ONLY AVAIL REF: MPS/EPDC FMEA REVIEW SUMMARY 8-17-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/17/88
 ASSESSMENT ID: MPS-631X
 NASA FMEA #: 2229-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 631
 ITEM: LVL SENSOR SIM OPEN CMD HDC

LEAD ANALYST: B. SLAUGHTER

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:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/17/88
 ASSESSMENT ID: MPS-632X
 NASA FMEA #: 2229-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 632
 ITEM: LVL SENSOR SIM OPEN CMD HDC

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

ONLY AVAIL REF: MPS/EPDC FMEA REVIEW SUMMARY 8-17-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/17/88
 ASSESSMENT ID: MPS-633X
 NASA FMEA #: 2230-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 633
 ITEM: LVL SENSOR SIM DRY CMD HDC

LEAD ANALYST: B. SLAUGHTER

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:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/17/88
 ASSESSMENT ID: MPS-634X
 NASA FMEA #: 2230-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 634
 ITEM: LVL SENSOR SIM DRY CMD HDC

LEAD ANALYST: B. SLAUGHTER

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:

ONLY AVAIL REF: MPS/EPDC FMEA REVIEW SUMMARY 8-17-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/17/88
ASSESSMENT ID: MPS-635X
NASA FMEA #: 2231-1

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: EPD&C/MPS
MDAC ID: 635
ITEM: LVL SENSOR SIM WET CMD HDC

LEAD ANALYST: B. SLAUGHTER

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:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/17/88
 ASSESSMENT ID: MPS-636X
 NASA FMEA #: 2231-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 636
 ITEM: LVL SENSOR SIM WET CMD HDC

LEAD ANALYST: B. SLAUGHTER

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:

ONLY AVAIL REF: MPS/EPDC FMEA REVIEW SUMMARY 8-17-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/17/88
 ASSESSMENT ID: MPS-640X
 NASA FMEA #: 2027-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 640
 ITEM: BUS 2 AND 3 UPSTREAM HDC

LEAD ANALYST: B. SLAUGHTER

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)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

ONLY AVAILA REF: MPS/EPDC FMEA REVIEW SUMMARY 8-17-87. AN UNDERLOAD WOULD NOT OCCUR BECAUSE OF THE FIRST FAILURE. SENSORS ARE AVAILABLE AT 100.15%, 100%, 100%, AND 99.85% AND ARE ALL POWERED BY A SEPARATE BUS.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/16/88
 ASSESSMENT ID: MPS-641X
 NASA FMEA #: 2027-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 641
 ITEM: BUS 2 AND 3 UPSTREAM HDC

LEAD ANALYST: B. SLAUGHTER

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:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/17/88
ASSESSMENT ID: MPS-642X
NASA FMEA #: 2028-1

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: EPD&C/MPS
MDAC ID: 642
ITEM: BUS 2 AND 3 DOWNSTREAM AND BUS 1 HDC

LEAD ANALYST: B. SLAUGHTER

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:

ONLY AVAIL REF: MPS/EPDC FMEA REVIEW SUMMARY 8-17-87. AN UNDERLOAD WOULD NOT OCCUR BECAUSE OF THE FIRST FAILURE. SENSORS ARE AVAILABLE AT 100.15%, 100%, AND 99.85% AND ARE ALL POWERED BY A SEPARATE BUS.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/17/88
 ASSESSMENT ID: MPS-643X
 NASA FMEA #: 2028-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 643
 ITEM: BUS 2 AND 3 DOWNSTREAM AND BUS 1 HDC

LEAD ANALYST: B. SLAUGHTER

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:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/17/88
ASSESSMENT ID: MPS-644X
NASA FMEA #: 2232-1

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: EPD&C/MPS
MDAC ID: 644
ITEM: BUS 4 RPC

LEAD ANALYST: B. SLAUGHTER

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)

[3 /1R] [P] [P] [P] [D]
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

ONLY AVAIL REF: MPS/EPDC FMEA REVIEW SUMMARY 8-17-87. PARALLEL
POWER PATHS PROVIDE REDUNDANCY FOR THE FIRST FAILURE. A SECOND
FAILURE WILL NOT ELIMINATE TWO POWER SUPPLIES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/17/88
 ASSESSMENT ID: MPS-645X
 NASA FMEA #: 2232-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 645
 ITEM: BUS 4 RPC

LEAD ANALYST: B. SLAUGHTER

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:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/17/88
ASSESSMENT ID: MPS-646X
NASA FMEA #: 2233-1

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: EPD&C/MPS
MDAC ID: 646
ITEM: RPC OUTPUT DIODE

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

ONLY AVAIL REF: MPS/EPDC FMEA REVIEW SUMMARY 8-17-87. PARALLEL
POWER PATHS PROVIDE REDUNDANCY FOR THE FIRST FAILURE. A SECOND
FAILURE WILL NOT ELIMINATE TWO POWER SUPPLIES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/17/88
 ASSESSMENT ID: MPS-647X
 NASA FMEA #: 2233-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 647
 ITEM: RPC OUTPUT DIODE

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

ONLY AVAIL REF: MPS/EPDC FMEA REVIEW SUMMARY 8-17-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/17/88
ASSESSMENT ID: MPS-648X
NASA FMEA #: 2233-3

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: EPD&C/MPS
MDAC ID: 648
ITEM: RPC OUTPUT DIODE

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

[3 /1R] [P] [P] [P] [D]
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

ONLY AVAIL REF: MPS/EPDC FMEA REVIEW SUMMARY 8-17-87. PARALLEL
POWER PATHS PROVIDE REDUNDANCY FOR THE FIRST FAILURE. A SECOND
FAILURE WILL NOT ELIMINATE TWO POWER SUPPLIES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/17/88
 ASSESSMENT ID: MPS-649X
 NASA FMEA #: 2234-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 649
 ITEM: MONITORING RESISTOR

LEAD ANALYST: B. SLAUGHTER

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:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/17/88
 ASSESSMENT ID: MPS-650X
 NASA FMEA #: 2395-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 650
 ITEM: BLEED RESISTORS

LEAD ANALYST: B. SLAUGHTER

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:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/16/88
 ASSESSMENT ID: MPS-655X
 NASA FMEA #: 2256-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 655
 ITEM: RPC

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

ONLY AVAIL REF: MPS/EPDC FMEA REVIEW SUMMARY 8-17-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/16/88
 ASSESSMENT ID: MPS-656X
 NASA FMEA #: 2256-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 656
 ITEM: RPC

LEAD ANALYST: B. SLAUGHTER

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:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/16/88
 ASSESSMENT ID: MPS-657X
 NASA FMEA #: 2257-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 657
 ITEM: HDC

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

ONLY AVAIL REF: MPS/EPDC FMEA REVIEW SUMMARY 8-17-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/16/88
 ASSESSMENT ID: MPS-658X
 NASA FMEA #: 2257-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 658
 ITEM: HDC

LEAD ANALYST: B. SLAUGHTER

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:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/16/88
 ASSESSMENT ID: MPS-659X
 NASA FMEA #: 2258-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 659
 ITEM: MONITORING RESISTOR

LEAD ANALYST: B. SLAUGHTER

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:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/16/88
 ASSESSMENT ID: MPS-660X
 NASA FMEA #: 2259-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 660
 ITEM: RPC OUTPUT DIODE

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

ONLY AVAIL REF: MPS/EPDC FMEA REVIEW SUMMARY 8-17-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/16/88
 ASSESSMENT ID: MPS-661X
 NASA FMEA #: 2259-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 661
 ITEM: RPC OUTPUT DIODE

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

ONLY AVAIL REF: MPS/EPDC FMEA REVIEW SUMMARY 8-17-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/16/88
 ASSESSMENT ID: MPS-662X
 NASA FMEA #: 2259-3

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 662
 ITEM: RPC OUTPUT DIODE

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

ONLY AVAIL REF: MPS/EPDC FMEA REVIEW SUMMARY 8-17-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/16/88
 ASSESSMENT ID: MPS-663X
 NASA FMEA #: 2380-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 663
 ITEM: BLEED RESISTORS

LEAD ANALYST: B. SLAUGHTER

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:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/16/88
ASSESSMENT ID: MPS-667X
NASA FMEA #: 2161-1

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: EPD&C/MPS
MDAC ID: 667
ITEM: BACKUP LH2 VLV SWITCH FUSE

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

ONLY AVAIL REF: MPS/EPDC FMEA REVIEW SUMMARY 8-17-87. IOA CALLS
COMPUTER DUMP COMMAND REDUNDANT TO THE SWITCH DUMP COMMAND.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/16/88
 ASSESSMENT ID: MPS-668X
 NASA FMEA #: 2162-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 668
 ITEM: DUMP SEQUENCE SWITCH S1

LEAD ANALYST: B. SLAUGHTER

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:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/16/88
ASSESSMENT ID: MPS-669X
NASA FMEA #: 2162-3

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: EPD&C/MPS
MDAC ID: 669
ITEM: DUMP SEQUENCE SWITCH S1

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[F]	[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:

ONLY AVAIL REF: MPS/EPDC FMEA REVIEW SUMMARY 8-17-87.
INSTRUMENTATION WOULD DETECT THE FAILURE.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/16/88
 ASSESSMENT ID: MPS-670X
 NASA FMEA #: 2163-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 670
 ITEM: BACKUP LH2 VALVE SWITCH S2

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

[3 /1R] [P] [P] [P] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

ONLY AVAIL REF: MPS/EPDC FMEA REVIEW SUMMARY 8-17-87. IOA CALLS
 COMPUTER DUMP COMMAND REDUNDANT TO THE SWITCH DUMP COMMAND.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/16/88
 ASSESSMENT ID: MPS-671X
 NASA FMEA #: 2163-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 671
 ITEM: BACKUP LH2 VALVE SWITCH S2

LEAD ANALYST: B. SLAUGHTER

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:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/16/88
 ASSESSMENT ID: MPS-672X
 NASA FMEA #: 2163-3

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 672
 ITEM: BACKUP LH2 VALVE SWITCH S2

LEAD ANALYST: B. SLAUGHTER

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)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

ONLY AVAIL REF: MPS/EPDC FMEA REVIEW SUMMARY 8-17-87. PROPELLANT VENTING DURING BOOST COULD CAUSE FIRE/EXPLOSION. SOFTWARE INHIBITS WERE NOT CONSIDERED.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/16/88
 ASSESSMENT ID: MPS-673X
 NASA FMEA #: 2163-4

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 673
 ITEM: BACKUP LH2 VALVE SWITCH S2

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

	CRITICALITY FLIGHT HDW/FUNC	REDUNDANCY SCREENS			CIL ITEM
		A	B	C	
NASA	[2 /1R]	[F]	[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:

ONLY AVAIL REF: MPS/EPDC FMEA REVIEW SUMMARY 8-17-87. THE
 FAILURE IS DETECTABLE.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/16/88
 ASSESSMENT ID: MPS-675X
 NASA FMEA #: 2023-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 675
 ITEM: LIMIT RESISTORS

LEAD ANALYST: B. SLAUGHTER

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:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/09/88
 ASSESSMENT ID: MPS-676X
 NASA FMEA #: 2396-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 676
 ITEM: BLEED RESISTORS

LEAD ANALYST: B. SLAUGHTER

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:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/17/88
 ASSESSMENT ID: MPS-680X
 NASA FMEA #: 2416-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 680
 ITEM: STATUS LIGHT

LEAD ANALYST: B. SLAUGHTER

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:

ONLY AVAIL REF: MPS/EPDC FMEA REVIEW SUMMARY 8-17-87. NASA VIOLATES NTS 22206 3.3.3F.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/17/88
ASSESSMENT ID: MPS-681X
NASA FMEA #: 2407-1

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: EPD&C/MPS
MDAC ID: 681
ITEM: METER M1 (PC)

LEAD ANALYST: B. SLAUGHTER

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:

ONLY AVAIL REF: MPS/EPDC FMEA REVIEW SUMMARY 8-17-87. NASA
VIOLATES NTS 22206 3.3.3F.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/17/88
 ASSESSMENT ID: MPS-682X
 NASA FMEA #: 2408-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 682
 ITEM: METER M2 (LO2/LH2 MANF. PRESSURE)

LEAD ANALYST: B. SLAUGHTER

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:

ONLY AVAIL REF: MPS/EPDC FMEA REVIEW SUMMARY 8-17-87. NASA VIOLATES NTS 22206 3.3.3F.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/17/88
 ASSESSMENT ID: MPS-683X
 NASA FMEA #: 2409-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 683
 ITEM: METER M4 (HELIUM PRESSURE)

LEAD ANALYST: B. SLAUGHTER

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:

NASA VIOLATES NTS 22206 2.3.3F. ONLY AVAIL REF: MPS/EPDC FMEA
 REVIEW SUMMARY 8-17-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/17/88
 ASSESSMENT ID: MPS-684X
 NASA FMEA #: 2410-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 684
 ITEM: TOGGLE SWITCH (TANK/REG SELECT FOR METER M4)

LEAD ANALYST: B. SLAUGHTER

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:

NASA VIOLATES NTS 22206 2.3.3F. ONLY AVAIL REF: MPS/EPDC FMEA
 REVIEW SUMMARY 8-17-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/01/88
 ASSESSMENT ID: MPS-801X
 NASA FMEA #: 2018-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 801
 ITEM: LH2 FEED MANIFOLD RTLS PRESS VALVES REMOTE POWER
 CONTROLLERS (4)

LEAD ANALYST: B. SLAUGHTER

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:
 ABORT CRITICALITY IS 2/1R FOR AN RTLS.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/01/88
 ASSESSMENT ID: MPS-802X
 NASA FMEA #: 2019-3

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 802
 ITEM: LH2 FEED MANIFOLD RTLS PRESS VALVES RPC A OUTPUT
 DIODE (2)

LEAD ANALYST: B. SLAUGHTER

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:
 CRITICALITY IS 2/1R FOR AN RTLS ABORT

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/01/88
 ASSESSMENT ID: MPS-803X
 NASA FMEA #: 2048-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 803
 ITEM: LH2 FEED MANIFOLD RTLS PRESS VALVES HYBRID
 DRIVER CONTROLLERS (4)

LEAD ANALYST: B. SLAUGHTER

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:

CRITICALITY IS 2/1R FOR AN RTLS ABORT

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/01/88
 ASSESSMENT ID: MPS-804X
 NASA FMEA #: 2382-3

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 804
 ITEM: LH2 FEED MANIFOLD RTLS PRESS VALVES RPC C OUTPUT
 DIODE (2)

LEAD ANALYST: B. SLAUGHTER

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:
 CRITICALITY IS 2/1R FOR AN RTLS ABORT

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/01/88
 ASSESSMENT ID: MPS-805X
 NASA FMEA #: 2383-3

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 805
 ITEM: LH2 FEED MANIFOLD RTLS PRESS VALVES RPC C
 CROSSOVER DIODES (2)

LEAD ANALYST: B. SLAUGHTER

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 FAILURE IS CRITICALITY 1/1 DURING AN RTLS.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/02/88	NASA DATA:
ASSESSMENT ID: MPS-806X	BASELINE []
NASA FMEA #: 2050-1	NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 806
 ITEM: HELIUM SUPPLY BLOWDOWN VALVES HYBRID DRIVER
 CONTROLLER

LEAD ANALYST: B. SLAUGHTER

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)
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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE	[]
INADEQUATE	[]

REMARKS:
 CRITICALITY FOR AN ABORT IS 1/1.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/01/88
 ASSESSMENT ID: MPS-807X
 NASA FMEA #: 2111-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 807
 ITEM: HELIUM ISOLATION B VALVE TOGGLE SWITCH

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/01/88
ASSESSMENT ID: MPS-808X
NASA FMEA #: 2114-2

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: EPD&C/MPS
MDAC ID: 808
ITEM: HELIUM ISOLATION "B" VALVE SWITCH BLOCKING DIODE

LEAD ANALYST: MCNICOLL

ASSESSMENT:

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

A LOSS OF ALL REDUNDANCY COULD RESULT IN AN EXPLOSION DUE TO LACK OF HELIUM PURGE IN A SSME.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/01/88
 ASSESSMENT ID: MPS-809X
 NASA FMEA #: 2115-3

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 809
 ITEM: HELIUM ISOLATION "B" VALVE RPC OUTPUT DIODE (6)

LEAD ANALYST: B. SLAUGHTER

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)

[3 /1R] [P] [P] [P] [D]
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:
 THE FAILURE IS DETECTABLE.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/02/88	NASA DATA:
ASSESSMENT ID: MPS-810X	BASELINE []
NASA FMEA #: 2117-2	NEW [X]

SUBSYSTEM: EPD&C/MPS
MDAC ID: 810
ITEM: HELIUM ISOLATION "A" VALVE TOGGLE SWITCH

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE	[]
INADEQUATE	[]

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/02/88
 ASSESSMENT ID: MPS-811X
 NASA FMEA #: 2119-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 811
 ITEM: HELIUM ISOLATION "A" VALVE SWITCH BLOCKING DIODE

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

LOSS OF ALL REDUNDANCY COULD RESULT IN AN EXPLOSION DUE TO LACK OF HELIUM PURGE IN A SSME.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/02/88
ASSESSMENT ID: MPS-812X
NASA FMEA #: 2119-2

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: EPD&C/MPS
MDAC ID: 812
ITEM: HELIUM ISOLATION "A" VALVE SWITCH BLOCKING DIODE

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

LOSS OF ALL REDUNDANCY COULD RESULT IN AN EXPLOSION DUE TO LACK OF HELIUM PURGE IN A SSME.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/02/88
 ASSESSMENT ID: MPS-813X
 NASA FMEA #: 2120-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 813
 ITEM: HELIUM ISOLATION VALVE TRANSIENT SUPPRESSION
 DIODES

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

LOSS OF ALL REDUNDANCY COULD RESULT IN AN EXPLOSION DUE TO LACK
 OF HELIUM PURGE IN A SSME.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/02/88
 ASSESSMENT ID: MPS-814X
 NASA FMEA #: 2300-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 814
 ITEM: FUSES (2)

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

[3 /1R] [P] [F] [P] [A]
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:
 PARALLEL PATH MASKS THE FAILURE.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/02/88
ASSESSMENT ID: MPS-815X
NASA FMEA #: 2301-1

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: EPD&C/MPS
MDAC ID: 815
ITEM: HDC III (2)

LEAD ANALYST: B. SLAUGHTER

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

ONLY AVAILABLE REF: EPDC/MPS FMEA REVIEW SUMMARY 8-17-87 AFT
PURGE AFTER A NOMINAL MISSION IS NON-CRITICAL. CRITICALITY FOR
AN ABORT IS 2/1R.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/02/88
 ASSESSMENT ID: MPS-816X
 NASA FMEA #: 2301-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 816
 ITEM: HDC III (2)

LEAD ANALYST: B. SLAUGHTER

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)

[3 /1R] [P] [P] [P] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

OPENING OF ALL REDUNDANT VALVES WOULD VENT HELIUM SUPPLY.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/02/88
 ASSESSMENT ID: MPS-817X
 NASA FMEA #: 2302-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 817
 ITEM: TOGGLE SWITCH

LEAD ANALYST: B. SLAUGHTER

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:

CRITICALITY FOR AN ABORT IS 2/1R.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/02/88
 ASSESSMENT ID: MPS-818X
 NASA FMEA #: 2302-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 818
 ITEM: TOGGLE SWITCH

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

A LOSS OF ALL REDUNDANCY COULD RESULT IN THE LOSS OF HELIUM SUPPLY.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/02/88
ASSESSMENT ID: MPS-819X
NASA FMEA #: 2302-3

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: EPD&C/MPS
MDAC ID: 819
ITEM: TOGGLE SWITCH

LEAD ANALYST: B. SLAUGHTER

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:

AFT PURGE AFTER A NOMINAL MISSION IS NON-CRITICAL. CRITICALITY FOR AN ABORT IS 2/1R.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/03/88
ASSESSMENT ID: MPS-820X
NASA FMEA #: 2131-3

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: EPD&C/MPS
MDAC ID: 820
ITEM: HELIUM CROSSOVER VALVE TOGGLE SWITCH

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

[3 /1R] [P] [NA] [P] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

THE NASA SCENARIO CALLS THE LOSS OF A SECOND UNRELATED ENGINE REDUNDANCY. THE SWITCH IS STANDBY REDUNDANT. NSTS 22206 2.3.3L REQUIRES ASSIGNMENT OF 3/1R FOR FAILURES RESULTING IN AN ENGINE SHUTDOWN.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/03/88
 ASSESSMENT ID: MPS-821X
 NASA FMEA #: 2131-4

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 821
 ITEM: HELIUM CROSSOVER VALVE TOGGLE SWITCH

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

[3 /1R] [P] [NA] [P] []
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

ONLY AVAIL REF: MPS/EPDC FMEA REVIEW SUMMARY. THE SWITCH IS
 STANDBY REDUNDANT. NSTS 22206 2.3.3L REQUIRES ASSIGNMENT OF 3/1R
 FOR FAILURES RESULTING IN AN ENGINE SHUTDOWN.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/03/88
ASSESSMENT ID: MPS-822X
NASA FMEA #: 2132-2

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: EPD&C/MPS
MDAC ID: 822
ITEM: HELIUM CROSSOVER VALVE CIRCUIT HDC

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

THE NASA SCENARIO CALLS THE LOSS OF A SECOND UNRELATED ENGINE REDUNDANCY. NSTS 22206 2.3.3L REQUIRES ASSIGNMENT OF 3/1R FOR FAILURES RESULTING IN AN ENGINE SHUTDOWN. NSTS 22206 2.3.3L REQUIRES ASSIGNMENT OF 3/1R FOR FAILURES RESULTING IN AN ENGINE SHUTDOWN.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/03/88
 ASSESSMENT ID: MPS-823X
 NASA FMEA #: 2133-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 823
 ITEM: HELIUM CROSSOVER VALVE CIRCUIT BLOCKING DIODES
 (2)

LEAD ANALYST: B. SLAUGHTER

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:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/04/88
 ASSESSMENT ID: MPS-825X
 NASA FMEA #: 2312-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 825
 ITEM: LO2 MANIFOLD REPRESS VALVES TOGGLE SWITCH

LEAD ANALYST: B. SLAUGHTER

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:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/04/88
ASSESSMENT ID: MPS-826X
NASA FMEA #: 2313-2

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: EPD&C/MPS
MDAC ID: 826
ITEM: LO2 MANIFOLD REPRESS VALVES CIRCUIT HDC III (2)

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/04/88
 ASSESSMENT ID: MPS-827X
 NASA FMEA #: N/A

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 827
 ITEM: LO2 MANIFOLD REPRESS VALVES CIRCUIT MDM OA3

LEAD ANALYST: B. SLAUGHTER

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-828X
 NASA FMEA #: 2310-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 828
 ITEM: LH2 MANIFOLD REPRESS VALVES CIRCUIT FUSE

LEAD ANALYST: B. SLAUGHTER

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:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/04/88
ASSESSMENT ID: MPS-829X
NASA FMEA #: 2064-1

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: EPD&C/MPS
MDAC ID: 829
ITEM: LH2 MANIFOLD REPRESS VALVES TOGGLE SWITCH

LEAD ANALYST: B. SLAUGHTER

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:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/04/88
 ASSESSMENT ID: MPS-830X
 NASA FMEA #: 2065-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 830
 ITEM: LH2 MANIFOLD REPRESS VALVES CIRCUIT HDC III (2)

LEAD ANALYST: B. SLAUGHTER

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:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/04/88
 ASSESSMENT ID: MPS-831X
 NASA FMEA #: N/A

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 831
 ITEM: LH2 MANIFOLD REPRESS VALVES CIRCUIT MONITOR MDM
 OA2

LEAD ANALYST: B. SLAUGHTER

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-833X
 NASA FMEA #: 2141-5

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 833
 ITEM: TOGGLE SWITCH, 2P3T (3)

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

NASA CALLS LOSS OF AN UNRELATED ENGINE A REDUNDANT FAILURE. NSTS 22206 2.3.3L REQUIRES ASSIGNMENT OF 3/1R FOR FAILURES RESULTING IN AN ENGINE SHUTDOWN.
 ONLY AVAIL REF: MPS/EPDC FMEA REVIEW SUMMARY 8-17-88.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/04/88
 ASSESSMENT ID: MPS-834X
 NASA FMEA #: 2141-3

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 834
 ITEM: HYBRID DRIVER, TYPE I (6)

LEAD ANALYST: B. SLAUGHTER

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

NASA ASSUMES A HELIUM LEAK WHICH IS CRITICALITY 1/1 BY ITSELF TO GET THEIR 1R.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/04/88
 ASSESSMENT ID: MPS-835X
 NASA FMEA #: 2143-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 835
 ITEM: REMOTE POWER CONTROLLER (6)

LEAD ANALYST: B. SLAUGHTER

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

NASA ASSUMES A HELIUM LEAK WHICH IS CRITICALITY 1/1 BY ITSELF TO GET THEIR 1R.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/05/88
 ASSESSMENT ID: MPS-836X
 NASA FMEA #: 2144-3

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 836
 ITEM: ISOLATION DIODES (6)

LEAD ANALYST: B. SLAUGHTER

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)

[3 /1R] [P] [P] [P] [D]
 (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

THE NASA SCENARIO CAUSES THE LOSS OF ONE ENGINE (LOSS OF MISSION). THE SHORT TO GROUND WILL BE DETECTED. NSTS 22206 2.3.3L REQUIRES ASSIGNMENT OF 3/1R FOR FAILURES RESULTING IN AN ENGINE SHUTDOWN.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/05/88
 ASSESSMENT ID: MPS-837X
 NASA FMEA #: 2145-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: EPD&C/MPS
 MDAC ID: 837
 ITEM: ISOLATION DIODES

LEAD ANALYST: B. SLAUGHTER

ASSESSMENT:

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

THE LOSS OF ONE ENGINE COULD RESULT IF ALL REDUNDANCY WERE LOST.
 THE FAILURE IS NOT READILY DETECTABLE. NSTS 22206 2.3.3L
 REQUIRES ASSIGNMENT OF 3/1R FOR FAILURES RESULTING IN AN ENGINE
 SHUTDOWN.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/05/88
ASSESSMENT ID: MPS-838X
NASA FMEA #: 2146-2

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: EPD&C/MPS
MDAC ID: 838
ITEM: ISOLATION DIODES

LEAD ANALYST: B. SLAUGHTER

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:

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/15/88
 ASSESSMENT ID: MPS-901X
 NASA FMEA #: 0602-5

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 901
 ITEM: LO2 MANIFOLD REPRESS REGULATOR (PR5)

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]	[P]	[]
COMPARE	[N /]	[]	[]	[]	[N]

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

REGULATOR WILL REMAIN OPEN, PRESSURIZING THE MANIFOLD. FAILURE OF RELIEF SYSTEM DURING ENTRY MAY CAUSE MANIFOLD RUPTURE. NO HAZARD DURING DUMP PRESSURIZATION.
 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-902X
NASA FMEA #: 0629-2

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 902
ITEM: LH2 MANIFOLD REPRESSURIZATION REGULATOR (PR6)

LEAD ANALYST: W.J. MCNICOLL

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

[3 /1R] [P] [P] [P] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

THREE FAILURES MUST OCCUR BEFORE HELIUM WILL BE INJECTED INTO THE
LH2 MANIFOLD. NO EFFECT PRE-MECO. FAILURE OF RELIEF SYSTEM
(FOUR FAILURES TOTAL) DURING ON-ORBIT OPERATIONS CAN CAUSE
MANIFOLD OVERPRESSURIZATION AND RUPTURE.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/15/88
 ASSESSMENT ID: MPS-903X
 NASA FMEA #: 0251-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 903
 ITEM: PNEUMATIC HELIUM SUPPLY RELIEF VALVE (RV4)

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]	[]
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: 2/15/88
 ASSESSMENT ID: MPS-904X
 NASA FMEA #: 0247-2

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 904
 ITEM: LH2 FEED MANIFOLD RTLS REPRESSURIZATION ORIFICE
 (RP9)

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]	[]
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: 2/15/88
ASSESSMENT ID: MPS-905X
NASA FMEA #: 0145-2

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 905
ITEM: PNEUMATIC HELIUM SUPPLY FILTER (FL5)

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]	[]
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: 2/16/88
 ASSESSMENT ID: MPS-906X
 NASA FMEA #: 0253-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 906
 ITEM: ENGINE HELIUM LINE (CV25,26,36,37,41,42 TO
 LV1,2,3,4,5,6)

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]	[]
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: 2/16/88
 ASSESSMENT ID: MPS-907X
 NASA FMEA #: 0254-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 907
 ITEM: ENGINE HELIUM SUPPLY LINE (LV1,2,3,4 TO
 PR1,2,3,7,8,9)

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]	[]
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: 2/16/88
 ASSESSMENT ID: MPS-908X
 NASA FMEA #: 0111-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 908
 ITEM: ENGINE HELIUM SUPPLY LINE (PR1,2,3,7,8,9 TO
 CV5,6,7,29,40,45)

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]	[]
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: 2/16/88
 ASSESSMENT ID: MPS-909X
 NASA FMEA #: 0235-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 909
 ITEM: ENGINE HELIUM SUPPLY LINE (CV5,6,7,29,40,45 TO SSME)

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]	[]
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: 2/16/88
 ASSESSMENT ID: MPS-910X
 NASA FMEA #: 0115-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 910
 ITEM: HELIUM INTERCONNECT IN LINE (LV59,61,63 TO
 CV27,38,43)

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]	[]
COMPARE	[/]	[]	[]	[]	[N]

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

HAZARD EXISTS WHEN INTERCONNECT IN VALVES ARE OPEN (MECO TO
 MECO+20 SEC). AT ALL OTHER TIMES, THIS FAILURE 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-911X
 NASA FMEA #: 0116-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 911
 ITEM: HELIUM INTERCONNECT OUT LINE (LV60,62,64 TO
 CV28,39,44)

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]	[]
COMPARE	[/]	[]	[]	[]	[N]

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

HAZARD EXISTS WHEN INTERCONNECT OUT VALVES ARE OPEN (MECO+20
 SEC). WHEN THE VALVES ARE CLOSED, THIS FAILURE 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: 2/17/88
 ASSESSMENT ID: MPS-912X
 NASA FMEA #: 0704-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 912
 ITEM: HELIUM METALLIC BOSS SEALS (K SEALS)

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]	[]
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 10-15-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/17/88
 ASSESSMENT ID: MPS-913X
 NASA FMEA #: 0705-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 913
 ITEM: NAFLEX HELIUM TANK SEALS (FOR TK4)

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]	[]
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: 2/17/88
 ASSESSMENT ID: MPS-914X
 NASA FMEA #: 0706-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 914
 ITEM: COMBINATION HELIUM TANK SEALS (FOR TK6, 8, 10)

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]	[]
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: 2/17/88
 ASSESSMENT ID: MPS-915X
 NASA FMEA #: 0626-8

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 915
 ITEM: ENGINE HELIUM SUPPLY PRESSURE TRANSDUCERS (3)

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	[3 /1R]	[P]	[F]	[P]	[]
COMPARE	[/]	[]	[]	[]	[N]

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

THERE ARE FOUR PRESSURE TRANSDUCERS THAT ALL SHOULD INDICATE THE SAME PRESSURE DURING FILL. FAILURE OF ALL FOUR CAN CAUSE T ANK UNDERFILL AND LOSS OF VEHICLE DURING ASCENT. FAILURE OF INDICTOR(S) DURING ASCENT WILL HAVE NO EFFECT.
 REF: RI/NASA CIL OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/17/88
ASSESSMENT ID: MPS-916X
NASA FMEA #: 0626-9

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 916
ITEM: PNEUMATIC HELIUM SUPPLY PRESSURE TRANSDUCER

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	[3 /1R]	[P]	[F]	[P]	[]
COMPARE	[/]	[]	[]	[]	[N]

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

FOUR PRESSURE TRANSDUCERS (INCLUDES ENGINE TRANSDUCERS) ALL SHOULD INDICATE THE SAME PRESSURE DURING TANK FILL. FAILURE OF ALL FOUR CAN CAUSE TANK UNDERFILL AND LOSS OF VEHICLE DURING ASCENT. FAILURE OF INDICATOR(S) DURING ASCENT WILL HAVE NO EFFECT.

REF: RI/NASA CIL OF 12-23-87 AND RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/17/88
ASSESSMENT ID: MPS-917X
NASA FMEA #: 0626-10

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 917
ITEM: ENGINE HELIUM REGULATOR OUTLET PRESSURE
TRANSDUCERS (6)

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	[3 /1R]	[P]	[F]	[P]	[]
COMPARE	[/]	[]	[]	[]	[N]

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

FAILURE OF TRANSDUCER WILL HAVE NO EFFECT. NO REDUNDANCY. A
LEAK IS NOT 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: 2/17/88
 ASSESSMENT ID: MPS-918X
 NASA FMEA #: 0626-11

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 918
 ITEM: PNEUMATIC HELIUM REGULATOR OUTLET PRESSURE
 TRANSDUCER

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	[3 /1R]	[P]	[F]	[P]	[]
COMPARE	[/]	[]	[]	[]	[N]

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

FAILURE OF TRANSDUCER WILL HAVE NO EFFECT. NO REDUNDANCY. A
 LEAK IS NOT 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: 2/17/88
 ASSESSMENT ID: MPS-919X
 NASA FMEA #: 0626-12

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 919
 ITEM: HELIUM ACCUMULATOR PRESSURE TRANSDUCER

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	[3 /1R]	[P]	[F]	[P]	[]
COMPARE	[/]	[]	[]	[]	[N]

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

TRANSDUCER FAILURE WILL HAVE NO EFFECT. NO REDUNDANCY. A LEAK IS NOT 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: 2/17/88
ASSESSMENT ID: MPS-920X
NASA FMEA #: 0627-6

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 920
ITEM: ENGINE HELIUM SUPPLY TEMPERATURE TRANSDUCERS (6)

LEAD ANALYST: W.J. MCNICOLL

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

MULTIPLE FAILURE OF TRANSDUCERS MAY ALLOW STRUCTURAL TEMPERATURE LIMITS TO BE VIOLATED DURING TANK FILL AND CAUSE RUPTURE AND LOSS OF VEHICLE. FAILURE DURING ASCENT WILL HAVE NO EFFECT.
REF: RI/NASA FMEA/CIL REVIEW MEETING NOTES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 2/17/88
 ASSESSMENT ID: MPS-921X
 NASA FMEA #: 0627-7

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 921
 ITEM: PNEUMATIC HELIUM SUPPLY TEMPERATURE TRANSDUCER

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: 2/17/88
 ASSESSMENT ID: MPS-922X
 NASA FMEA #: 0409-4

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 922
 ITEM: GN2 PURGE DISCONNECT (PD14)

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]	[]
COMPARE	[/]	[]	[]	[]	[N]

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

POSSIBLE OVERPRESSURIZATION AND/OR SHARPNEEL DAMAGE.
 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-923X
 NASA FMEA #: 0426-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 923
 ITEM: GN2 PURGE LINE

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]	[]
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: 2/17/88
 ASSESSMENT ID: MPS-924X
 NASA FMEA #: 0901-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 924
 ITEM: STRUCTURAL ATTACH POINTS

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	[/]	[]	[]	[]	[]
COMPARE	[N / N]	[N]	[N]	[N]	[N]

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

NSTS 22206 2.3.1 DOES NOT REQUIRE A FMEA FOR STRUCTURE. DELETE
 0901-1.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/20/88
ASSESSMENT ID: MPS-1001
NASA FMEA #: NA

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 1001
ITEM: GO2 PRESSURE ISOLATION CHECK VALVE (CV18, 19, 20)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

THIS WORKSHEET SHOULD BE COMBINED WITH MPS-1005, WHICH IS THE WORST CASE FOR THIS FAILURE MODE. MPS-1005 MATCHES AND AGREES WITH 0514-1. THE VEHICLE'S ACCELERATION HAS A MUCH LARGER EFFECT ON THE LO2 NET POSITIVE SUCTION PRESSURE (NPSP) THAN THE ULLAGE PRESSURE DOES. THEREFORE, NEITHER CAVITATION AT THE LPOT NOR LOSS OF LO2 IS VALID. HOWEVER, THE LOSS OF GO2 ULLAGE PRESSURE CAUSES AN OPPOSITE PRESSURE DIFFERENTIAL THAN WHAT THE LO2 TANK WAS DESIGNED FOR. THIS COULD CAUSE THE LO2 TANK TO BUCKLE DUE TO AERODYNAMIC LOADS ON A TANK WHICH IS NOT PRESSURIZED. THERE ARE 3 SUCH CHECK VALVES.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/20/88
ASSESSMENT ID: MPS-1002
NASA FMEA #: 0514-2

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 1002
ITEM: GO2 PRESSURE ISOLATION CHECK VALVE (CV18, 19, 20)

LEAD ANALYST: K.A. HOLDEN

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

[3 /1R] [P] [F] [F] []
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

THE IOA CRITICALITY FOR AN ABORT WAS ORIGINALLY REPORTED AS A 1/1 DUE TO ULLAGE PRESSURE LOST THROUGH A SHUTDOWN ENGINE. THE MAIN OXIDIZER VALVE, WHICH IS CLOSED DURING AN ENGINE SHUTDOWN, ADDS 2 LEVELS OF REDUNDANCY TO THIS FAILURE MODE. THE LOSS OF LO2 ULLAGE PRESSURE COULD CAUSE A PRESSURE DIFFERENTIAL BETWEEN THE INSIDE AND OUTSIDE OF THE TANK THAT THE TANK WAS NOT DESIGNED TO HOLD. THE RESULTANT LACK OF PRESSURE IN THE TANK COULD CAUSE THE TANK TO BUCKLER DUE TO THE ATMOSPHERE FORCES. NASA INFORMATION IS BASED ON THE NASA/RI CRITICAL ITEMS LIST OF 12-23-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/20/88
ASSESSMENT ID: MPS-1003
NASA FMEA #: 0514-4

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 1003
ITEM: GO2 PRESSURE ISOLATION CHECK VALVE (CV18, 19, 20)

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:

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-1004
NASA FMEA #: 0514-3

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 1004
ITEM: GO2 PRESSURE ISOLATION CHECK VALVE (CV18, 19 20)

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]	[X]
COMPARE	[N / N]	[]	[]	[]	[N]

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

THE HEAT EXCHANGER IN THE SSME IS DESIGNED TO HANDLE O2 AT ABOUT 3700 PSIA. HELIUM LEAKING INTO THE HEAT EXCHANGER AT 20 PSIA WOULD NOT HAVE ANY SIGNIFICANT EFFECT. THEREFORE, IT IS 3/3. NASA INFORMATION IS BASED ON NASA FMEA/CIL REVIEW MEETING NOTES (REF. J. BORCHES).

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/20/88
 ASSESSMENT ID: MPS-1005
 NASA FMEA #: 0514-1

NASA DATA:
 BASELINE []
 NEW [X]

SUBSYSTEM: MPS
 MDAC ID: 1005
 ITEM: GO2 PRESSURE ISOLATION CHECK VALVE (CV18, 19, 20)

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)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
 INADEQUATE []

REMARKS:

FAILURE OF THE CHECK VALVE TO OPEN WILL ALLOW INCREASING GO2 PRESSURE TO RUPTURE THE HEAT EXCHANGER, POSSIBLY RESULTING IN ENGINE EXPLOSION. NASA/RI INFORMATION IS TAKEN FROM THE RI/NASA CRITICAL ITEMS LIST OF 12-23-87.

APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/20/88
ASSESSMENT ID: MPS-1006
NASA FMEA #: NA

NASA DATA:
BASELINE []
NEW [X]

SUBSYSTEM: MPS
MDAC ID: 1006
ITEM: GO2 PRESSURE ISOLATION CHECK VALVE (CV18, 19, 20)

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] []
(ADD/DELETE)

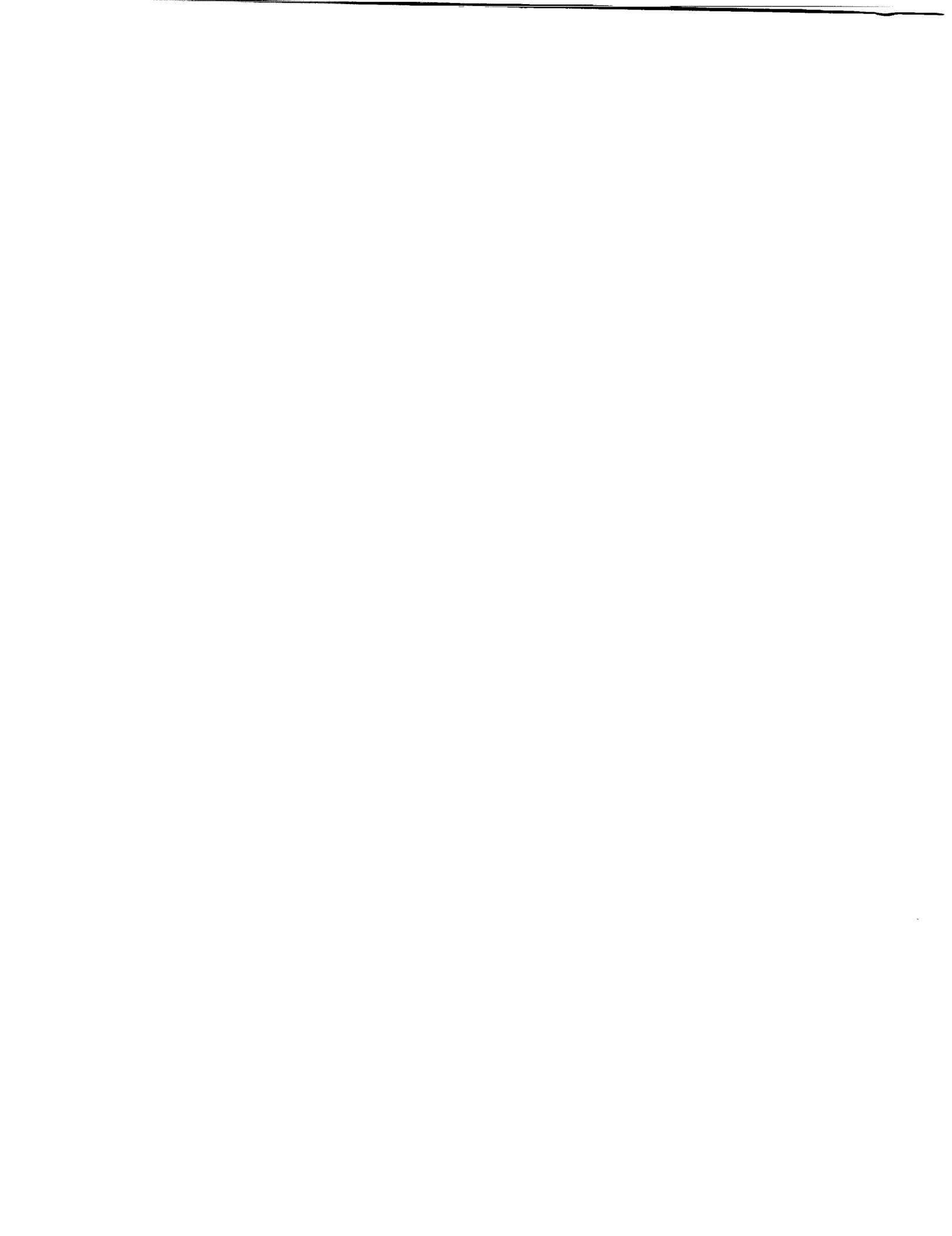
* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE []
INADEQUATE []

REMARKS:

THE BURNING OF THIS VALVE COULD CAUSE A HOLE WHICH WOULD ALLOW HOT GO2 TO ENTER THE AFT COMPARTMENT. THIS WOULD RESULT IN OVERPRESSURIZATION AND A POSSIBLE FIRE/EXPLOSION.





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