APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-742
NASA FMEA #: 05-6KF-2088 -1
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 742
ITEM: RESISTOR, 5.1K 1/4W

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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| COMPARE [ / ] | [ ] | [ ] | [ ] | [ ] | | [ ] |

RECOMMENDATIONS: (If different from NASA)

[ 3 /2R ] [ P ] [ P ] [ P ] [ ]
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
THIS FAILURE MAY CAUSE LOSS OF ACCURATE INDICATION OF THE VALVE POSITION. REDUNDANCY PROVIDED. LOSS OF ALL REDUNDANCY MAY LEAD TO FALSELY FAILING THE VALVE CLOSED, POSSIBLY EFFECTING MISSION OPERATIONS.

ISSUE NOT RESOLVED AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-743
NASA FMEA #: 05-6KF-2088 -1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 743
ITEM: RESISTOR, 5.1K 1/4W

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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| SCREENS        | [ ] | [ ] | [ ] | [ ] |
| ITEM           | [ ] | [ ] | [ ] | [ ] |

RECOMMENDATIONS: (If different from NASA)

[ / ] | [ ] | [ ] | [ ] | [ ] *

(ADD/DELETE)

*CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
A SHORT ACROSS A RLR TYPE RESISTOR IS NOT A CREDIBLE FAILURE.
IOA RECOMMENDS REMOVAL OF THE "SHORT" FAILURE MODE FROM THIS FMEA.

ISSUE RESOLVED AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88
(SHORT FAILURE MODE TO BE REMOVED).

REPORT DATE 2/26/88                         C-702
### APPENDIX C

**ASSESSMENT WORKSHEET**

- **ASSESSMENT DATE:** 1/29/88
- **NASA DATA:**
  - BASELINE [ ]
  - NEW [ X ]
- **SUBSYSTEM:** FRCS
- **MDAC ID:** 744
- **ITEM:** RESISTOR, 5.1K 1/4W
- **LEAD ANALYST:** D. HARTMAN
- **ASSESSMENT:**

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**RECOMMENDATIONS:** (If different from NASA)

- [ 3 /2R ]
- [ P ]
- [ P ]
- [ P ]
- [ ]

(ADD/DELETE)

* **CIL RETENTION RATIONALE:** (If applicable)

  - ADEQUATE [ ]
  - INADEQUATE [ ]

**REMARKS:**

- THIS FAILURE MAY CAUSE LOSS OF ACCURATE INDICATION OF THE VALVE POSITION. REDUNDANCY PROVIDED. LOSS OF ALL REDUNDANCY MAY LEAD TO FALSELY FAILING THE VALVE CLOSED, POSSIBLY EFFECTING MISSION OPERATIONS.

- ISSUE NOT RESOLVED AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88.

**REPORT DATE 2/26/88**

C-703
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88	NASA DATA:
ASSESSMENT ID: FRCS-745	BASELINE [ ]
NASA FMEA #: 05-6KF-2088 -1	NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 745
ITEM: RESISTOR, 5.1K 1/4W

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
A SHORT ACROSS A RLR TYPE RESISTOR IS NOT A CREDIBLE FAILURE. IOA RECOMMENDS REMOVAL OF THE "SHORT" FAILURE MODE FROM THIS FMEA.

ISSUE RESOLVED AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88 (SHORT FAILURE MODE TO BE REMOVED).

REPORT DATE 2/26/88 C-704
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-746
NASA FMEA #: 05-6KF-2089 -1
SUBSYSTEM: FRCS
MDAC ID: 746
ITEM: RESISTOR, 1.2K 2W
LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

[ 3 /2R ] [ P ] [ P ] [ P ] [ D ]
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:

NASA FMEA CONSIDERS MULTIPLE FAILURES. HOWEVER, LOSS OF CAPABILITY TO MONITOR VALVE STATUS MAY LEAD TO FALSELY FAILING THE VALVE CLOSED POSSIBLY EFFECTING MISSION OPERATIONS.

AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88, NSTS 22206 WAS DISCUSSED. IT WAS AGREED UPON THAT THE ISSUE RAISED ABOVE WAS DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THE ISSUE REMAINS OPEN.

REPORT DATE 2/26/88
C-705
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-747
NASA FMEA #: 05-6KF-2089 -2
SUBSYSTEM: FRCS
MDAC ID: 747
ITEM: RESISTOR, 1.2K 2W
LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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NASA DATA:
BASELINE [ ]
NEW [ X ]

RECOMMENDATIONS: (If different from NASA)

[ / ] [ ] [ ] [ ] [ ] [ ]

(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-706
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88  
ASSESSMENT ID: FRCS-748  
NASA FMEA #: 05-6KF-2087 -1  
NASA DATA:  
BASELINE [ ]  
NEW [ X ]

SUBSYSTEM: FRCS  
MDAC ID: 748  
ITEM: RESISTOR, 5.1K 1/4W  
LEAD ANALYST: D. HARTMAN

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| COMPARE | [ / ] | [ ] | [ ] | [ ] | [ ] | [ ] |

RECOMMENDATIONS: (If different from NASA)  
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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88  C-707
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
NASA DATA:
ASSESSMENT ID: FRCS-749 NASA FMEA #: 05-6KF-2087 -1
NASA FMEA #: 05-6KF-2087 -1
SUBSYSTEM: FRCS
MDAC ID: 749
ITEM: RESISTOR, 5.1K 1/4W

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)
[ / ] [ ] [ ] [ ] [ ]

* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
A SHORT ACROSS A RLR TYPE RESISTOR IS NOT A CREDIBLE FAILURE. IOA RECOMMENDS REMOVAL OF THE "SHORT" FAILURE MODE FROM THIS FMEA.

ISSUE RESOLVED AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88 (SHORT FAILURE MODE TO BE REMOVED).

REPORT DATE 2/26/88 C-708
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-750
NASA FMEA #: 05-6KF-2087 -1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 750
ITEM: RESISTOR, 5.1K 1/4W

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)
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* CIL RETENTION RATIONALE: (If applicable)
  ADEQUATE [ ]
  INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-751
NASA FMEA #: 05-6KF-2087 -1
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 751
ITEM: RESISTOR, 5.1K 1/4W

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)
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* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
A SHORT ACROSS A RLR TYPE RESISTOR IS NOT A CREDIBLE FAILURE.
IOA RECOMMENDS REMOVAL OF THE "SHORT" FAILURE MODE FROM THIS FMEA.

ISSUE RESOLVED AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88
(SHORT FAILURE MODE TO BE REMOVED).

REPORT DATE 2/26/88 C-710
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-752
NASA FMEA #: 05-6KF-2088 -1

SUBSYSTEM: FRCS
MDAC ID: 752
ITEM: RESISTOR, 5.1K 1/4W

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

[ 3 /2R ] [ P ] [ P ] [ P ] [ ]

(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:

THIS FAILURE MAY CAUSE LOSS OF ACCURATE INDICATION OF THE VALVE POSITION. REDUNDANCY PROVIDED. LOSS OF ALL REDUNDANCY MAY LEAD TO FALSELY FAILING THE VALVE CLOSED, POSSIBLY EFFECTING MISSION OPERATIONS.

ISSUE NOT RESOLVED AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88.

REPORT DATE 2/26/88 C-711
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-753
NASA FMEA #: 05-6KF-2088 -1
SUBSYSTEM: FRCS
MDAC ID: 753
ITEM: RESISTOR, 5.1K 1/4W
LEAD ANALYST: D. HARTMAN

NASA DATA:
BASELINE [ ]
NEW [ X ]

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
A SHORT ACROSS A RLR TYPE RESISTOR IS NOT A CREDIBLE FAILURE.
IOA RECOMMENDS REMOVAL OF THE "SHORT" FAILURE MODE FROM THIS
FMEA.

ISSUE RESOLVED AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88
(SHORT FAILURE MODE TO BE REMOVED).

REPORT DATE 2/26/88 C-712
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-754
NASA FMEA #: 05-6KF-2088 -1
NASA DATA: BASELINE [ ]
               NEW [ x ]
SUBSYSTEM: FRCS
MDAC ID: 754
ITEM: RESISTOR, 5.1K 1/4W
LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

[ 3 /2R ] [ P ] [ P ] [ P ] [ ]
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
THIS FAILURE MAY CAUSE LOSS OF ACCURATE INDICATION OF THE VALVE POSITION. REDUNDANCY PROVIDED. LOSS OF ALL REDUNDANCY MAY LEAD TO FALSELY FAILING THE VALVE CLOSED, POSSIBLY EFFECTING MISSION OPERATIONS.

ISSUE NOT RESOLVED AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88.
APPENDIX C
ASSESSMENT WORKSHEET

ASSessment DATE: 1/29/88
ASSessment ID: FRCS-755
NASA FMEA #: 05-6KF-2088 -1
NASA DATA: BASELINE [ ] NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 755
ITEM: RESISTOR, 5.1K 1/4W

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)
[ / ] [ ] [ ] [ ] [ ] [ ]

(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
A SHORT ACROSS A RLR TYPE RESISTOR IS NOT A CREDIBLE FAILURE.
IOA RECOMMENDS REMOVAL OF THE "SHORT" FAILURE MODE FROM THIS FMEA.

ISSUE RESOLVED AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88
(SHORT FAILURE MODE TO BE REMOVED).

REPORT DATE 2/26/88 C-714
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-756
NASA FMEA #: 05-6KF-2088 -1
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 756
ITEM: RESISTOR, 5.1K 1/4W

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

[ 3 /2R ] [ P ] [ P ] [ P ]
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
THIS FAILURE MAY CAUSE LOSS OF ACCURATE INDICATION OF THE VALVE POSITION. REDUNDANCY PROVIDED. LOSS OF ALL REDUNDANCY MAY LEAD TO FALSELY FAILING THE VALVE CLOSED, POSSIBLY EFFECTING MISSION OPERATIONS.

ISSUE NOT RESOLVED AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-757
NASA FMEA #: 05-6KF-2088 -1
SUBSYSTEM: FRCS
MDAC ID: 757
ITEM: RESISTOR, 5.1K 1/4W
LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)
[ / ] [ ] [ ] [ ] [ ] [ ] (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
A SHORT ACROSS A RLR TYPE RESISTOR IS NOT A CREDIBLE FAILURE.
IOA RECOMMENDS REMOVAL OF THE "SHORT" FAILURE MODE FROM THIS FMEA.

ISSUE RESOLVED AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88
(SHORT FAILURE MODE TO BE REMOVED).

REPORT DATE 2/26/88 C-716
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-758
NASA FMEA #: 05-6KF-2088 -1
SUBSYSTEM: FRCS
MDAC ID: 758
ITEM: RESISTOR, 5.1K 1/4W
LEAD ANALYST: D. HARTMAN

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM:
MDAC ID:
ITEM:
ASSESSMENT:
ITEM
CRITICALITY
FLIGHT
HDW/FUNC
A
B
C
NASA [ 3 /3 ] [ ] [ ] [ ] [ ] [ ] [ ]*
IOA [ 3 /3 ] [ ] [ ] [ ] [ ] [ ]
COMPARE [ / ] [ ] [ ] [ ] [ ] [ ]

RECOMMENDATIONS: (If different from NASA)
[ 3 /2R ] [ P ] [ P ] [ P ] [ ]
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
THIS FAILURE MAY CAUSE LOSS OF ACCURATE INDICATION OF THE VALVE
POSITION. REDUNDANCY PROVIDED. LOSS OF ALL REDUNDANCY MAY LEAD
TO FALSELY FAILING THE VALVE CLOSED, POSSIBLY EFFECTING MISSION
OPERATIONS.

ISSUE NOT RESOLVED AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88.

REPORT DATE 2/26/88
C-717
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-759
NASA FMEA #: 05-6KF-2088 -1
SUBSYSTEM: FRCS
MDAC ID: 759
ITEM: RESISTOR, 5.1K 1/4W
LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

*CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:

A SHORT ACROSS A RLR TYPE RESISTOR IS NOT A CREDIBLE FAILURE. IOA RECOMMENDS THE REMOVAL OF "SHORT" FAILURE MODE FROM THIS FMEA.

ISSUE RESOLVED AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88 (SHORT FAILURE MODE TO BE REMOVED).

REPORT DATE 2/26/88 C-718
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-760
NASA FMEA #: 05-6KF-2089 -1
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 760
ITEM: RESISTOR, 1.2K 2W

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)
[ 3 /2R ] [ P ] [ P ] [ P ] [ D ]
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NASA FMEA CONSIDERS MULTIPLE FAILURES. HOWEVER, LOSS OF CAPABILITY TO MONITOR VALVE STATUS MAY LEAD TO FALSELY FAILING THE VALVE CLOSED POSSIBLY EFFECTING MISSION OPERATIONS.

AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88, NSTS 22206 WAS DISCUSSED. IT WAS AGREED UPON THAT THE ISSUE RAISED ABOVE WAS DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THE ISSUE REMAINS OPEN.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-761
NASA FMEA #: 05-6KF-2089-2
SUBSYSTEM: FRCS
MDAC ID: 761
ITEM: RESISTOR, 1.2K 2W
LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-720
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-762
NASA FMEA #: 05-6KF-2087 -1
ASSESSMENT ID:
FRCS-762
NASA FMEA #: 05-6KF-2087 -1
SUBSYSTEM: FRCS
MDAC ID: 762
ITEM: RESISTOR, 5.1K 1/4W
LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)  ADEQUATE [ ]

INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88  C-721
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-763
NASA FMEA #: 05-6KF-2087 -1

SUBSYSTEM: FRCS
MDAC ID: 763
ITEM: RESISTOR, 5.1K 1/4W

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
A SHORT ACROSS A RLR TYPE RESISTOR IS NOT A CREDIBLE FAILURE.
IOA RECOMMENDS REMOVAL OF THE "SHORT" FAILURE MODE FROM THIS
FMEA.

ISSUE RESOLVED AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88
(SHORT FAILURE MODE TO BE REMOVED).

REPORT DATE 2/26/88 C-722
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-764
NASA FMEA #: 05-6KF-2087 -1
SUBSYSTEM: FRCS
MDAC ID: 764
ITEM: RESISTOR, 5.1K 1/4W
LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-723
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-765
NASA FMEA #: 05-6KF-2091 -1
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 765
ITEM: RESISTOR, 5.1K 1/4W

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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IOA [ 3/3 ] [ ] [ ] [ ] [ ] [ ] [ ]

COMPARE [ ] [ ] [ ] [ ] [ ] [ ] [ ]

RECOMMENDATIONS: (If different from NASA)

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

*CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
A SHORT ACROSS A RLR TYPE RESISTOR IS NOT A CREDIBLE FAILURE.
IOA RECOMMENDS REMOVAL OF THE "SHORT" FAILURE MODE FROM THIS FMEA.

ISSUE RESOLVED AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88
(SHORT FAILURE MODE TO BE REMOVED).

REPORT DATE 2/26/88 C-724
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-766
NASA FMEA #: 05-6KF-2088 -1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 766
ITEM: RESISTCR, 5.1K 1/4W

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

[ 3 /2R ] [ P ] [ P ] [ P ] [ ]
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
THIS FAILURE MAY CAUSE LOSS OF ACCURATE INDICATION OF THE VALVE POSITION. REDUNDANCY PROVIDED. LOSS OF ALL REDUNDANCY MAY LEAD TO FALSELY FAILING THE VALVE CLOSED, POSSIBLY EFFECTING MISSION OPERATIONS.

ISSUE NOT RESOLVED AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-767
NASA FMEA #: 05-6KF-2091 -1

SUBSYSTEM: FRCS
MDAC ID: 767
ITEM: RESISTOR, 5.1K 1/4W

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:

A SHORT ACROSS A RLR TYPE RESISTOR IS NOT A CREDIBLE FAILURE. IOA RECOMMENDS REMOVAL OF THE "SHORT" FAILURE MODE FROM THIS FMEA.

ISSUE RESOLVED AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88 (SHORT FAILURE MODE TO BE REMOVED).

REPORT DATE 2/26/88 C-726
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-768
NASA FMEA #: 05-6KF-2088 -1

SUBSYSTEM: FRCS
MDAC ID: 768
ITEM: RESISTOR, 5.1K 1/4W

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

[ 3 /2R ] [ P ] [ P ] [ P ] [ ] (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
THIS FAILURE MAY CAUSE LOSS OF ACCURATE INDICATION OF THE VALVE POSITION. REDUNDANCY PROVIDED. LOSS OF ALL REDUNDANCY MAY LEAD TO FALSELY FAILING THE VALVE CLOSED, POSSIBLY EFFECTING MISSION OPERATIONS.

ISSUE NOT RESOLVED AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88.

REPORT DATE 2/26/88 C-727
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-769
NASA FMEA #: 05-6KF-2091 -1
NASA DATA: BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 769
ITEM: RESISTOR, 5.1K 1/4W

LEAD ANALYST: D. HARTMAN

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

RECOMMENDATIONS: (If different from NASA)
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* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
A SHORT ACROSS A RLR TYPE RESISTOR IS NOT A CREDIBLE FAILURE. IOA RECOMMENDS REMOVAL OF THE "SHORT" FAILURE MODE FROM THIS FMEA.

ISSUE RESOLVED AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88 (SHORT FAILURE MODE TO BE REMOVED).
APPENDIX C  
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88  
ASSESSMENT ID: FRCS-770  
NASA FMEA #: 05-6KF-2088 -1  
SUBSYSTEM: FRCS  
MDAC ID: 770  
ITEM: RESISTOR, 5.1K 1/4W  
LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]  
INADEQUATE [ ]

REMARKS:

THIS FAILURE MAY CAUSE LOSS OF ACCURATE INDICATION OF THE VALVE POSITION. REDUNDANCY PROVIDED. LOSS OF ALL REDUNDANCY MAY LEAD TO FALSELY FAILING THE VALVE CLOSED, POSSIBLY EFFECTING MISSION OPERATIONS.

ISSUE NOT RESOLVED AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-771
NASA FMEA #: 05-6KF-2091 -1
SUBSYSTEM: FRCS
MDAC ID: 771
ITEM: RESISTOR, 5.1K 1/4W
LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
A SHORT ACROSS A RLR TYPE RESISTOR IS NOT A CREDIBLE FAILURE.
IOA RECOMMENDS REMOVAL OF THE "SHORT" FAILURE MODE FROM THIS
FMEA.

ISSUE RESOLVED AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88
(SHORT FAILURE MODE TO BE REMOVED).

REPORT DATE 2/26/88 C-730
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-772
NASA FMEA #: 05-6KF-2088 -1
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 772
ITEM: RESISTOR, 5.1K 1/4W

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

[ 3 /2R ] [ P ] [ P ] [ P ] [ ]
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
THIS FAILURE MAY CAUSE LOSS OF ACCURATE INDICATION OF THE VALVE POSITION. REDUNDANCY PROVIDED. LOSS OF ALL REDUNDANCY MAY LEAD TO FALSELY FAILING THE VALVE CLOSED, POSSIBLY EFFECTING MISSION OPERATIONS.

ISSUE NOT RESOLVED AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88.

REPORT DATE 2/26/88 C-731
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-773
NASA FMEA #: 05-6KF-2091 - I
SUBSYSTEM: FRCS
MDAC ID: 773
ITEM: RESISTOR, 5.1K 1/4W
LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
A SHORT ACROSS A RLR TYPE RESISTOR IS NOT A CREDIBLE FAILURE. IOA RECOMMENDS REMOVAL OF THE "SHORT" FAILURE MODE FROM THIS FMEA.

ISSUE RESOLVED AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88 (SHORT FAILURE MODE TO BE REMOVED).

REPORT DATE 2/26/88 C-732
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: FRCS-774 NASA DATA: BASELINE [ ] NEW [ ]
ASSESSMENT ID: FRCS NASA FMEA #: [ ]
MDAC ID: 774 SUBSYSTEM: FRCS
ITEM: RESISTOR, 5.1K 1/4W
LEAD ANALYST:

ASSESSMENT:

CRITICALITY
FLIGHT
HDW/FUNC

REDUNDANCY SCREENS
A B C

CIL ITEM

NASA [ / ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]
IOA [ 3 /3 ] [ ] [ ] [ ] [ ] [ ]
COMPARE [ N /N ] [ ] [ ] [ ] [ ] [ ]

RECOMMENDATIONS: (If different from NASA)

[ / ] [ ] [ ] [ ] [ ] [ ] [ ]

(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
FORWARD MANIFOLD ISOLATION VALVE #5 RE-ANALYZED BY IOA DUE TO
CHANGE IN CIRCUITRY. SEE ASSESSMENT IDs FRCS 11001X-11079X.

REPORT DATE 2/26/88 C-733
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: NASA DATA:
ASSESSMENT ID: FRCS-775 NASA FMEA #:
SUBSYSTEM: FRCS MDAC ID: 775
ITEM: RESISTOR, 5.1K 1/4W
LEAD ANALYST:

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

RECOMMENDATIONS: (If different from NASA)
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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
FORWARD MANIFOLD ISOLATION VALVE #5 RE-ANALYZED BY IOA DUE TO CHANGE IN CIRCUITRY. SEE ASSESSMENT IDS FRCS 11001X-11079X.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: [ ]
ASSESSMENT ID: FRCS-776
NASA FMEA #: [ ]
NASA DATA:

BASELINE [ ]
NEW [ ]

SUBSYSTEM: FRCS
MDAC ID: 776
ITEM: RESISTOR, 5.1K 1/4W

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RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
FORWARD MANIFOLD ISOLATION VALVE #5 RE-ANALYZED BY IOA DUE TO CHANGE IN CIRCUITRY. SEE ASSESSMENT IDS FRCS 11001X-11079X.

REPORT DATE 2/26/88 C-735
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE:  
ASSESSMENT ID: FRCS-777  
NASA DATA:  
NASA FMEA #:  
SUBSYSTEM: FRCS  
MDAC ID: 777  
ITEM: RESISTOR, 5.1K 1/4W  
LEAD ANALYST:  
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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]  
INADEQUATE [ ]  

REMARKS:
FORWARD MANIFOLD ISOLATION VALVE #5 RE-ANALYZED BY IOA DUE TO CHANGE IN CIRCUITRY. SEE ASSESSMENT IDS FRCS 11001X-11079X.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: NASA DATA:
ASSESSMENT ID: FRCS-778 BASELINE [ ]
NASA FMEA #: NEW [ ]
SUBSYSTEM: FRCS NASA [ ]
MDAC ID: 778 [ ]
ITEM: RESISTOR, 5.1K 1/4W

LEAD ANALYST:

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

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REMARKS:
FORWARD MANIFOLD ISOLATION VALVE #5 RE-ANALYZED BY IOA DUE TO CHANGE IN CIRCUITRY. SEE ASSESSMENT IDS FRCS 11001X-11079X.

REPORT DATE 2/26/88 C-737
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: NASA DATA: NASA FMEA #:
ASSESSMENT ID: FRCS-779 BASELINE [ ]
NASA MDAC ID: 779 NEW [ ]
ITEM: RESISTOR, 5.1K 1/4W

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

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REMARKS:
FORWARD MANIFOLD ISOLATION VALVE #5 RE-ANALYZED BY IOA DUE TO CHANGE IN CIRCUITRY. SEE ASSESSMENT IDS FRCS 11001X-11079X.

REPORT DATE 2/26/88 C-738
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 
ASSESSMENT ID: FRCS-780
NASA FMEA #: 
SUBSYSTEM: FRCS
MDAC ID: 780
ITEM: RESISTOR, 5.1K 1/4W
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| COMPARE | N | /N | [ ] | [ ] | [ ] | [ ] | [ ] |

RECOMMENDATIONS: (If different from NASA)
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* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
FORWARD MANIFOLD ISOLATION VALVE #5 RE-ANALYZED BY IOA DUE TO CHANGE IN CIRCUITRY. SEE ASSESSMENT IDs FRCS 11001X-11079X.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: NASA DATA: FRCS-781 BASELINE [ ]
ASSESSMENT ID: NASA FMEA #: NEW [ ]
NASA FMEA #: FRCS-781 NASA 
SUBSYSTEM: FRCS MDAC ID: 781 NASA
ITEM: RESISTOR, 5.1K 1/4W

LEAD ANALYST:

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RECOMMENDATIONS: (If different from NASA)
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* CIL RETENTION RATIONALE: (If applicable)
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REMARKS:
FORWARD MANIFOLD ISOLATION VALVE #5 RE-ANALYZED BY IOA DUE TO CHANGE IN CIRCUITRY. SEE ASSESSMENT IDS FRCS 11001X-11079X.

REPORT DATE 2/26/88 C-740
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 
ASSESSMENT ID: FRCS-782 
NASA FMEA #: 
NASA DATA: 
BASELINE [ ] 
NEW [ ]

SUBSYSTEM: FRCS 
MDAC ID: 782 
ITEM: RESISTOR, 5.1K 1/4W 

LEAD ANALYST: 

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)
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* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
FORWARD MANIFOLD ISOLATION VALVE #5 RE-ANALYZED BY IOA DUE TO CHANGE IN CIRCUITRY. SEE ASSESSMENT IDS FRCS 11001X-11079X.

REPORT DATE 2/26/88 C-741
ASSESSMENT DATE:  
ASSESSMENT ID:  FRCS-783  
NASA FMEA #:  
SUBSYSTEM:  FRCS  
MDAC ID:  783  
ITEM:  RESISTOR, 5.1K 1/4W  
LEAD ANALYST:  
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* CIL RETENTION RATIONALE:  (If applicable)  

ADEQUATE [ ]  
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REMARKS:  
FORWARD MANIFOLD ISOLATION VALVE #5 RE-ANALYZED BY IOA DUE TO CHANGE IN CIRCUITRY. SEE ASSESSMENT IDs FRCS 11001X-11079X.
APPENDIX C
ASSESSMENT WORKSHEET

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
FORWARD MANIFOLD ISOLATION VALVE #5 RE-ANALYZED BY IOA DUE TO CHANGE IN CIRCUITRY. SEE ASSESSMENT IDS FRCS 11001X-11079X.

REPORT DATE 2/26/88 C-743
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 
ASSESSMENT ID: FRCS-785 
NASA FMEA #: 

NASA DATA:
BASELINE [ ]
NEW [ ]

SUBSYSTEM: FRCS
MDAC ID: 785
ITEM: RESISTOR, 5.1K 1/4W

LEAD ANALYST: 

ASSESSMENT:

| CRITICALITY | REDUNDANCY SCREENS | CIL |
| FLIGHT | HDW/FUNC | A | B | C | ITEM |
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| COMPARE [ N /N ] [ ] [ ] [ ] [ ] [ ] [ ] |

RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
FORWARD MANIFOLD ISOLATION VALVE #5 RE-ANALYZED BY IOA DUE TO CHANGE IN CIRCUITRY. SEE ASSESSMENT IDS FRCS 11001X-11079X.

REPORT DATE 2/26/88 C-744
# APPENDIX C
## ASSESSMENT WORKSHEET

**ASSESSMENT DATE:**

**ASSESSMENT ID:** FRCS-786

**NASA FMEA #:** NASA

**SUBSYSTEM:** FRCS

**MDAC ID:** 786

**ITEM:** RESISTOR, 5.1K 1/4W

**LEAD ANALYST:**

**ASSESSMENT:**

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**RECOMMENDATIONS:** (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

**REMARKS:**

FORWARD MANIFOLD ISOLATION VALVE #5 RE-ANALYZED BY IOA DUE TO CHANGE IN CIRCUITRY. SEE ASSESSMENT IDS FRCS 11001X-11079X.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE:  NASA DATA:
ASSESSMENT ID:   FRCS-787
NASA FMEA #:     BASELINE [ ]
SUBSYSTEM:   FRCS
MDAC ID: 787
ITEM: RESISTOR, 5.1K 1/4W

LEAD ANALYST:

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IOA [ 3 /3 ] [ ] [ ] [ ] [ ] [ ]
COMPAR [ N /N ] [ ] [ ] [ ] [ ] [ ]

RECOMMENDATIONS:  (If different from NASA)
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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
FORWARD MANIFOLD ISOLATION VALVE #5 RE-ANALYZED BY IOA DUE TO CHANGE IN CIRCUITRY. SEE ASSESSMENT IDs FRCS 11001X-11079X.

REPORT DATE 2/26/88  C-746
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: NASA DATA:
ASSESSMENT ID: FRCS-788 BASELINE [  ]
NASA FMEA #: NEW [  ]
SUBSYSTEM: FRCS NASA DATA:
MDAC ID: 788 FRCS-788 BASELINE [ ]
ITEM: RESISTOR, 1.2K 2W NEW [ ]
LEAD ANALYST:

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
FORWARD MANIFOLD ISOLATION VALVE #5 RE-ANALYZED BY IOA DUE TO CHANGE IN CIRCUITRY. SEE ASSESSMENT IDS FRCS 11001X-11079X.

REPORT DATE 2/26/88 C-747
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: NASA DATA: NASA FMEA #:
ASSESSMENT ID: FRCS-789 BASELINE [ ]
NASA FMEA #: NEW [ ]

SUBSYSTEM: FRCS
MDAC ID: 789
ITEM: RESISTOR, 1.2K 2W

LEAD ANALYST:

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RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]

INADEQUATE [ ]

REMARKS:
FORWARD MANIFOLD ISOLATION VALVE #5 RE-ANALYZED BY IOA DUE TO CHANGE IN CIRCUITRY. SEE ASSESSMENT IDS FRCS 11001X-11079X.

REPORT DATE 2/26/88 C-748
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE:  ASSESSMENT ID:  NASA FMEA #:
NASA DATA:  BASELINE [  ]
NEW [  ]

SUBSYSTEM:  FRCS
MDAC ID:  790
ITEM:  MANIFOLD 1, OX & FU ISOL VLV SWITCH

LEAD ANALYST:

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RECOMMENDATIONS:  (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE:  (If applicable)

ADEQUATE [  ]
INADEQUATE [  ]

REMARKS:
MANIFOLD 1, OXIDIZER AND FUEL ISOLATION VALVE SWITCH 30 RE-
ANALYZED BY IOA.  SEE ASSESSMENT IDS FRCS 11095X-11099X.

REPORT DATE 2/26/88  C-749
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE:  
ASSESSMENT ID:  FRCS-791  
NASA FMEA #:  
SUBSYSTEM:  FRCS  
MDAC ID:  791  
ITEM:  MANIFOLD 1, OX & FU ISOL VLV SWITCH

LEAD ANALYST:  
ASSESSMENT:

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RECOMMENDATIONS:  (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
MANIFOLD 1, OXIDIZER AND FUEL ISOLATION VALVE SWITCH 30 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs FRCS 11095X-11099X.

REPORT DATE 2/26/88  C-750
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE:  
ASSESSMENT ID: FRCS-792  
NASA FMEA #:  
SUBSYSTEM: FRCS  
MDAC ID: 792  
ITEM: MANIFOLD 1, OX & FU ISOL VLV SWITCH  
LEAD ANALYST:  
ASSESSMENT:  

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RECOMMENDATIONS: (If different from NASA)  
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* CIL RETENTION RATIONALE: (If applicable)  
ADEQUATE [ ]  
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REMARKS:  
MANIFOLD 1, OXIDIZER AND FUEL ISOLATION VALVE SWITCH 30 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs FRCS 11095X-11099X.

REPORT DATE 2/26/88  
C-751
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 
ASSESSMENT ID: FRCS-793 
NASA FMEA #: 
SUBSYSTEM: FRCS 
MDAC ID: 793 
ITEM: MANIFOLD 1, OX & FU ISOL VLV SWITCH OPEN 
CONTACTS 1, 2 
LEAD ANALYST: 

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
MANIFOLD 1, OXIDIZER AND FUEL ISOLATION VALVE SWITCH 30 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs FRCS 11095X-11099X.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE:  
NASA DATA:  
ASSESSMENT ID: FRCS-794  
BASELINE [ ]  
NASA FMEA #:  
NEW [ ]

SUBSYSTEM: FRCS  
MDAC ID: 794  
ITEM: MANIFOLD 1, OX & FU ISOL VLV SWITCH OPEN  
CONTACTS 1, 2

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RECOMMENDATIONS: (If different from NASA)  
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* CIL RETENTION RATIONALE: (If applicable)  
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INADEQUATE [ ]

REMARKS:
MANIFOLD 1, OXIDIZER AND FUEL ISOLATION VALVE SWITCH 30 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS FRCS 11095X-11099X.

REPORT DATE 2/26/88  C-753
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: NASA DATA:
ASSESSMENT ID: FRCS-795 NASA FMEA #:
NASA MDAC ID: 795 NEW [ ]
ITEM: MANIFOLD 1, OX & FU ISOL VLV SWITCH GPC CONTACTS 3, 4

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
MANIFOLD 1, OXIDIZER AND FUEL ISOLATION VALVE SWITCH 30 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs FRCS 11095X-11099X.

REPORT DATE 2/26/88 C-754
APPENDIX C
ASSESSMENT WORKSHEET

**ASSESSMENT DATE:**

**ASSESSMENT ID:** FRCS-796

**NASA FMEA #:**

**NASA DATA:**

- BASELINE [ ]
- NEW [ ]

**SUBSYSTEM:** FRCS

**MDAC ID:** 796

**ITEM:** MANIFOLD 1, OX & FU ISOL VLV SWITCH GPC CONTACTS 3, 4

**LEAD ANALYST:**

**ASSESSMENT:**

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**RECOMMENDATIONS:** (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

- ADEQUATE [ ]
- INADEQUATE [ ]

**REMARKS:**

MANIFOLD 1, OXIDIZER AND FUEL ISOLATION VALVE SWITCH 30 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs FRCS 11095X-11099X.

**REPORT DATE 2/26/88**

C-755
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 
ASSESSMENT ID: FRCS-797
NASA FMEA #: 
NASA DATA: BASELINE [ ] NEW [ ]

SUBSYSTEM: FRCS
MDAC ID: 797
ITEM: MANIFOLD 1, OX & FU ISOL VLV SWITCH CLOSE
CONTACTS 5, 6

LEAD ANALYST:

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
MANIFOLD 1, OXIDIZER AND FUEL ISOLATION VALVE SWITCH 30 RE-
ANALYZED BY IOA. SEE ASSESSMENT IDS FRCS 11095X-11099X.

REPORT DATE 2/26/88  C-756
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: NASA DATA:
ASSESSMENT ID: FRCS-798 BASELINE [ ]
NASA FMEA #: NEW [ ]

SUBSYSTEM: FRCS
MDAC ID: 798
ITEM: MANIFOLD 1, OX & FU ISOL VLV SWITCH CLOSE
CONTACTS 5, 6

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RECOMMENDATIONS: (If different from NASA)
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* CIL RETENTION RATIONALE: (If applicable) ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
MANIFOLD 1, OXIDIZER AND FUEL ISOLATION VALVE SWITCH 30 RE-
ANALYZED BY IOA. SEE ASSESSMENT IDS FRCS 11095X-11099X.

REPORT DATE 2/26/88 C-757
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE:  
ASSESSMENT ID:  FRCS-799  
NASA FMEA #:  
NASA DATA:  
BASELINE [ ]  
NEW [ ]  

SUBSYSTEM:  FRCS  
MDAC ID:  799  
ITEM:  MANIFOLD 2, OX & FU ISOL VLV SWITCH  
LEAD ANALYST:  
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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
MANIFOLD 2, OXIDIZER AND FUEL ISOLATION VALVE SWITCH 31 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs 11100X-11104X.

REPORT DATE 2/26/88 C-758
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 
ASSESSMENT ID: FRCS-800 
NASA FMEA #: 
SUBSYSTEM: FRCS 
MDAC ID: 800 
ITEM: MANIFOLD 2, OX & FU ISOL VLV SWITCH 
LEAD ANALYST: 
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RECOMMENDATIONS: (If different from NASA)

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REMARKS:
MANIFOLD 2, OXIDIZER AND FUEL ISOLATION VALVE SWITCH 31 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs 11100X-11104X.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: NASA DATA:
ASSESSMENT ID: FRCS-801 BASELINE [ ]
NASA FMEA #: NEW [ ]

SUBSYSTEM: FRCS
MDAC ID: 801
ITEM: MANIFOLD 2, OX & FU ISOL VLV SWITCH

LEAD ANALYST:

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
MANIFOLD 2, OXIDIZER AND FUEL ISOLATION VALVE SWITCH 31 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS 11100X-11104X.

REPORT DATE 2/26/88 C-760
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: [ ] NASA DATA: [ ]
ASSESSMENT ID: FRCS-802 BASELINE [ ]
NASA FMEA #: [ ] NEW [ ]

SUBSYSTEM: FRCS
MDAC ID: 802
ITEM: MANIFOLD 2, OX & FU ISOL VLV SWITCH OPEN
CONTACTS 1, 2

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
MANIFOLD 2, OXIDIZER AND FUEL ISOLATION VALVE SWITCH 31 RE-
ANALYZED BY IOA. SEE ASSESSMENT IDs 11100X-11104X.

REPORT DATE 2/26/88 C-761
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE:  NASA DATA:  NASA FMEA #:
ASSESSMENT ID:  FRCS-803  BASELINE   [ ]
MDAC ID:  803  NEW   [ ]
ITEM:  MANIFOLD 2, OX & FU ISOL VLV SWITCH OPEN
CONTACTS 1, 2

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE   [ ]
INADEQUATE [ ]

REMARKS:
MANIFOLD 2, OXIDIZER AND FUEL ISOLATION VALVE SWITCH 31 RE-
ANALYZED BY IOA. SEE ASSESSMENT IDS 11100X-11104X.

REPORT DATE 2/26/88   C-762
APPENDIX C
ASSESSMENT WORKSHEET

ASSIGNMENT DATE: NASA DATA:
ASSIGNMENT ID: FRCS-804 BASELINE [ ]
NASA FMEA #: NEW [ ]

SUBSYSTEM: FRCS NASA DATA:
MDAC ID: 804 BASELINE [ ]
ITEM:

MANIFOLD 2, OX & FU ISOL VLV SWITCH GPC CONTACTS 3, 4

LEAD ANALYST:

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
MANIFOLD 2, OXIDIZER AND FUEL ISOLATION VALVE SWITCH 31 RE-
ANALYZED BY IOA. SEE ASSESSMENT IDS 11100X-11104X.

REPORT DATE 2/26/88 C-763
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE:  
NASA DATA:  
ASSESSMENT ID:  FRCS-805  
BASELINE [ ]  
NASA FMEA #:  
NEW [ ]  

SUBSYSTEM:  FRCS  
MDAC ID:  805  
ITEM:  MANIFOLD 2, OX & FU ISOL VLV SWITCH GPC CONTACTS 3, 4  

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* CIL RETENTION RATIONALE:  (If applicable)  
ADEQUATE [ ]  
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REMARKS:  
MANIFOLD 2, OXIDIZER AND FUEL ISOLATION VALVE SWITCH 31 REANALYZED BY IOA. SEE ASSESSMENT IDS 11100X-11104X.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE:  
ASSESSMENT ID:  FRCS-806  
NASA FMEA #:  
NASA DATA:  
BASELINE [ ]  
NEW [ ]  

SUBSYSTEM:  FRCS  
MDAC ID:  806  
ITEM:  MANIFOLD 2, OX & FU ISOL VLV SWITCH CLOSE  
CONTACTS 5, 6  

LEAD ANALYST:  

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* CIL RETENTION RATIONALE:  (If applicable)  
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REMARKS:  
MANIFOLD 2, OXIDIZER AND FUEL ISOLATION VALVE SWITCH 31 RE-ANALYZED BY IOA.  SEE ASSESSMENT IDs 11100X-11104X.

REPORT DATE 2/26/88  
C-765
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: NASA DATA:
ASSESSMENT ID: FRCS-807 BASELINE [ ]
NASA FMEA #: NEW [ ]

SUBSYSTEM: FRCS
MDAC ID: 807
ITEM: MANIFOLD 2, OX & FU ISOL VLV SWITCH CLOSE
CONTACTS 5, 6
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* CIL RETENTION RATIONALE: (If applicable)

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REMARKS:
MANIFOLD 2, OXIDIZER AND FUEL ISOLATION VALVE SWITCH 31 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs 11100X-11104X.

REPORT DATE 2/26/88 C-766
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: NASA DATA:
ASSESSMENT ID: FRCS-808 BASELINE [ ]
NASA FMEA #: NEW [ ]

SUBSYSTEM: FRCS NASA DATA:
MDAC ID: 808 BASELINE [ ]
ITEM: MANIFOLD 3, OX & FU ISOL VLV SWITCH NEW [ ]

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RECOMMENDATIONS: (If different from NASA) [ / ] [ ] [ ] [ ] [ ] [ ]

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* CIL RETENTION RATIONALE: (If applicable) ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
MANIFOLD 3, OXIDIZER AND FUEL ISOLATION VALVE SWITCH RE-ANALYZED BY IOA. SEE ASSESSMENT IDs FRCS 11105X-11109X.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 
ASSESSMENT ID: FRCS-809 
NASA FMEA #: 

NASA DATA: 
BASELINE [ ] 
NEW [ ]

SUBSYSTEM: FRCS 
MDAC ID: 809 
ITEM: MANIFOLD 3, OX & FU ISOL VLV SWITCH 

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* CIL RETENTION RATIONALE: (If applicable)

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REMARKS:
MANIFOLD 3, OXIDIZER AND FUEL ISOLATION VALVE SWITCH RE-ANALYZED BY IOA. SEE ASSESSMENT IDs FRCS 11105X-11109X.

REPORT DATE 2/26/88 C-768
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 
ASSESSMENT ID: FRCS-810
NASA FMEA #: NASA DATA:
NASA FMEA #: NASA DATA:

SUBSYSTEM: FRCS
MDAC ID: 810
ITEM: MANIFOLD 3, OX & FU ISOL VLV SWITCH

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* CIL RETENTION RATIONALE: (If applicable)

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REMARKS:
MANIFOLD 3, OXIDIZER AND FUEL ISOLATION VALVE SWITCH RE-ANALYZED BY IOA. SEE ASSESSMENT IDS FRCS 11105X-11109X.

REPORT DATE 2/26/88 C-769
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE:  
ASSESSMENT ID: FRCS-811  
NASA FMEA #:  
SUBSYSTEM: FRCS  
MDAC ID: 811  
ITEM: MANIFOLD 3, OX & FU ISOL VLV SWITCH OPEN  
CONTACTS 1, 2  
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* CIL RETENTION RATIONALE: (If applicable)  
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REMARKS:  
MANIFOLD 3, OXIDIZER AND FUEL ISOLATION VALVE SWITCH RE-ANALYZED BY IOA. SEE ASSESSMENT IDS FRCS 11105X-11109X.

REPORT DATE 2/26/88 C-770
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: NASA DATA:
ASSESSMENT ID: FRCS-812 BASELINE [ ]
NASA FMEA #: NEW [ ]

SUBSYSTEM: FRCS
MDAC ID: 812
ITEM: MANIFOLD 3, OX & FU ISOL VLV SWITCH OPEN
CONTACTS 1, 2

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

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REMARKS:
MANIFOLD 3, OXIDIZER AND FUEL ISOLATION VALVE SWITCH RE-ANALYZED BY IOA. SEE ASSESSMENT IDS FRCS 11105X-11109X.

REPORT DATE 2/26/88 C-771
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: NASA DATA:
ASSESSMENT ID: FRCS-813 BASELINE [ ]
NASA FMEA #: NEW [ ]

SUBSYSTEM: FRCS NASA DATA:
MDAC ID: 813 BASELINE [ ]
ITEM: MANIFOLD 3, OX & FU ISOL VLV SWITCH GPC CONTACTS
3, 4 NEW [ ]

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

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INADEQUATE [ ]

REMARKS:
MANIFOLD 3, OXIDIZER AND FUEL ISOLATION VALVE SWITCH RE-ANALYZED
BY IOA. SEE ASSESSMENT IDS FRCS 11105X-11109X.
APPENDIX C
ASSESSMENT WORKSHEET

**ASSESSMENT DATE:**
**ASSESSMENT ID:** FRCS-814
**NASA FMEA #:**
**NASA DATA:**
**BASELINE [ ]**
**NEW [ ]**

**SUBSYSTEM:** FRCS
**MDAC ID:** 814
**ITEM:** MANIFOLD 3, OX & FU ISOL VLV SWITCH GPC CONTACTS 3, 4

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
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**REMARKS:**
MANIFOLD 3, OXIDIZER AND FUEL ISOLATION VALVE SWITCH RE-ANALYZED BY IOA. SEE ASSESSMENT IDS FRCS 11105X-11109X.

REPORT DATE 2/26/88
## APPENDIX C
### ASSESSMENT WORKSHEET

**ASSESSMENT DATE:**

**ASSESSMENT ID:** FRCS-815

**NASA FMEA #:** FRCS

**MDAC ID:** 815

**ITEM:** MANIFOLD 3, OX & FU ISOL VLV SWITCH CLOSE

**CONTACTS 5, 6**

**LEAD ANALYST:**

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**RECOMMENDATIONS:** (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]

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**REMARKS:**

MANIFOLD 3, OXIDIZER AND FUEL ISOLATION VALVE SWITCH RE-ANALYZED BY IOA. SEE ASSESSMENT IDS FRCS 11105X-11109X.

**REPORT DATE 2/26/88**

C-774
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: NASA DATA:
ASSESSMENT ID: FRCS-816 BASELINE [ ]
NASA FMEA #: NEW [ ]

SUBSYSTEM: FRCS
MDAC ID: 816
ITEM: MANIFOLD 3, OX & FU ISOL VLV SWITCH CLOSE
CONTACTS 5, 6

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* CIL RETENTION RATIONALE: (If applicable)

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REMARKS:
MANIFOLD 3, OXIDIZER AND FUEL ISOLATION VALVE SWITCH RE-ANALYZED
BY IOA. SEE ASSESSMENT IDs FRCS 11105X-11109X.

REPORT DATE 2/26/88 C-775
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: NASA DATA:
ASSESSMENT ID: FRCS-817 NASA FMEA #:
SUBSYSTEM: FRCS BASELINE [ ]
MDAC ID: 817 NEW [ ]
ITEM: MANIFOLD 4, OX & FU ISOL VLV SWITCH

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

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REMARKS:
MANIFOLD 4, OXIDIZER AND FUEL ISOLATION VALVE SWITCH 33 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS FRCS 11110X-11114X.

REPORT DATE 2/26/88 C-776
## APPENDIX C
### ASSESSMENT WORKSHEET

**ASSESSMENT DATE:**

**ASSESSMENT ID:** FRCS-818

**NASA FMEA #:**

**SUBSYSTEM:** FRCS

**MDAC ID:** 818

**ITEM:** MANIFOLD 4, OX & FU ISOL VLV SWITCH

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* CIL RETENTION RATIONALE: (If applicable)

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**REMARKS:**

MANIFOLD 4, OXIDIZER AND FUEL ISOLATION VALVE SWITCH 33 RE-ANALYZED BY IOA. SEE ASSESSMENT ID$s$ FRCS 11110X-11114X.

**REPORT DATE 2/26/88 C-777**
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: NASA DATA:
ASSESSMENT ID: FRCS-819 BASELINE [ ]
NASA FMEA #: NEW [ ]

SUBSYSTEM: FRCS
MDAC ID: 819
ITEM: MANIFOLD 4, OX & FU ISOL VL V SWITCH

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
MANIFOLD 4, OXIDIZER AND FUEL ISOLATION VALVE SWITCH 33 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS FRCS 11110X-11114X.

REPORT DATE 2/26/88 C-778
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 
ASSESSMENT ID: FRCS-820
NASA FMEA #: NASA

SUBSYSTEM: FRCS
MDAC ID: 820
ITEM: MANIFOLD 4, OX & FU ISOL VLV SWITCH OPEN
CONTACTS 1, 2

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* CIL RETENTION RATIONALE: (If applicable)
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REMARKS:
MANIFOLD 4, OXIDIZER AND FUEL ISOLATION VALVE SWITCH 33 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs FRCS 11110X-11114X.

REPORT DATE 2/26/88 C-779
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE:  
ASSESSMENT ID: FRCS-821  
NASA FMEA #:  

NASA DATA:  
BASELINE [ ]  
NEW [ ]  

SUBSYSTEM: FRCS  
MDAC ID: 821  
ITEM: MANIFOLD 4, OX & FU ISOL VLV SWITCH OPEN CONTACTS 1, 2  

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REMARKS:  
MANIFOLD 4, OXIDIZER AND FUEL ISOLATION VALVE SWITCH 33 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS FRCS 11110X-11114X.

REPORT DATE 2/26/88  
C-780
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: [ ]
ASSESSMENT ID: FRCS-822
NASA FMEA #: [ ]

NASA DATA:
BASELINE [ ]
NEW [ ]

SUBSYSTEM: FRCS
MDAC ID: 822
ITEM: MANIFOLD 4, OX & FU ISOL VLV SWITCH GPC CONTACTS 3, 4

LEAD ANALYST: [ ]

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)
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* CIL RETENTION RATIONALE: (If applicable)
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REMARKS:
MANIFOLD 4, OXIDIZER AND FUEL ISOLATION VALVE SWITCH 33 RE-
ANALYZED BY IOA. SEE ASSESSMENT IDS FRCS 11110X-11114X.

REPORT DATE 2/26/88 C-781
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: [Date]
ASSESSMENT ID: FRCS-823
NASA FMEA #: [Number]
SUBSYSTEM: FRCS
MDAC ID: 823
ITEM: MANIFOLD 4, OX & FU ISOL VLV SWITCH GPC CONTACTS 3, 4
LEAD ANALYST: [Name]

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RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
MANIFOLD 4, OXIDIZER AND FUEL ISOLATION VALVE SWITCH 33 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs FRCS 11110X-11114X.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: [ ]
ASSESSMENT ID: FRCS-824
NASA FMEA #: [ ]

NASA DATA:
BASELINE [ ]
NEW [ ]

SUBSYSTEM: FRCS
MDAC ID: 824
ITEM: MANIFOLD 4, OX & FU ISOL VLV SWITCH CLOSE
CONTACTS 5, 6

LEAD ANALYST: [ ]

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RECOMMENDATIONS: (If different from NASA)
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* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
MANIFOLD 4, OXIDIZER AND FUEL ISOLATION VALVE SWITCH 33 RE-
ANALYZED BY IOA. SEE ASSESSMENT IDS FRCS 11110X-11114X.

REPORT DATE 2/26/88  C-783
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE:  
ASSESSMENT ID:  FRCS-825  
NASA FMEA #: 

NASA DATA:  
BASELINE [ ]  
NEW [ ]

SUBSYSTEM:  FRCS  
MDAC ID:  825  
ITEM:  MANIFOLD 4, OX & FU ISOL VLV SWITCH CLOSE CONTACTS 5, 6

LEAD ANALYST:

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RECOMMENDATIONS:  (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE:  (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
MANIFOLD 4, OXIDIZER AND FUEL ISOLATION VALVE SWITCH 33 RE-ANALYZED BY IOA.  SEE ASSESSMENT IDs FRCS 11110X-11114X.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE:  
ASSESSMENT ID:  FRCS-826  
NASA FMEA #:  
NASA DATA:  
BASELINE [ ]  
NEW [ ]  
SUBSYSTEM:  FRCS  
MDAC ID:  826  
ITEM:  MANIFOLD 5, OX & FU ISOL VLV SWITCH  
LEAD ANALYST:  
ASSESSMENT:  
FRCS-826  

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* CIL RETENTION RATIONALE:  (If applicable)  
ADEQUATE [ ]  
INADEQUATE [ ]  

REMARKS:  
FORWARD MANIFOLD ISOLATION VALVE #5 RE-ANALYZED BY IOA DUE TO CHANGE IN CIRCUITRY. SEE ASSESSMENT IDs FRCS 11001X-11079X.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: [ ]
ASSESSMENT ID: FRCS-827
NASA FMEA #: [ ]
NASA DATA:
BASELINE [ ]
NEW [ ]
SUBSYSTEM: FRCS
MDAC ID: 827
ITEM: MANIFOLD 5, OX & FU ISOL VLV SWITCH
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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
FORWARD MANIFOLD ISOLATION VALVE #5 RE-ANALYZED BY IOA DUE TO CHANGE IN CIRCUITRY. SEE ASSESSMENT IDS FRCS 11001X-11079X.

REPORT DATE 2/26/88 C-786
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE:  
ASSESSMENT ID:  FRCS-828  
NASA FMEA #:  

SUBSYSTEM:  FRCS  
MDAC ID:  828  
ITEM:  MANIFOLD 5, OX & FU ISOL VLV SWITCH  

LEAD ANALYST:  

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* CIL RETENTION RATIONALE:  (If applicable)
ADEQUATE [ ]
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REMARKS:
FORWARD MANIFOLD ISOLATION VALVE #5 RE-ANALYZED BY IOA DUE TO CHANGE IN CIRCUITRY. SEE ASSESSMENT IDS FRCS 11001X-11079X.

REPORT DATE 2/26/88  
C-787
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: FRCS-829
ASSESSMENT ID: NASA FMEA #:
NASA DATA:
BASELINE [ ]
NEW [ ]

SUBSYSTEM: FRCS
MDAC ID: 829
ITEM: MANIFOLD 5, OX & FU ISOL VLV SWITCH OPEN
CONTACTS 1, 2

LEAD ANALYST:

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
FORWARD MANIFOLD ISOLATION VALVE #5 RE-ANALYZED BY IOA DUE TO
CHANGE IN CIRCUITRY. SEE ASSESSMENT IDS FRCS 11001X-11079X.

REPORT DATE 2/26/88 C-788
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: [ ]
ASSESSMENT ID: FRCS-830
NASA FMEA #: [ ]
SUBSYSTEM: FRCS
MDAC ID: 830
ITEM: MANIFOLD 5, OX & FU ISOL VLV SWITCH OPEN
CONTACTS 1, 2

LEAD ANALYST: [ ]

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
FORWARD MANIFOLD ISOLATION VALVE #5 RE-ANALYZED BY IOA DUE TO CHANGE IN CIRCUITRY. SEE ASSESSMENT IDS FRCS 11001X-11079X.

REPORT DATE 2/26/88  C-789
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE:  
ASSESSMENT ID:  FRCS-831  
NASA FMEA #:  
NASA DATA:  
BASELINE [ ]  
NEW [ ]  

SUBSYSTEM:  FRCS  
MDAC ID:  831  
ITEM:  MANIFOLD 5, OX & FU ISOL VLV SWITCH GPC CONTACTS 3, 4  

LEAD ANALYST:  

ASSESSMENT:  

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

RECOMMENDATIONS:  (If different from NASA)  
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(ADD/DELETE)  

* CIL RETENTION RATIONALE:  (If applicable)  
ADEQUATE [ ]  
INADEQUATE [ ]  

REMARKS:  
FORWARD MANIFOLD ISOLATION VALVE #5 RE-ANALYZED BY IOA DUE TO CHANGE IN CIRCUITRY.  SEE ASSESSMENT IDS FRCS 11001X-11079X.  

REPORT DATE 2/26/88  
C-790
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: [ ]
ASSESSMENT ID: FRCS-832
NASA FMEA #: [ ]

NASA DATA:
BASELINE [ ]
NEW [ ]

SUBSYSTEM: FRCS
MDAC ID: 832
ITEM: MANIFOLD 5, OX & FU ISOL VLV SWITCH GPC CONTACTS 3, 4

LEAD ANALYST:

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RECOMMENDATIONS: (If different from NASA)
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* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
FORWARD MANIFOLD ISOLATION VALVE #5 RE-ANALYZED BY IOA DUE TO CHANGE IN CIRCUITRY. SEE ASSESSMENT IDs FRCS 11001X-11079X.

REPORT DATE 2/26/88 C-791
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE:  
ASSESSMENT ID:  FRCS-833  
NASA FMEA #:  
NASA DATA:  
BASELINE [ ]  
NEW [ ]  
SUBSYSTEM:  FRCS  
MDAC ID:  833  
ITEM:  MANIFOLD 5, OX & FU ISOL VLV SWITCH CLOSE  
CONTACTS 5, 6  
LEAD ANALYST:  

ASSESSMENT:  

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RECOMMENDATIONS:  (If different from NASA)  

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* CIL RETENTION RATIONALE:  (If applicable)  

ADEQUATE [ ]  
INADEQUATE [ ]  

REMARKS:  
FORWARD MANIFOLD ISOLATION VALVE #5 RE-ANALYZED BY IOA DUE TO CHANGE IN CIRCUITRY.  SEE ASSESSMENT IDs FRCS 11001X-11079X.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: NASA DATA:
ASSESSMENT ID: FRCS-834 BASELINE [ ]
NASA FMEA #: FRCS NEW [ ]
NASA ID: 834

SUBSYSTEM: FRCS
MDAC ID:
ITEM: MANIFOLD 5, OX & FU ISOL VLV SWITCH CLOSE
CONTACTS 5, 6

LEAD ANALYST:

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
FORWARD MANIFOLD ISOLATION VALVE #5 RE-ANALYZED BY IOA DUE TO CHANGE IN CIRCUITRY. SEE ASSESSMENT IDS FRCS 11001X-11079X.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE:    NASA DATA:
ASSESSMENT ID: FRCS-835     BASELINE [  ]
NASA FMEA #:    NEW [  ]
SUBSYSTEM: FRCS
MDAC ID: 835
ITEM: MANIFOLD 5, OX & FU ISOL VLV SWITCH OPEN
CONTACTS 7, 8
LEAD ANALYST:

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [  ]
INADEQUATE [  ]

REMARKS:
FORWARD MANIFOLD ISOLATION VALVE #5 RE-ANALYZED BY IOA DUE TO CHANGE IN CIRCUITRY. SEE ASSESSMENT IDS FRCS 11001X-11079X.

REPORT DATE 2/26/88    C-794
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 
ASSESSMENT ID: FRCS-836 
NASA FMEA #: 
NASA DATA: 
BASELINE [ ] 
NEW [ ] 

SUBSYSTEM: FRCS 
MDAC ID: 836 
ITEM: MANIFOLD 5, OX & FU ISOL VLV SWITCH OPEN 
CONTACTS 7, 8 

LEAD ANALYST: 

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
FORWARD MANIFOLD ISOLATION VALVE #5 RE-ANALYZED BY IOA DUE TO CHANGE IN CIRCUITRY. SEE ASSESSMENT IDS FRCS 11001X-11079X.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: [ ]
ASSESSMENT ID: FRCS-837
NASA FMEA #: [ ]

NASA DATA:
BASELINE [ ]
NEW [ ]

SUBSYSTEM: MANIFOLD 5, OX & FU ISOL VLV SWITCH GPC CONTACTS
MDAC ID:
ITEM: 9, 10

LEAD ANALYST:

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)
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*CIL RETENTION RATIONALE: (If applicable)

Adequate [ ]
Inadequate [ ]

REMARKS:
FORWARD MANIFOLD ISOLATION VALVE #5 RE-ANALYZED BY IOA DUE TO
CHANGE IN CIRCUITRY. SEE ASSESSMENT IDS FRCS 11001X-11079X.

REPORT DATE 2/26/88 C-796

C 2
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE:  
ASSESSMENT ID:  FRCS-838  
NASA FMEA #:  
NASA DATA:  BASELINE [ ]  
NEW [ ]

SUBSYSTEM:  FRCS  
MDAC ID:  838  
ITEM:  MANIFOLD 5, OX & FU ISOL VLV SWITCH GPC CONTACTS 9, 10

LEAD ANALYST:  
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RECOMMENDATIONS:  (If different from NASA)  
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* CIL RETENTION RATIONALE: (If applicable)  
ADEQUATE [ ]  
INADEQUATE [ ]

REMARKS:  
FORWARD MANIFOLD ISOLATION VALVE #5 RE-ANALYZED BY IOA DUE TO CHANGE IN CIRCUITRY. SEE ASSESSMENT IDS FRCS 11001X-11079X.

REPORT DATE 2/26/88  
C-797
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 
ASSESSMENT ID: FRCS-839
NASA FMEA #: 
NASA DATA: 
BASELINE [ ]
NEW [ ]

SUBSYSTEM: FRCS
MDAC ID: 839
ITEM: MANIFOLD 5, OX & FU ISOL VLV SWITCH CLOSE
CONTACTS 11, 12

LEAD ANALYST: 
ASSESSMENT:

| CRITICALITY | REDUNDANCY SCREENS | CIL |
| FLIGHT HDW/FUNC | A | B | C |
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RECOMMENDATIONS: (If different from NASA)
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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
FORWARD MANIFOLD ISOLATION VALVE #5 RE-ANALYZED BY IOA DUE TO CHANGE IN CIRCUITRY. SEE ASSESSMENT IDS FRCS 11001X-11079X.

REPORT DATE 2/26/88 C-798
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 
ASSESSMENT ID: FRCS-840 
NASA FMEA #: 

NASA DATA: 
BASELINE [ ] 
NEW [ ]

SUBSYSTEM: FRCS 
MDAC ID: 840 
ITEM: MANIFOLD 5, OX & FU ISOL VLV SWITCH CLOSE 
CONTACTS 11, 12 

LEAD ANALYST: 

ASSessment:

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RECOMMENDATIONS: (If different from NASA) 

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable) 

ADEQUATE [ ] 
INADEQUATE [ ]

REMARKS: 
FORWARD MANIFOLD ISOLATION VALVE #5 RE-ANALYZED BY IOA DUE TO CHANGE IN CIRCUITRY. SEE ASSESSMENT IDS FRCS 11001X-11079X.

REPORT DATE 2/26/88 C-799
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88

NASA DATA:
ASSESSMENT ID: FRCS-841
NASA FMEA #: 03-2F-103350 -2

SUBSYSTEM: FRCS
MDAC ID: 841
ITEM: FU TK ULLAGE PRESS SENSOR

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
IOA AGREES WITH NASA FMEA.

REPORT DATE 2/26/88 C-800
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-842
NASA FMEA #: 03-2F-103350 -2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 842
ITEM: FU TK ULLAGE PRESS SENSOR

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
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REMARKS:
IOA AGREES WITH NASA FMEA.

REPORT DATE 2/26/88 C-801
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-843
NASA FMEA #: 03-2F-103350 -2

SUBSYSTEM: FRCS
MDAC ID: 843
ITEM: FU TK OUT PRESS SENSOR

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)
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* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
IOA AGREES WITH NASA FMEA.

REPORT DATE 2/26/88   C-802
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-844
NASA FMEA #: 03-2F-103350 -2

SUBSYSTEM: FRCS
MDAC ID: 844
ITEM: FU TK OUT PRESS SENSOR
LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)
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* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
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REMARKS:
IOA AGREES WITH NASA FMEA.

REPORT DATE 2/26/88 C-803
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-845
NASA FMEA #: 03-2F-103350-2
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 845
ITEM: OX TK ULLAGE PRESS SENSOR

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
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REMARKS:
IOA AGREES WITH NASA FMEA.

REPORT DATE 2/26/88 C-804
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-846
NASA FMEA #: 03-2F-103350 -2

SUBSYSTEM: FRCS
MDAC ID: 846
ITEM: OX TK ULLAGE PRESS SENSOR

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
IOA AGREES WITH NASA FMEA.

REPORT DATE 2/26/88
C-805
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-847
NASA FMEA #: 03-2F-103350 -2
SUBSYSTEM: FRCS
MDAC ID: 847
ITEM: OX TK OUT PRESS SENSOR
LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
IOA AGREES WITH NASA FMEA.

REPORT DATE 2/26/88 C-806
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-848
NASA FMEA #: 03-2F-103350 -2

SUBSYSTEM: FRCS
MDAC ID: 848
ITEM: OX TK OUT PRESS SENSOR

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)
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* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
IOA AGREES WITH NASA FMEA.

REPORT DATE 2/26/88 C-807
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-849
NASA FMEA #: 03-2F-103370 -1
SUBSYSTEM: FRCS
MDAC ID: 849
ITEM: FU PRESS LINE (NEAR THERMOSTAT) TEMP SENSOR
LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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*CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
IOA AGREES WITH NASA FMEA.

REPORT DATE 2/26/88 C-808
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-850
NASA FMEA #: 03-2F-103370 -1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 850
ITEM: FU PRESS LINE (NEAR THERMOSTAT) TEMP SENSOR

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
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REMARKS:
IOA AGREES WITH NASA FMEA.

REPORT DATE 2/26/88 C-809
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-851
NASA FMEA #: 03-2F-103370 -1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 851
ITEM: FU FILL LINE TEMP SENSOR

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)
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* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
IOA AGREES WITH NASA FMEA.

REPORT DATE 2/26/88
C-810
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-852
NASA FMEA #: 03-2F-103370 -1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 852
ITEM: FU FILL LINE TEMP SENSOR

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
IOA AGREES WITH NASA FMEA.

REPORT DATE 2/26/88 C-811
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88  NASA DATA:
ASSESSMENT ID: FRCS-853  BASELINE [ ]
NASA FMEA #: 03-2P-103370 -1  NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 853
ITEM: L FUEL PRESS LINE BACKUP TEMP SENSOR

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

| CRITICALITY | REDUNDANCY SCREENS | CIL |
| HDW/FUNC    | A             | B        | C    | ITEM |
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|            | IOA [ 3 /3 ]   | [ ]       | [ ]  | [ ]  | [ ]            |
| COMPARE     | [ /N ]        | [ N ]     | [ N ] | [ N ] | [ ] |

RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
IOA AGREES WITH NASA FMEA.

REPORT DATE 2/26/88  C-812
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-854
NASA FMEA #: 03-2F-103370-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 854
ITEM: L FUEL PRESS LINE BACKUP TEMP SENSOR

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)
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* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
IOA AGREES WITH NASA FMEA.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-855
NASA FMEA #: 03-2F-103370 -1
NASA DATA: BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 855
ITEM: OX FILL LINE TEMP SENSOR

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:

IOA AGREES WITH NASA FMEA.

REPORT DATE 2/26/88 C-814
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-856
NASA FMEA #: 03-2F-103370 -1
SUBSYSTEM: FRCS
MDAC ID: 856
ITEM: OX FILL LINE TEMP SENSOR
LEAD ANALYST: D. HARTMAN

ASSessment:

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RECOMMENDATIONS:  (If different from NASA)

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* CIL RETENTION RATIONALE:  (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
IOA AGREES WITH NASA FMEA.

REPORT DATE 2/26/88 C-815
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-857
NASA FMEA #: 03-2F-103370 -1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 857
ITEM: OX PRESS LINE (NEAR THERMOSTAT) TEMP SENSOR
LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)
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* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
IOA AGREES WITH NASA FMEA.

REPORT DATE 2/26/88 C-816
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-858
NASA FMEA #: 03-2F-103370 -1
SUBSYSTEM: FRCS
MDAC ID: 858
ITEM: OX PRESS LINE (NEAR THERMOSTAT) TEMP SENSOR
LEAD ANALYST: D. HARTMAN

NASA DATA:
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NEW [ X ]

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RECOMMENDATIONS: (If different from NASA)
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REMARKS:
IOA AGREES WITH NASA FMEA.

REPORT DATE 2/26/88 C-817
ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-859
NASA FMEA #: 03-2F-103370 -1
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 859
ITEM: OX PRESS LINE TEMP BACKUP SENSOR

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)
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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
IOA AGREES WITH NASA FMEA.

REPORT DATE 2/26/88 C-818
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-860
NASA FMEA #: 03-2F-103370 -1
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 860
ITEM: OX PRESS LINE TEMP BACKUP SENSOR

LEAD ANALYST: D. HARTMAN

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
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REMARKS:
IOA AGREES WITH NASA FMEA.

REPORT DATE 2/26/88 C-819
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-861
NASA FMEA #: 03-2F-103370 -1

SUBSYSTEM: FRCS
MDAC ID: 861
ITEM: OX TK TEMP-1 TEMP SENSOR
LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
IOA AGREES WITH NASA FMEA. NOTE: IOA SHOULD HAVE ANALYZED FUEL TANK TEMPERATURE SENSOR ALSO CONTAINED IN THIS FMEA.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-862
NASA FMEA #: 03-2F-103370 -1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 862
ITEM: OX TK TEMP-1 TEMP SENSOR

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
IOA AGREES WITH NASA FMEA. NOTE: IOA SHOULD HAVE ANALYZED FUEL TANK TEMPERATURE SENSOR ALSO CONTAINED IN THIS FMEA.

REPORT DATE 2/26/88
C-821
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-863
NASA FMEA #: 03-2F-103350 -3

SUBSYSTEM: FRCS
MDAC ID: 863
ITEM: FU MANIF PRESS-1 PRESS SENSOR
LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:

IOA AGREES WITH NASA FMEA.
### APPENDIX C
### ASSESSMENT WORKSHEET

**ASSESSMENT DATE:** 1/29/88

**ASSESSMENT ID:** FRCS-864

**NASA FMEA #:** 03-2F-103350 -3

**SUBSYSTEM:** FRCS

**MDAC ID:** 864

**ITEM:** PU MANIF PRESS-1 PRESS SENSOR

**LEAD ANALYST:** D. HARTMAN

**NASA DATA:**

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**SUBSYSTEM:** FRCS

**MDAC ID:** 864

**ITEM:** PU MANIF PRESS-1 PRESS SENSOR

**LEAD ANALYST:** D. HARTMAN

**ASSESSMENT:**

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**RECOMMENDATIONS:** (If different from NASA)

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* **CIL RETENTION RATIONALE:** (If applicable)

  | ADEQUATE | INADEQUATE |
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**REMARKS:**

IOA AGREES WITH NASA FMEA.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-865
NASA FMEA #: 03-2F-103350 -3

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 865
ITEM: OX MANIF PRESS-1 PRESS SENSOR

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)
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* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
IOA AGREES WITH NASA FMEA.

REPORT DATE 2/26/88 C-824
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-866
NASA FMEA #: 03-2F-103350 -3

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 866
ITEM: OX MANIF PRESS-1 PRESS SENSOR

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
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REMARKS:
IOA AGREES WITH NASA FMEA.

REPORT DATE 2/26/88 C-825
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-867
NASA FMEA #: 03-2F-103350 -3

SUBSYSTEM: FRCS
MDAC ID: 867
ITEM: FU MANIF PRESS-2 PRESS SENSOR

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
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REMARKS:

IOA AGREES WITH NASA FMEA.

REPORT DATE 2/26/88 C-826
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-868
NASA FMEA #: 03-2F-103350 -3

NASA DATA:
BASELINE [ ]
NEW [ x ]

SUBSYSTEM: FRCS
MDAC ID: 868
ITEM: FU MANIF PRESS-2 PRESS SENSOR

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
IOA AGREES WITH NASA FMEA.

REPORT DATE 2/26/88 C-827
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-869
NASA FMEA #: 03-2F-103350 -3

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 869
ITEM: OX MANIF PRESS-2 PRESS SENSOR

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)
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* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
IOA AGREES WITH NASA FMEA.

REPORT DATE 2/26/88 C-828
### APPENDIX C
### ASSESSMENT WORKSHEET

**ASSESSMENT DATE:** 1/29/88  
**ASSESSMENT ID:** FRCS-870  
**NASA FMEA #:** 03-2F-103350 -3  
**NASA DATA:**  
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  - NEW [ x ]

**SUBSYSTEM:** FRCS  
**MDAC ID:** 870  
**ITEM:** OX MANIF PRESS-2 PRESS SENSOR

**LEAD ANALYST:** D. HARTMAN

**ASSESSMENT:**

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**RECOMMENDATIONS:** (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

**REMARKS:**

IOA AGREES WITH NASA FMEA.

**REPORT DATE 2/26/88**

C-829
**APPENDIX C**
**ASSESSMENT WORKSHEET**

**ASSESSMENT DATE:** 1/29/88  
**NASA DATA:**  
**ASSESSMENT ID:** FRCS-871  
**NASA FMEA #:** 03-2F-103350 -3  

**SUBSYSTEM:** FRCS  
**MDAC ID:** 871  
**ITEM:** FU MANIF PRESS-3 PRESS SENSOR  

**LEAD ANALYST:** D. HARTMAN  

**ASSESSMENT:**  

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**RECOMMENDATIONS:** (If different from NASA)  

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* CIL RETENTION RATIONALE: (If applicable)  

ADEQUATE [ ]  
INADEQUATE [ ]

**REMARKS:**  
IOA AGREES WITH NASA FMEA.

**REPORT DATE 2/26/88**

C-830
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88  NASA DATA:
ASSESSMENT ID: FRC8-872  BASELINE [    ]
NASA FMEA #: 03-2F-103350 -3  NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 872
ITEM: FU MANIF PRESS-3 PRESS SENSOR

LEAD ANALYST: D. HARTMAN

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
IOA AGREES WITH NASA FMEA.
APPENDIX C  
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88  
NASA DATA:

ASSESSMENT ID: FRCS-873  
NASA FMEA #: 03-2F-103350 -3

SUBSYSTEM: FRCS  
MDAC ID: 873  
ITEM: OX MANIF PRESS-3 PRESS SENSOR

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:

IOA AGREES WITH NASA FMEA.

REPORT DATE 2/26/88  
C-832
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-874
NASA FMEA #: 03-2F-103350 -3

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 874
ITEM: OX MANIF PRESS-3 PRESS SENSOR

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
IOA AGREES WITH NASA FMEA.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
NASA DATA:
ASSESSMENT ID: FRCS-875
BASELINE [ ]
NASA FMEA #: 03-2F-103350 -3
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 875
ITEM: FU MANIF PRESS-4 PRESS SENSOR

LEAD ANALYST: D. HARTMAN

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* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
IOA AGREES WITH NASA FMEA.

REPORT DATE 2/26/88 C-834
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88  NASA DATA:
ASSESSMENT ID: FRCS-876
NASA FMEA #: 03-2F-103350 -3  BASELINE [ ]  NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 876
ITEM: FU MANIF PRESS-4 PRESS SENSOR

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
IOA AGREES WITH NASA FMEA.

REPORT DATE 2/26/88  C-835
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-877
NASA FMEA #: 03-2F-103350 -3
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 877
ITEM: OX MANIF PRESS-4 PRESS SENSOR

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
IOA AGREES WITH NASA FMEA.

REPORT DATE 2/26/88 C-836
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-878
NASA FMEA #: 03-2F-103350 -3

SUBSYSTEM: FRCS
MDAC ID: 878
ITEM: OX MANIF PRESS-4 PRESS SENSOR

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
IOA AGREES WITH NASA FMEA.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88

NASA DATA:
BASELINE [ ]
NEW [ X ]

ASSESSMENT ID: FRCS-879

SUBSYSTEM: FRCS
MDAC ID: 879
ITEM: OX & FU TK ISOL VLV 1/2 & 3/4/5 SWITCH TALKBACK

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

[ 3 /2R ] [ P ] [ P ] [ P ] [ ]

(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:

THIS FAILURE MAY CAUSE LOSS OF ACCURATE INDICATION OF THE VALVE POSITION. REDUNDANCY PROVIDED. LOSS OF ALL REDUNDANCY MAY LEAD TO FALSELY FAILING THE VALVE CLOSED, POSSIBLY AFFECTING MISSION OPERATIONS.

ISSUE NOT RESOLVED AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88.

REPORT DATE 2/26/88  C-838
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-879A
NASA FMEA #: 05-6KF-2154 -1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 879
ITEM: OX & FU TK ISOL VLV 1/2 & 3/4/5 SWITCH TALKBACK

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

[ 3 /2R ] | [ P ]| [ P ]| [ P ]| [ ] |

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* CIL RETENTION RATIONALE: (If applicable)

Adequate [ ]
Inadequate [ ]

REMARKS:
THIS FAILURE MAY CAUSE LOSS OF ACCURATE INDICATION OF THE VALVE POSITION. REDUNDANCY PROVIDED. LOSS OF ALL REDUNDANCY MAY LEAD TO FALSELY FAILING THE VALVE CLOSED, POSSIBLY EFFECTING MISSION OPERATIONS.

ISSUE NOT RESOLVED AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88.

REPORT DATE 2/26/88 \ C-839
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-880
NASA FMEA #: 05-6KF-2155 -1
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 880
ITEM: MANIFOLD 1, OX & FU ISOL VLV SWITCH TALKBACK

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)
[ 3 /2R ] [ P ] [ P ] [ P ] [ ] (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NASA FMEA CONSIDERS MULTIPLE FAILURES. HOWEVER, LOSS OF ACCURATE INDICATION OF VALVE STATUS WITH SWITCH TALKBACK COUPLED WITH THE LOSS OF REDUNDANCY (MDM DISCRETES) MAY LEAD TO FALSELY FAILING THE VALVE CLOSED, POSSIBLY EFFECTING MISSION OPERATIONS.

AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88, NSTS 22206 WAS DISCUSSED. IT WAS AGREED UPON THAT THE ISSUE RAISED ABOVE WAS DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THE ISSUE REMAINS OPEN.

REPORT DATE 2/26/88 C-840
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
NASA DATA:
ASSessment ID: FRCS-880A
NASA FMEA #: 05-6KF-2155 -2

SUBSYSTEM: FRCS
MDAC ID: 880
ITEM: MANIFOLD 1, OX & FU ISOL VALV SWITCH TALKBACK

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

[ 3 /2R ] [ P ] [ P ] [ P ] [ ]

(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]

INADEQUATE [ ]

REMARKS:

THIS FAILURE MAY CAUSE LOSS OF ACCURATE INDICATION OF THE VALVE POSITION. REDUNDANCY PROVIDED. LOSS OF ALL REDUNDANCY MAY LEAD TO FALSELY FAILING THE VALVE CLOSED, POSSIBLY EFFECTING MISSION OPERATIONS.

ISSUE NOT RESOLVED AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88.

REPORT DATE 2/26/88

C-841
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
NASA DATA:
ASSESSMENT ID: FRCS-881
BASELINE [ ]
NASA FMEA #: 05-6KF-2155 -1
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 881
ITEM: MANIFOLD 2, OX & FU ISOL VLV SWITCH TALKBACK

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
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REMARKS:
NASA FMEA CONSIDERS MULTIPLE FAILURES. HOWEVER, LOSS OF ACCURATE INDICATION OF VALVE STATUS WITH SWITCH TALKBACK COUPLED WITH THE LOSS OF REDUNDANCY (MDM DISCRETES) MAY LEAD TO FALSELY FAILING THE VALVE CLOSED, POSSIBLY EFFECTING MISSION OPERATIONS.

AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88, NSTS 22206 WAS DISCUSSED. IT WAS AGREED UPON THAT THE ISSUE RAISED ABOVE WAS DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THE ISSUE REMAINS OPEN.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-881A
NASA FMEA #: 05-6KF-2155 -2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 881
ITEM: MANIFOLD 2, OX & FU ISOL VLV SWITCH TALKBACK

LEAD ANALYST: D. HARTMAN

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:

THIS FAILURE MAY CAUSE LOSS OF ACCURATE INDICATION OF THE VALVE POSITION. REDUNDANCY PROVIDED. LOSS OF ALL REDUNDANCY MAY LEAD TO FALSELY FAILING THE VALVE CLOSED, POSSIBLY EFFECTING MISSION OPERATIONS.

ISSUE NOT RESOLVED AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88.

REPORT DATE 2/26/88 C-843
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-882
NASA FMEA #: 05-6KF-2155 -1
SUBSYSTEM: FRCS
MDAC ID: 882
ITEM: MANIFOLD 3, OX & FU ISOL VLV SWITCH TALKBACK
LEAD ANALYST: D. HARTMAN

NASA DATA:
BASELINE [ ]
NEW [ ]

SUBSYSTEM: FRCS
MDAC ID: 882
ITEM: MANIFOLD 3, OX & FU ISOL VLV SWITCH TALKBACK
LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NASA FMEA CONSIDERS MULTIPLE FAILURES. HOWEVER, LOSS OF ACCURATE INDICATION OF VALVE STATUS WITH SWITCH TALKBACK COUPLED WITH THE LOSS OF REDUNDANCY (MDM DISCRETES) MAY LEAD TO FALSELY FAILING THE VALVE CLOSED, POSSIBLY EFFECTING MISSION OPERATIONS.

AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88, NSTS 22206 WAS DISCUSSED. IT WAS AGREED UPON THAT THE ISSUE RAISED ABOVE WAS DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THE ISSUE REMAINS OPEN.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-882A
NASA FMEA #: 05-6KF-2155 -2
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 882
ITEM: MANIFOLD 3, OX & FU ISOL VLV SWITCH TALKBACK

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

[ 3 /2R ] [ P ] [ P ] [ P ] (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
THIS FAILURE MAY CAUSE LOSS OF ACCURATE INDICATION OF THE VALVE POSITION. REDUNDANCY PROVIDED. LOSS OF ALL REDUNDANCY MAY LEAD TO FALSELY FAILING THE VALVE CLOSED, POSSIBLY EFFECTING MISSION OPERATIONS.

ISSUE NOT RESOLVED AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88.

REPORT DATE 2/26/88 C-845
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-883
NASA FMEA #: 05-6KF-2155 -1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 883
ITEM: MANIFOLD 4, OX & FU ISOL VLV SWITCH TALKBACK

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)
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(AD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NASA FMEA CONSIDERS MULTIPLE FAILURES. HOWEVER, LOSS OF ACCURATE INDICATION OF VALVE STATUS WITH SWITCH TALKBACK COUPLED WITH THE LOSS OF REDUNDANCY (MDM DISCRETES) MAY LEAD TO FALSELY FAILING THE VALVE CLOSED, POSSIBLY EFFECTING MISSION OPERATIONS.

AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88, NSTS 22206 WAS DISCUSSED. IT WAS AGREED UPON THAT THE ISSUE RAISED ABOVE WAS DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THE ISSUE REMAINS OPEN.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-883A
NASA FMEA #: 05-6KF-2155 -2
SUBSYSTEM: FRCS
MDAC ID: 883
ITEM: MANIFOLD 4, OX & FU ISOL VLV SWITCH TALKBACK
LEAD ANALYST: D. HARTMAN

NASA DATA:
BASELINE [ ]
NEW [ X ]

NASA DATA:
BASELINE [ ]
NEW [ X ]

CRITICALITY
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HDW/FUNC A B C ITEM
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RECOMMENDATIONS: (If different from NASA)
[ 3 /2R ] [ P ] [ P ] [ P ] [ ]
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
THIS FAILURE MAY CAUSE LOSS OF ACCURATE INDICATION OF THE VALVE POSITION. REDUNDANCY PROVIDED. LOSS OF ALL REDUNDANCY MAY LEAD TO FALSELY FAILING THE VALVE CLOSED, POSSIBLY EFFECTING MISSION OPERATIONS.

ISSUE NOT RESOLVED AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: NASA DATA:
ASSESSMENT ID: FRCS-884 BASELINE [ ]
NASA FMEA #: NEW [ ]
SUBSYSTEM: FRCS
MDAC ID: 884
ITEM: MANIFOLD 5, OX & FU ISOL VLV SWITCH TALKBACK

LEAD ANALYST:

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

[ / ] [ ] [ ] [ ] [ ] [ ]

(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
FORWARD MANIFOLD ISOLATION VALVE #5 RE-ANALYZED BY IOA DUE TO CHANGE IN CIRCUITRY. SEE ASSESSMENT IDs FRCS 11001X-11079X.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-885
NASA FMEA #: 05-6KF-2179 -1
SUBSYSTEM: FRCS
MDAC ID: 885
ITEM: CONTROLLER, REMOTE POWER
LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

[ 2 /1R ] [ P ] [ P ] [ P ] [ A ]

(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
LOSE JETS ON MANIFOLD 1. REDUNDANCY PROVIDED BY JETS ON MANIFOLD 3. JETS REQUIRED TO EXPEL PROPELLANTS TO MEET CG LIMITS.

ISSUE IS TIED TO THE IOA HARDWARE CRITICALITY FOR THE FAILED OFF THRUSTERS.

REPORT DATE 2/26/88 C-849
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-886
NASA FMEA #: 05-6KF-2179 -2

SUBSYSTEM: FRCS
MDAC ID: 886
ITEM: CONTROLLER, REMOTE POWER

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)
[ 3 /3 ] [ ] [ ] [ ] [ D ] (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NASA FMEA CONSIDERS MULTIPLE FAILURES. THIS FAILURE ALONE HAS NO EFFECT.

AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88, NSTS 22206 WAS DISCUSSED. IT WAS AGREED UPON THAT THE ISSUE RAISED ABOVE WAS DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THE ISSUE REMAINS OPEN.

REPORT DATE 2/26/88
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-887
NASA FMEA #: 05-6KF-2180 -1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 887
ITEM: CONTROLLER, REMOTE POWER

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)
[ 2 /1R ] [ P ] [ P ] [ P ] [ A ]
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
LOSE JETS ON MANIFOLD 1. REDUNDANCY PROVIDED BY JETS ON MANIFOLD 3. JETS REQUIRED TO EXPEL PROPELLANTS TO MEET CG LIMITS.

ISSUE IS TIED TO THE IOA HARDWARE CRITICALITY FOR FAILED OFF THRUSTERS.

REPORT DATE 2/26/88
C-851
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-888
NASA FMEA #: 05-6KF-2180-2
SUBSYSTEM: FRCS
MDAC ID: 888
ITEM: CONTROLLER, REMOTE POWER
LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-852
APPENDIX C
ASSessment Worksheet

Assessment Date: 1/29/88
Assessment ID: FRCS-889
NASA FMEA #: 05-6KF-2179 -1

Subsystem: FRCS
MDAC ID: 889
Item: CONTROLLER, REMOTE POWER

Lead Analyst: D. Hartman

Assessment:

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Recommendations: (If different from NASA)

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

*CIL Retention Rationale: (If applicable)
Adequate [ ]
Inadequate [ ]

Remarks:
LOSE JETS ON MANIFOLD 2. REDUNDANCY PROVIDED BY JETS ON MANIFOLD 4. JETS REQUIRED TO EXPEL PROPELLANTS TO MEET CG LIMITS.

Issue is tied to the IOA hardware criticality for the failed off thrusters.

Report Date 2/26/88 C-853
APPENDIX C
ASSESSMENT WORKSHEET

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**ASSESSMENT:**

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**RECOMMENDATIONS:** (If different from NASA)

[ 3 /3 ] [ ] [ ] [ ] [ ] [ D ]

(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

**REMARKS:**

NASA FMEA CONSIDERS MULTIPLE FAILURES. THIS FAILURE ALONE HAS NO EFFECT.

AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88, NSTS 22206 WAS DISCUSSED. IT WAS AGREED UPON THAT THE ISSUE RAISED ABOVE WAS DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THE ISSUE REMAINS OPEN.

REPORT DATE 2/26/88 C-854
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-891
NASA FMEA #: 05-6KF-2180 -1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 891
ITEM: CONTROLLER, REMOTE POWER
LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
LOSE JETS ON MANIFOLD 2. REDUNDANCY PROVIDED BY JETS ON MANIFOLD 4. JETS REQUIRED TO EXPEL PROPELLANTS TO MEET CG LIMITS.

ISSUE IS TIED TO THE IOA HARDWARE CRITICALITY FOR FAILED OFF THRUSTERS.

REPORT DATE 2/26/88
C-855
ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-892
NASA FMEA #: 05-6KF-2180 -2
NASA DATA:
BASELINE [ ]
NEW [ X ]
SUBSYSTEM: FRCS
MDAC ID: 892
ITEM: CONTROLLER, REMOTE POWER
LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-893
NASA FMEA #: 05-6KF-2179 -1
SUBSYSTEM: FRCS
MDAC ID: 893
ITEM: CONTROLLER, REMOTE POWER
LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)
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* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
IOA AGREES WITH NASA FMEA.

REPORT DATE 2/26/88 C-857
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-894
NASA FMEA #: 05-6KF-2179 -2
SUBSYSTEM: FRCS
MDAC ID: 894
ITEM: CONTROLLER, REMOTE POWER
LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:

NASA FMEA CONSIDERS MULTIPLE FAILURES. THIS FAILURE ALONE HAS NO EFFECT.

AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88, NSTS 22206 WAS DISCUSSED. IT WAS AGREED UPON THAT THE ISSUE RAISED ABOVE WAS DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THE ISSUE REMAINS OPEN.

REPORT DATE 2/26/88 C-858
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-895
NASA FMEA #: 05-6KF-2180 -1

SUBSYSTEM: FRCS
MDAC ID: 895
ITEM: CONTROLLER, REMOTE POWER

LEAD ANALYST: D. HARTMAN

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

RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
IOA AGREES WITH NASA FMEA.

REPORT DATE 2/26/88 C-859
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88  NASA DATA:
ASSESSMENT ID: FRCS-896  BASELINE [ ]
NASA FMEA #: 05-6KF-2180 -2  NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 896
ITEM: CONTROLLER, REMOTE POWER

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)
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* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88  C-860
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-897
NASA FMEA #: 05-6KF-2181 -1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 897
ITEM: CONTROLLER, REMOTE POWER

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
IOA AGREES WITH NASA FMEA.

REPORT DATE 2/26/88  C-861
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-898
NASA FMEA #: 05-6KF-2181-2
SUBSYSTEM: FRCS
MDAC ID: 898
ITEM: CONTROLLER, REMOTE POWER
LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
IOA AGREES WITH NASA FMEA.

REPORT DATE 2/26/88 C-862
APPENDIX C  
ASSESSMENT WORKSHEET  

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-899
NASA FMEA #: 05-6KF-2182 -1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 899
ITEM: CONTROLLER, REMOTE POWER

LEAD ANALYST: D. HARTMAN

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
IOA AGREES WITH NASA FMEA.

REPORT DATE 2/26/88  C-863
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-900
NASA FMEA #: 05-6KF-2182 -2

SUBSYSTEM: FRCS
MDAC ID: 900
ITEM: CONTROLLER, REMOTE POWER

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NASA FMEA CONSIDERS MULTIPLE FAILURES. THIS FAILURE ALONE HAS NO EFFECT.

AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88, NSTS 22206 WAS DISCUSSED. IT WAS AGREED UPON THAT THE ISSUE RAISED (MULTIPLE FAILURES) WAS DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THE ISSUE REMAINS OPEN.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-901
NASA FMEA #: 05-6KF-2179 -2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 901
ITEM: CONTROLLER, REMOTE POWER

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NASA FMEA CONSIDERS MULTIPLE FAILURES. THIS FAILURE ALONE HAS NO EFFECT.

AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88, NSTS 22206 WAS DISCUSSED. IT WAS AGREED UPON THAT THE ISSUE RAISED ABOVE WAS DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THE ISSUE REMAINS OPEN.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-902
NASA FMEA #: 05-6KF-2180 -1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 902
ITEM: CONTROLLER, REMOTE POWER

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
LOSE JETS ON MANIFOLD 4. REDUNDANCY PROVIDED BY JETS ON MANIFOLD 2. JETS REQUIRED TO EXPEL PROPELLANTS TO MEET CG LIMITS.

ISSUE IS TIED TO THE IOA HARDWARE CRITICALITY FOR FAILED OFF THRUSTERS.

REPORT DATE 2/26/88  C-866
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-903
NASA FMEA #: 05-6KF-2180-2
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 903
ITEM: CONTROLLER, REMOTE POWER

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-904
NASA FMEA #: 05-6KF-2179 -1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 904
ITEM: CONTROLLER, REMOTE POWER

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
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REMARKS:
LOSE JETS ON MANIFOLD 4. REDUNDANCY PROVIDED BY JETS ON MANIFOLD 2. JETS REQUIRED TO EXPEL PROPELLANTS TO MEET CG LIMITS.

ISSUE IS TIED TO THE IOA HARDWARE CRITICALITY FOR THE FAILED OFF THRUSTERS.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-905
NASA FMEA #: 05-6KF-2183 -1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 905
ITEM: CONTROLLER, REMOTE POWER

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)
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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
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REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88   C-869
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-906
NASA FMEA #: 05-6KF-2183 -2

SUBSYSTEM: FRCS
MDAC ID: 906
ITEM: CONTROLLER, REMOTE POWER
LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NASA FMEA CONSIDERS MULTIPLE FAILURES. THIS FAILURE ALONE HAS NO EFFECT.

AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88, NSTS 22206 WAS DISCUSSED. IT WAS AGREED UPON THAT THE ISSUE RAISED ABOVE WAS DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THE ISSUE REMAINS OPEN.
**APPENDIX C**  
**ASSESSMENT WORKSHEET**

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| LEAD ANALYST:    | D. HARTMAN |

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**RECOMMENDATIONS:** *(If different from NASA)*

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* **CIL RETENTION RATIONALE:** *(If applicable)*

| ADEQUATE [ ] |
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**REMARKS:**
NO DIFFERENCES.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-908
NASA FMEA #: 05-6KF-2183 -2
SUBSYSTEM: FRCS
MDAC ID: 908
ITEM: CONTROLLER, REMOTE POWER
LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:

NASA FMEA CONSIDERS MULTIPLE FAILURES. THIS FAILURE ALONE HAS NO EFFECT.

AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88, NSTS 22206 WAS DISCUSSED. IT WAS AGREED UPON THAT THE ISSUE RAISED ABOVE WAS DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THE ISSUE REMAINS OPEN.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-909
NASA FMEA #: 05-6KF-2260 -1
SUBSYSTEM: FRCS
MDAC ID: 909
ITEM: DIODE
LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
LOSE JETS ON MANIFOLD 1. REDUNDANCY PROVIDED BY JETS ON MANIFOLD
3. JETS REQUIRED TO EXPEL PROPELLANTS TO MEET CG LIMITS.

ISSUE IS TIED TO THE IOA HARDWARE CRITICALITY FOR FAILED OFF
THRUSTERS.

REPORT DATE 2/26/88 C-873
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-910
NASA FMEA #: 05-6KF-2260 -2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 910
ITEM: DIODE

LEAD ANALYST: D. HARTMAN

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* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-911
NASA FMEA #: 05-6KF-2259A-1

NASA DATA:
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SUBSYSTEM: FRCS
MDAC ID: 911
ITEM: DIODE

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
IOA AGREES WITH NASA FMEA.

REPORT DATE 2/26/88 C-875
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-912
NASA FMEA #: 05-6KF-2259A-2

SUBSYSTEM: FRCS
MDAC ID: 912
ITEM: DIODE

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]

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REMARKS:

NO DIFFERENCES.

REPORT DATE 2/26/88 C-876
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-913
NASA FMEA #: 05-6KF-2259 -1
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 913
ITEM: DIODE

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)
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* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
LOSE JETS ON MANIFOLD I. REDUNDANCY PROVIDED BY MANIFOLD 3 JETS.
JETS REQUIRED TO EXPEL PROPELLANTS TO MEET CG LIMITS.

ISSUE IS TIED TO THE IOA HARDWARE CRITICALITY FOR FAILED OFF THRUSTERS.

REPORT DATE 2/26/88 C-877
**APPENDIX C**

**ASSESSMENT WORKSHEET**

**ASSESSMENT DATE:** 1/29/88

**ASSESSMENT ID:** FRCS-914

**NASA FMEA #:** 05-6KF-2259 -2

**SUBSYSTEM:** FRCS

**MDAC ID:** 914

**ITEM:** DIODE

**LEAD ANALYST:** D. HARTMAN

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**COMPARE [ / ] [ ] [ ] [ ] [ ] [ ] [ ]**

**RECOMMENDATIONS:** (If different from NASA)

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(ADD/DELETE)

* **CIL RETENTION RATIONALE:** (If applicable)

ADEQUATE [ ]

INADEQUATE [ ]

**REMARKS:**

NO DIFFERENCES.

---

**REPORT DATE** 2/26/88

C-878
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-915
NASA FMEA #: 05-6KF-2260 -1

SUBSYSTEM: FRCS
MDAC ID: 915
ITEM: DIODE
LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
LOSE JETS ON MANIFOLD 2. REDUNDANCY PROVIDED BY JETS ON MANIFOLD 4. JETS REQUIRED TO EXPEL PROPELLANTS TO MEET CG LIMITS.

ISSUE IS TIED TO THE IOA HARDWARE CRITICALITY FOR FAILED OFF THRUSTERS.

REPORT DATE 2/26/88 C-879
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-916
NASA FMEA #: 05-6KF-2260-2

SUBSYSTEM: FRCS
MDAC ID: 916
ITEM: DIODE

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

* CIL RETENTION RATIONALE: (If applicable)

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-880
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-917
NASA FMEA #: 05-6KF-2259A-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 917
ITEM: DIODE
LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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IOA [ 3 /2R ] [ P ] [ F ] [ P ] [ X ]

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

RECOMMENDATIONS: (If different from NASA)
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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
IOA AGREES WITH NASA FMEA.

REPORT DATE 2/26/88 C-881
### APPENDIX C
### ASSESSMENT WORKSHEET

**ASSESSMENT DATE:** 1/29/88  
**ASSESSMENT ID:** FRCS-918  
**NASA FMEA #:** 05-6KF-2259A-2  
**NASA DATA:**  
- BASELINE [ ]  
- NEW [ X ]  

**SUBSYSTEM:** FRCS  
**MDAC ID:** 918  
**ITEM:** DIODE  
**LEAD ANALYST:** D. HARTMAN  

**ASSESSMENT:**

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**RECOMMENDATIONS:** (If different from NASA)  
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(ADD/DELETE)

* **CIL RETENTION RATIONALE:** (If applicable)  
  ADEQUATE [ ]  
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**REMARKS:**  
NO DIFFERENCES.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-919
NASA FMEA #: 05-6KF-2259 -1
SUBSYSTEM: FRCS
MDAC ID: 919
ITEM: DIODE
LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
LOSE JETS ON MANIFOLD 2. REDUNDANCY PROVIDED BY JETS ON MANIFOLD 4. JETS REQUIRED TO EXPEL PROPELLANTS TO MEET CG LIMITS.

ISSUE IS TIED TO THE IOA HARDWARE CRITICALITY FOR FAILED OFF THRUSTERS.

REPORT DATE 2/26/88 C-883
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-920
NASA FMEA #: 05-6KF-2259 -2
SUBSYSTEM: FRCS
MDAC ID: 920
ITEM: DIODE
LEAD ANALYST: D. HARTMAN

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IOA [ 3 /3 ] [ ] [ ] [ ] [ ] [ ]

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

RECOMMENDATIONS: (If different from NASA)
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* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-884
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-921
NASA FMEA #: 05-6KF-2260 -1
SUBSYSTEM: FRCS
MDAC ID: 921
ITEM: DIODE
LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
IOA AGREES WITH NASA FMEA.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88

NASA DATA:

ASSESSMENT ID: FRCS-922
NASA FMEA #: 05-6KF-2260 -2

SUBSYSTEM: FRCS
MDAC ID: 922
ITEM: DIODE

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

CRITICALITY

FLIGHT
HDW/FUNC A B C

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IOA [ 3 /2R ] [P] [F] [P] [X]

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RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]

INADEQUATE [ ]

REMARKS:

IOA AGREES WITH NASA FMEA.

REPORT DATE 2/26/88 C-886
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-923
NASA FMEA #: 05-6KF-2259A-1

SUBSYSTEM: FRCS
MDAC ID: 923
ITEM: DIODE

LEAD ANALYST: D. HARTMAN

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* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
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REMARKS:
IOA AGREES WITH NASA FMEA.

REPORT DATE 2/26/88 C-887
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-924
NASA FMEA #: 05-6KF-2259A-2
SUBSYSTEM: FRCS
MDAC ID: 924
ITEM: DIODE
LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
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REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-888
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-925
NASA FMEA #: 05-6KF-2259 -1

NASA DATA:
BASELINE [ ]
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SUBSYSTEM: FRCS
MDAC ID: 925
ITEM: DIODE
LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
IOA AGREES WITH NASA FMEA.

REPORT DATE 2/26/88 C-889
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-926
NASA FMEA #: 05-6KF-2259 -2
NASA DATA:

BASELINE [ ]
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SUBSYSTEM: FRCS
MDAC ID: 926
ITEM: DIODE

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
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REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88  C-890
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-927
NASA FMEA #: 05-6KF-2260 -1

NASA DATA:
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NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 927
ITEM: DIODE

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
IOA AGREES WITH NASA FMEA.

REPORT DATE 2/26/88 C-891
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-928
NASA FMEA #: 05-6KF-2260 -2
SUBSYSTEM: FRCS
MDAC ID: 928
ITEM: DIODE
LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
IOA AGREES WITH NASA FMEA.

REPORT DATE 2/26/88 C-892
**APPENDIX C**

**ASSESSMENT WORKSHEET**

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**SUBSYSTEM:** FRCS

**MDAC ID:** 929

**ITEM:** DIODE

**LEAD ANALYST:** D. HARTMAN

**ASSESSMENT:**

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**RECOMMENDATIONS:** (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

| ADEQUATE [ ] |
| INADEQUATE [ ] |

**REMARKS:**

IOA AGREES WITH NASA FMEA.
### APPENDIX C
#### ASSESSMENT WORKSHEET

**ASSESSMENT DATE:** 1/29/88  
**NASA DATA:**
- **ASSESSMENT ID:** FRCS-930  
- **NASA FMEA #:** 05-6KF-2259A-2  
- **BASELINE [ ]**  
- **NEW [ X ]**

**SUBSYSTEM:** FRCS  
**MDAC ID:** 930  
**ITEM:** DIODE

**LEAD ANALYST:** D. HARTMAN

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**RECOMMENDATIONS:** (If different from NASA)

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* **CIL RETENTION RATIONALE:** (If applicable)

ADEQUATE [ ]  
INADEQUATE [ ]

**REMARKS:**

NO DIFFERENCES.

**REPORT DATE** 2/26/88  
**C-894**
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-931
NASA FMEA #: 05-6KF-2259 -1
SUBSYSTEM: FRCS
MDAC ID: 931
ITEM: DIODE
LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
IOA AGREES WITH NASA FMEA.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-932
NASA FMEA #: 05-6KF-2259 -2
SUBSYSTEM: FRCS
MDAC ID: 932
ITEM: DIODE
LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-896
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-933
NASA FMEA #: 05-6KF-2266 -1
SUBSYSTEM: FRCS
MDAC ID: 933
ITEM: DIODE
LEAD ANALYST: D. HARTMAN

NASA DATA:
BASELINE [ ]
NEW [ X ]

NASA FMEA #: 05-6KF-2266 -1

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
IOA AGREES WITH NASA FMEA.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-934
NASA FMEA #: 05-6KF-2266 -2

SUBSYSTEM: FRCS
MDAC ID: 934
ITEM: DIODE
LEAD ANALYST: D. HARTMAN

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| IOA  | [ 3 /2R] | [ P ] | [ F ] | [ P ] | [ X ] |

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
IOA AGREES WITH NASA FMEA.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-935
NASA FMEA #: 05-6KF-2266 -1

SUBSYSTEM: FRCS
MDAC ID: 935
ITEM: DIODE

LEAD ANALYST: D. HARTMAN

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NASA [ 3 /1R ] [ P ] [ F ] [ P ] [ X ] *
IOA [ 3 /2R ] [ P ] [ F ] [ P ] [ X ]

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

RECOMMENDATIONS: (If different from NASA)

[ / ] [ ] [ ] [ ] [ ]

(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
IOA AGREES WITH NASA FMEA.

REPORT DATE 2/26/88 C-899
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-936
NASA FMEA #: 05-6KF-2266 -2
SUBSYSTEM: FRCS
MDAC ID: 936
ITEM: DIODE
LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
IOA AGREES WITH NASA FMEA.

REPORT DATE 2/26/88 C-900
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-937
NASA FMEA #: 05-6KF-2271 -1

SUBSYSTEM: FRCS
MDAC ID: 937
ITEM: DIODE
LEAD ANALYST: D. HARTMAN

ASSESSMENT:
CRITICALITY
FLIGHT HDW/FUNC A B C

NASA [ 3 /1R ] [ P ] [ F ] [ P ] [ X ] *
IOA [ 3 /2R ] [ P ] [ F ] [ P ] [ X ]
COMPARE [ /N ] [ ] [ ] [ ] [ ] [ ]

RECOMMENDATIONS: (If different from NASA)
[ / ] [ ] [ ] [ ] [ ] [ ] (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
IOA AGREES WITH NASA FMEA.

REPORT DATE 2/26/88 C-901
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-938
NASA FMEA #: 05-6KF-2271-2

SUBSYSTEM: FRCS
MDAC ID: 938
ITEM: DIODE

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:

NO DIFFERENCES.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-939
NASA FMEA #: 05-6KF-2259A-1

SUBSYSTEM: FRCS
MDAC ID: 939
ITEM: DIODE

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
IOA AGREES WITH NASA FMEA.

REPORT DATE 2/26/88 C-903
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
NASA DATA:
ASSESSMENT ID: FRCS-940
NASA FMEA #: 05-6KF-2259A-2
SUBSYSTEM: FRCS
MDAC ID: 940
ITEM: DIODE
LEAD ANALYST: D. HARTMAN

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IOA [3/3] [ ] [ ] [ ] [ ] [ ]
COMPARE [ / ] [ ] [ ] [ ] [ ] [ ]

RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-941
NASA FMEA #: 05-6KF-2259 -1
NASA DATA:
BASELINE [ ]
NEW [ X ]
SUBSYSTEM: FRCS
MDAC ID: 941
ITEM: DIODE
LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
LOSE JETS ON MANIFOLD 4 AND 5. REDUNDANCY FOR MANIFOLD 4 JETS PROVIDED BY JETS ON MANIFOLD 2. JETS REQUIRED TO EXPEL PROPELLANTS TO MEET CG LIMITS.

ISSUE IS TIED TO THE IOA HARDWARE CRITICALITY FOR FAILED OFF THRUSTERS.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-942
NASA FMEA #: 05-6KF-2259 -2
SUBSYSTEM: FRCS
MDAC ID: 942
ITEM: DIODE
LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

| [ ] | [ ] | [ ] |

* CIL RETENTION RATIONALE: (If applicable)

| ADEQUATE |

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-906
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-943
NASA FMEA #: 05-6KF-2260 -1

SUBSYSTEM: FRCS
MDAC ID: 943
ITEM: DIODE
LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
LOSE JETS ON MANIFOLD 4. REDUNDANCY PROVIDED BY JETS ON MANIFOLD 2. JETS REQUIRED TO EXPEL PROPELLANTS TO MEET CG LIMITS.

ISSUE IS TIED TO THE IOA HARDWARE CRITICALITY FOR FAILED OFF THRUSTERS.

REPORT DATE 2/26/88

C-907
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-944
NASA FMEA #: 05-6KF-2260 -2

SUBSYSTEM: FRCS
MDAC ID: 944
ITEM: DIODE
LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONAL: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-908
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
NASA DATA:
ASSESSMENT ID: FRCS-945
NASA FMEA #: 05-6KF-2270 -1
SUBSYSTEM: FRCS
MDAC ID: 945
ITEM: DIODE
LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
NASA DATA:
ASSESSMENT ID: FRCS-946
NASA FMEA #: 05-6KF-2270 -2
SUBSYSTEM: FRCS
MDAC ID: 946
ITEM: DIODE
LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

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REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-910
**APPENDIX C**

**ASSESSMENT WORKSHEET**

**ASSESSMENT DATE:** 1/29/88

**ASSESSMENT ID:** FRCS-947

**NASA FMEA #:** 05-6KF-2214 -1

**NASA DATA:**

- BASELINE [ ]
- NEW [ X ]

**SUBSYSTEM:** FRCS

**MDAC ID:** 947

**ITEM:** DRIVER, HYBRID

**LEAD ANALYST:** D. HARTMAN

**SUBSYSTEM:** FRCS

**MDAC ID:** 947

**ITEM:** DRIVER, HYBRID

**LEAD ANALYST:** D. HARTMAN

**ASSESSMENT:**

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**RECOMMENDATIONS:**

(If different from NASA)

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

* **CIL RETENTION RATIONALE:** (If applicable)

- ADEQUATE [ ]
- INADEQUATE [ ]

**REMARKS:**

- LOSE JETS ON MANIFOLD 1. REDUNDANCY PROVIDED BY JETS ON MANIFOLD 3. JETS REQUIRED TO EXPEL PROPELLANTS TO MEET CG LIMITS.

- ISSUE IS TIED TO THE IOA HARDWARE CRITICALITY FOR FAILED OFF THRUSTERS.

**REPORT DATE 2/26/88**

C-911
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-948
NASA FMEA #: 05-6KF-2214 -2
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 948
ITEM: DRIVER, HYBRID
LEAD ANALYST: D. HARTMAN

ASSESSMENT:

CRITICALITY REDUNDANCY SCREENS CIL
FLIGHT HDW/FUNC A B C ITEM

NASA [ 3/1R ] [ P ] [ F ] [ P ] [ X ] *
IOA [ 2/2 ] [ ] [ ] [ ] [ X ]
COMPARE [ N/N ] [ N ] [ N ] [ N ] [ ]

RECOMMENDATIONS: (If different from NASA)
[ 3/3 ] [ ] [ ] [ ] [ D ]
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NASA FMEA CONSIDERS MULTIPLE FAILURES. THIS FAILURE ALONE HAS NO EFFECT.

AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88, NSTS 22206 WAS DISCUSSED. IT WAS AGREED UPON THAT THE ISSUE RAISED ABOVE WAS DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THE ISSUE REMAINS OPEN.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-949
NASA FMEA #: 05-6KF-2214 -1
SUBSYSTEM: FRCS
MDAC ID: 949
ITEM: DRIVER, HYBRID
LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
LOSE JETS ON MANIFOLD 2. REDUNDANCY PROVIDED BY JETS ON MANIFOLD 4. JETS REQUIRED TO EXPEL PROPELLANTS TO MEET CG LIMITS.

ISSUE IS TIED TO THE IOA HARDWARE CRITICALITY FOR FAILED OFF THRUSTERS.

REPORT DATE 2/26/88 C-913
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-950
NASA FMEA #: 05-6KF-2214 -2

SUBSYSTEM: FRCS
MDAC ID: 950
ITEM: DRIVER, HYBRID

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)
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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NASA FMEA CONSIDERS MULTIPLE FAILURES. THIS FAILURE ALONE HAS NO EFFECT.

AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88, NSTS 22206 WAS DISCUSSED. IT WAS AGREED UPON THAT THE ISSUE RAISED ABOVE WAS DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THE ISSUE REMAINS OPEN.

REPORT DATE 2/26/88 C-914
APPENDIX C  
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88  
ASSESSMENT ID:  FRCS-951  
NASA FMEA #:  05-6KF-2214-1

NASA DATA:
BASELINE [ ]  
NEW [ X ]

SUBSYSTEM:  FRCS  
MDAC ID:  951  
ITEM:  DRIVER, HYBRID

LEAD ANALYST:  D. HARTMAN

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RECOMMENDATIONS:  (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE:  (If applicable)

ADEQUATE [ ]

INADEQUATE [ ]

REMARKS:

IOA AGREES WITH NASA FMEA.

REPORT DATE 2/26/88  
C-915
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-952
NASA FMEA #: 05-6KF-2214 -2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 952
ITEM: DRIVER, HYBRID
LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

[ 3 /3 ] [ ] [ ] [ ] [ ] [ D ]

(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NASA FMEA CONSIDERS MULTIPLE FAILURES. THIS FAILURE ALONE HAS NO EFFECT.

AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88, NSTS 22206 WAS DISCUSSED. IT WAS AGREED UPON THAT THE ISSUE RAISED ABOVE WAS DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THE ISSUE REMAINS OPEN.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-953
NASA FMEA #: 05-6KF-2214 -1
SUBSYSTEM: FRCS
MDAC ID: 953
ITEM: DRIVER, HYBRID
LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
IOA AGREES WITH NASA FMEA.

REPORT DATE 2/26/88 C-917
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-954
NASA FMEA #: 05-6KF-2214 -2

SUBSYSTEM: FRCS
MDAC ID: 954
ITEM: DRIVER, HYBRID
LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NASA FMEA CONSIDERS MULTIPLE FAILURES. THIS FAILURE ALONE HAS NO EFFECT.

AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88, NSTS 22206 WAS DISCUSSED. IT WAS AGREED UPON THAT THE ISSUE RAISED ABOVE WAS DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THE ISSUE REMAINS OPEN.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-955
NASA FMEA #: 05-6KF-2214-2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 955
ITEM: DRIVER, HYBRID

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:

NASA FMEA CONSIDERS MULTIPLE FAILURES. THIS FAILURE ALONE HAS NO EFFECT.

AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88, NSTS 22206 WAS DISCUSSED. IT WAS AGREED UPON THAT THE ISSUE RAISED ABOVE WAS DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THE ISSUE REMAINS OPEN.

REPORT DATE 2/26/88 C-919
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-956
NASA FMEA #: 05-6KF-2214 -1

SUBSYSTEM: * FRCS
MDAC ID: 956
ITEM: DRIVER, HYBRID
LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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

*CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
LOSE JETS ON MANIFOLD 4. REDUNDANCY PROVIDED BY JETS ON MANIFOLD 2. JETS REQUIRED TO EXPEL PROPELLANTS TO MEET CG LIMITS.

ISSUE IS TIED TO THE IOA HARDWARE CRITICALITY FOR FAILED OFF THRUSTERS.

REPORT DATE 2/26/88  C-920
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-957
NASA FMEA #: 05-6KF-2220 -1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 957
ITEM: DRIVER, HYBRID

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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| COMPARE [ / ] | [ ] | [ ] | [ ] | [ ] |

RECOMMENDATIONS: (If different from NASA)
[ / ] [ ] [ ] [ ] [ ]

(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-958
NASA FMEA #: 05-6KF-2220 -2

SUBSYSTEM: FRCS
MDAC ID: 958
ITEM: DRIVER, HYBRID

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NASA FMEA CONSIDERS MULTIPLE FAILURES. THIS FAILURE ALONE HAS NO EFFECT.

AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88, NSTS 22206 WAS DISCUSSED. IT WAS AGREED UPON THAT THE ISSUE RAISED ABOVE WAS DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THE ISSUE REMAINS OPEN.

REPORT DATE 2/26/88 C-922
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-959
NASA FMEA #: 05-6KF-2009 -1

SUBSYSTEM: FRCS
MDAC ID: 959
ITEM: FUSE, 2A
LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
LOSE JETS ON MANIFOLD 1. REDUNDANCY PROVIDED BY JETS ON MANIFOLD 3. JETS REQUIRED FOR TO EXPEL PROPPELLANTS TO MEET CG LIMITS.

ISSUE IS TIED TO THE IOA HARDWARE CRITICALITY FOR THE FAILED OFF THRUSTERS.

REPORT DATE 2/26/88 C-923
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-960
NASA FMEA #: 05-6KF-2008 -1

SUBSYSTEM: FRCS
MDAC ID: 960
ITEM: FUSE, 1A

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

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REMARKS:
LOSE JETS ON MANIFOLD 1. REDUNDANCY PROVIDED BY JETS ON MANIFOLD 3. JETS REQUIRED TO EXPEL PROPELLANTS TO MEET CG LIMITS.

ISSUE IS TIED TO THE IOA HARDWARE ISSUE FOR FAILED OFF THRUSTERS.

REPORT DATE 2/26/88 C-924
### APPENDIX C
#### ASSESSMENT WORKSHEET

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#### RECOMMENDATIONS: (If different from NASA)

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

#### CIL RETENTION RATIONALE: (If applicable)

| ADEQUATE [ ] |
| INADEQUATE [ ] |

#### REMARKS:

LOSE JETS ON MANIFOLD 1. REDUNDANCY PROVIDED BY JETS ON MANIFOLD 3. JETS REQUIRED TO EXPEL PROPELLANTS TO MEET CG LIMITS.

ISSUE IS TIED TO THE IOA HARDWARE CRITICALITY FOR THE FAILED OFF THRUSTERS.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-962
NASA FMEA #: 05-6KF-2009 -1
SUBSYSTEM: FRCS
MDAC ID: 962
ITEM: FUSE, 2A
LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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COMPARE [ /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:
LOSE JETS ON MANIFOLD 2. REDUNDANCY PROVIDED BY JETS ON MANIFOLD 4. JETS REQUIRED FOR TO EXPEL PROPELLANTS TO MEET CG LIMITS.

ISSUE IS TIED TO THE IOA HARDWARE CRITICALITY FOR THE FAILED OFF THRUSTERS.

REPORT DATE 2/26/88 C-926
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-963
NASA FMEA #: 05-6KF-2008 -1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 963
ITEM: FUSE, 1A

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
LOSE JETS ON MANIFOLD 2. REDUNDANCY PROVIDED BY JETS ON MANIFOLD 4. JETS REQUIRED TO EXPEL PROPELLANTS TO MEET CG LIMITS.

ISSUE IS TIED TO THE IOA HARDWARE ISSUE FOR FAILED OFF THRUSTERS.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-964
NASA FMEA #: 05-6KF-2007 -I

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 964
ITEM: FUSE, 1A
LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

[ 2/1R ] [ P ] [ P ] [ P ] [ A ]

(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
LOSE JETS ON MANIFOLD 2. REDUNDANCY PROVIDED BY JETS ON MANIFOLD 4. JETS REQUIRED TO EXPEL PROPELLANTS TO MEET CG LIMITS.

ISSUE IS TIED TO THE IOA HARDWARE CRITICALITY FOR THE FAILED OFF THRUSTERS.

REPORT DATE 2/26/88 C-928
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-965
NASA FMEA #: 05-6KF-2009 -1

SUBSYSTEM: FRCS
MDAC ID: 965
ITEM: FUSE, 1A

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

[ 2 /1R ] [ P ] [ P ] [ P ] [ A ]

(ADD/DELETE)

*CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
LOSE JETS ON MANIFOLD 4. REDUNDANCY PROVIDED BY JETS ON MANIFOLD 2. JETS REQUIRED TO EXPEL PROPELLANTS TO MEET CG LIMITS.

ISSUE IS TIED TO THE IOA HARDWARE CRITICALITY FOR THE FAILED OFF THRUSTERS.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-966
NASA FMEA #: 05-6KF-2008 -1
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 966
ITEM: FUSE, 1A

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS:  (If different from NASA)

[ 2 /1R ] [ P ] [ P ] [ P ] [ A ]

* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
LOSE JETS ON MANIFOLD 3. REDUNDANCY PROVIDED BY JETS ON MANIFOLD 1. JETS REQUIRED TO EXPEL PROPELLANTS TO MEET CG LIMITS.

ISSUE IS TIED TO THE IOA HARDWARE ISSUE FOR FAILED OFF THRUSTERS.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-967
NASA FMEA #: 05-6KF-2007 -1
SUBSYSTEM: FRCS
MDAC ID: 967
ITEM: FUSE, IA
LEAD ANALYST: D. HARTMAN

NASA DATA:
BASELINE [ ]
NEW [ X ]

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

[ 2 /1R ] [ P ] [ P ] [ P ] [ A ]

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
LOSE JETS ON MANIFOLD 3. REDUNDANCY PROVIDED BY JETS ON MANIFOLD 1. JETS REQUIRED TO EXPEL PROPELLANTS TO MEET CG LIMITS.

ISSUE IS TIED TO THE IOA HARDWARE CRITICALITY FOR THE FAILED OFF THRUSTERS.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-968
NASA FMEA #: 05-6KF-2017 -1

SUBSYSTEM: FRCS
MDAC ID: 968
ITEM: FUSE, 1A

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA) [ / ] [ ] [ ] [ ] [ ] [ ]

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-932
# APPENDIX C
## ASSESSMENT WORKSHEET

**ASSESSMENT DATE:** 1/29/88  
**NASA DATA:**  
**ASSESSMENT ID:** FRCS-969  
**NASA FMEA #:** 05-6KF-2007 -1  
**SUBSYSTEM:** FRCS  
**MDAC ID:** 969  
**ITEM:** FUSE, 1A  
**LEAD ANALYST:** D. HARTMAN

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**COMPARE** [ / ] [ ] [ ] [ ] [ ] [ ] [ ]

**RECOMMENDATIONS:** (If different from NASA)

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

* **CIL RETENTION RATIONALE:** (If applicable)

  ADEQUATE [ ]
  INADEQUATE [ ]

**REMARKS:**

IOA AGREES WITH NASA FMEA.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-970
NASA FMEA #: 05-6KF-2008 -1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 970
ITEM: FUSE, 1A

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

[ 2 /1R ] [ P ] [ P ] [ P ] [ A ]

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
LOSE JETS ON MANIFOLD 4. REDUNDANCY PROVIDED BY JETS ON MANIFOLD 2. JETS REQUIRED TO EXPEL PROPELLANTS TO MEET CG LIMITS.

ISSUE IS TIED TO THE IOA HARDWARE ISSUE FOR FAILED OFF THRUSTERS.

REPORT DATE 2/26/88 C-934
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-971
NASA FMEA #: 05-6KF-2017 -1
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 971
ITEM: FUSE, 1A
LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

[ / ] [ ] [ ] [ ] [ ]

(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-935
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-972
NASA FMEA #: 05-6KF-2130 -1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 972
ITEM: RELAY

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

[2 /1R] [ P ] [ P ] [ P ] [ A ]

(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

Adequate [ ]
Inadequate [ ]

REMARKS:
LOSE JETS ON MANIFOLD 1. REDUNDANCY PROVIDED BY JETS ON MANIFOLD 3. JETS REQUIRED TO EXPEL PROPELLANTS TO MEET CG LIMITS.

ISSUE IS TIED TO THE IOA HARDWARE CRITICALITY FOR THE FAILED OFF THRUSTERS.

REPORT DATE 2/26/88 C-936
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-973
NASA FMEA #: 05-6KF-2130 -2

SUBSYSTEM: FRCS
MDAC ID: 973
ITEM: RELAY
LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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NASA DATA:

BASELINE [ ]
NEW [ X ]

ITEM: RELAY

ASSESSMENT:

CRITICALITY

FLIGHT

HDW/.func

REDUNDANCY SCREENS

A      B      C

NASA  [ 3 /1R ]  [ P ]  [ P ]  [ P ]  [ ]  *

IOA   [ 3 /3 ]    [ ]    [ ]    [ ]    [ ]

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

RECOMMENDATIONS: (If different from NASA)

[ 3 /3 ]  [ ]  [ ]  [ ]  [ ]  [ ]

(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:

NASA FMEA CONSIDERS MULTIPLE FAILURES. THIS FAILURE Alone HAS NO EFFECT.

AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88, NSTS 22206 WAS DISCUSSED. IT WAS AGREED UPON THAT THE ISSUE RAISED ABOVE WAS DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THE ISSUE REMAINS OPEN.

REPORT DATE 2/26/88

C-937
## APPENDIX C
### ASSESSMENT WORKSHEET

**ASSESSMENT DATE:** 1/29/88  
**ASSESSMENT ID:** FRCS-974  
**NASA FMEA #:** 05-6KF-2130 -1  
**SUBSYSTEM:** FRCS  
**MDAC ID:** 974  
**ITEM:** RELAY  
**LEAD ANALYST:** D. HARTMAN  

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### RECOMMENDATIONS:

(If different from NASA)

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[ P ]  
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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]  
INADEQUATE [ ]

### REMARKS:

LOSE JETS OF MANIFOLD 2. REDUNDANCY PROVIDED BY JETS ON MANIFOLD 4. JETS REQUIRED TO EXPEL PROPELLANTS TO MEET CG LIMITS.

ISSUE IS TIED TO THE IOA HARDWARE CRITICALITY FOR THE FAILED OFF THRUSTERS.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-975
NASA FMEA #: 05-6KF-2130 -2
SUBSYSTEM: FRCS
MDAC ID: 975
ITEM: RELAY
LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

[ 3 /3 ] [ ] [ ] [ ] [ ] [ ]

(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:

NASA FMEA CONSIDERS MULTIPLE FAILURES. THIS FAILURE ALONE HAS NO EFFECT.

AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88, NSTS 22206 WAS DISCUSSED. IT WAS AGREED UPON THAT THE ISSUE RAISED ABOVE WAS DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THE ISSUE REMAINS OPEN.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
NASA DATA:
ASSESSMENT ID: FRCS-976 NASA FMEA #: 05-6KF-2130 -1
NASA FMEA #: BASELINE [ ] NEW [ X ]
SUBSYSTEM: FRCS
MDAC ID: 976
ITEM: RELAY, LATCHING
LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
LOSE JETS ON MANIFOLD 4. REDUNDANCY PROVIDED BY JETS ON MANIFOLD 2. JETS REQUIRED TO EXPEL PROPELLANTS TO MEET CG LIMITS.

ISSUE IS TIED TO THE IOA HARDWARE CRITICALITY FOR THE FAILED OFF THRUSTERS.

REPORT DATE 2/26/88 C-940
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-977
NASA FMEA #: 05-6KF-2130 -2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 977
ITEM: RELAY, LATCHING

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

[ 3 /3 ] [ ] [ ] [ ] [ ]

(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NASA FMEA CONSIDERS MULTIPLE FAILURES. THIS FAILURE ALONE HAS NO EFFECT.

AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88, NSTS 22206 WAS DISCUSSED. IT WAS AGREED UPON THAT THE ISSUE RAISED ABOVE WAS DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THE ISSUE REMAINS OPEN.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-978
NASA FMEA #: 05-6KF-2095 -1
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 978
ITEM: RESISTOR, 5.1K 1/4W

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

CRITICALITY
FLIGHT
HDW/FUNC

REDUNDANCY SCREENS
A  B  C

CIL
ITEM

NASA  [ 3 /3 ]  [ ]  [ ]  [ ]  [ ]  [ ] *

IOA  [ 3 /3 ]  [ ]  [ ]  [ ]  [ ]  [ ]

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

RECOMMENDATIONS: (If different from NASA)

[ / ]  [ ]  [ ]  [ ]  [ ]

(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]

INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-942
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-979
NASA FMEA #: 05-6KF-2095 -1
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 979
ITEM: RESISTOR, 5.1K 1/4W

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]

INADEQUATE [ ]

REMARKS:
A SHORT ACROSS A RLR TYPE RESISTOR IS NOT A CREDIBLE FAILURE.
IOA RECOMMENDS REMOVAL OF THE "SHORT" FAILURE MODE FROM THIS FMEA.

ISSUE RESOLVED AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88
(SHORT FAILURE MODE TO BE REMOVED).

REPORT DATE 2/26/88 C-943
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-980
NASA FMEA #: 05-6KF-2093 -1
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 980
ITEM: RESISTOR, 5.1K 1/4W

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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IOA [ 3 /3 ] [ ] [ ] [ ] [ ] [ ]
COMPARE [ / ] [ ] [ ] [ ] [ ] [ ]

RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-944
APPENDIX C  
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88  
ASSESSMENT ID: FRCS-981  
NASA FMEA #: 05-6KF-2093 -1  
NASA DATA:  
BASELINE [ ]  
NEW [ X ]  

SUBSYSTEM: FRCS  
MDAC ID: 981  
ITEM: RESISTOR, 5.1K 1/4W  

LEAD ANALYST: D. HARTMAN  

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)  
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* CIL RETENTION RATIONALE: (If applicable)  
ADEQUATE [ ]  
INADEQUATE [ ]

REMARKS:  
A SHORT ACROSS A RLR TYPE RESISTOR IS NOT A CREDIBLE FAILURE.  
IOA RECOMMENDS REMOVAL OF THE "SHORT" FAILURE MODE FROM THIS FMEA.

ISSUE RESOLVED AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88  
(SHORT FAILURE MODE TO BE REMOVED).

REPORT DATE 2/26/88  
C-945
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-982
NASA FMEA #: 05-6KF-2098 -1
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 982
ITEM: RESISTOR, 1.8K 1/4W

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-983
NASA FMEA #: 05-6KF-2098 -1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 983
ITEM: RESISTOR, 1.8K 1/4W

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)
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* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
A SHORT ACROSS A RLR TYPE RESISTOR IS NOT A CREDIBLE FAILURE.
IOA RECOMMENDS REMOVAL OF THE "SHORT" FAILURE MODE FROM THIS FMEA.

ISSUE RESOLVED AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88
(SHORT FAILURE MODE TO BE REMOVED).

REPORT DATE 2/26/88
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-984
NASA FMEA #: 05-6KF-2098 -1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 984
ITEM: RESISTOR, 2.2K 1/2W

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)
[ / ] [ ] [ ] [ ] [ ] (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-948
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-985
NASA FMEA #: 05-6KF-2098 -1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 985
ITEM: RESISTOR, 2.2K 1/2W

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)
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* CIL RETENTION RATIONALE: (If applicable)

A SHORT ACROSS A RLR TYPE RESISTOR IS NOT A CREDIBLE FAILURE.
IOA RECOMMENDS REMOVAL OF THE "SHORT" FAILURE MODE FROM THIS FMEA.

ISSUE RESOLVED AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88
(SHORT FAILURE MODE TO BE REMOVED).

REPORT DATE 2/26/88  C-949
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-986
NASA FMEA #: 05-6KF-2097 -1
SUBSYSTEM: FRCS
MDAC ID: 986
ITEM: RESISTOR, 1.8K 1/4W
LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-950
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-987
NASA FMEA #: 05-6KF-2097 -1
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 987
ITEM: RESISTOR, 1.8K 1/4W

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
A SHORT ACROSS A RLR TYPE RESISTOR IS NOT A CREDIBLE FAILURE.
IOA RECOMMENDS REMOVAL OF THE "SHORT" FAILURE MODE FROM THIS FMEA.

ISSUE RESOLVED AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88
(SHORT FAILURE MODE TO BE REMOVED).
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-988
NASA FMEA #: 05-6KF-2094 -1
SUBSYSTEM: FRCS
MDAC ID: 988
ITEM: RESISTOR, 1.2K 2W
LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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IOA [3 /2R] [P] [F] [P] [X]

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

RECOMMENDATIONS: (If different from NASA)

[ / ] [ ] [ ] [ ] [ ]

(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]

INADEQUATE [ ]

REMARKS:

IOA AGREES WITH NASA FMEA.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-989
NASA FMEA #: 05-6KF-2094 -2

SUBSYSTEM: FRCS
MDAC ID: 989
ITEM: RESISTOR, 1.2K 2W

LEAD ANALYST: D. HARTMAN

NASA DATA:
BASELINE [ ]
NEW [ X ]

ASSESSMENT:
CRITICALITY REDUNDANCY SCREENS CIL
FLIGHT HDW/FUNC A B C ITEM

NASA [ 3 /3 ] [ ] [ ] [ ] [ ] [ ] [ ] *
IOA [ 3 /3 ] [ ] [ ] [ ] [ ] [ ]

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

RECOMMENDATIONS: (If different from NASA)
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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-953
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-990
NASA FMEA #: 05-6KF-2096 -1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 990
ITEM: RESISTOR, 5.1K 1/4W

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-954
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-991
NASA FMEA #: 05-6KF-2096 -1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 991
ITEM: RESISTOR, 5.1K 1/4W

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
A SHORT ACROSS A RLR TYPE RESISTOR IS NOT A CREDIBLE FAILURE.
IOA RECOMMENDS REMOVAL OF THE "SHORT" FAILURE MODE FROM THIS FMEA.

ISSUE RESOLVED AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88
(SHORT FAILURE MODE TO BE REMOVED).
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-992
NASA FMEA #: 05-6KF-2097 -1

SUBSYSTEM: FRCS
MDAC ID: 992
ITEM: RESISTOR, 2.2K 1/2W

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-956
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-993
NASA FMEA #: 05-6KF-2097 -1

SUBSYSTEM: FRCS
MDAC ID: 993
ITEM: RESISTOR, 2.2K 1/2W

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:

A SHORT ACROSS A RLR TYPE RESISTOR IS NOT A CREDIBLE FAILURE. IOA RECOMMENDS REMOVAL OF THE "SHORT" FAILURE MODE FROM THIS FMEA.

ISSUE RESOLVED AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88 (SHORT FAILURE MODE TO BE REMOVED).

REPORT DATE 2/26/88 C-957
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-994
NASA FMEA #: 05-6KF-2095 -1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 994
ITEM: RESISTOR, 5.1K 1/4W

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-995
NASA FMEA #: 05-6KF-2095-1

SUBSYSTEM: FRCS
MDAC ID: 995
ITEM: RESISTOR, 5.1K 1/4W

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
A SHORT ACROSS A RLR TYPE RESISTOR IS NOT A CREDIBLE FAILURE.
IOA RECOMMENDS REMOVAL OF THE "SHORT" FAILURE MODE FROM THIS
FMEA.

ISSUE RESOLVED AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88
(SHORT FAILURE MODE TO BE REMOVED).

REPORT DATE 2/26/88 C-959
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-996
NASA FMEA #: 05-6KF-2093 -1
SUBSYSTEM: FRCS
MDAC ID: 996
ITEM: RESISTOR, 5.1K 1/4W
LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-960
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-997
NASA FMEA #: 05-6KF-2093 -1
SUBSYSTEM: FRCS
MDAC ID: 997
ITEM: RESISTOR, 5.1K 1/4W
LEAD ANALYST: D. HARTMAN

NASA DATA:
BASELINE [ ]
NEW [ X ]

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

[ / ] [ ] [ ] [ ] [ ] [ ]

(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
A SHORT ACROSS A RLR TYPE RESISTOR IS NOT A CREDIBLE FAILURE.
IOA RECOMMENDS REMOVAL OF THE "SHORT" FAILURE MODE FROM THIS FMEA.

ISSUE RESOLVED AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88
(SHORT FAILURE MODE TO BE REMOVED).

REPORT DATE 2/26/88   C-961
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-998
NASA FMEA #: 05-6KF-2098 -1
SUBSYSTEM: FRCS
MDAC ID: 998
ITEM: RESISTOR, 2.2K 1/2W
LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-962
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-999
NASA FMEA #: 05-6KF-2098 -1
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 999
ITEM: RESISTOR, 2.2K 1/2W

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)
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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
A SHORT ACROSS A RLR TYPE RESISTOR IS NOT A CREDIBLE FAILURE.
IOA RECOMMENDS REMOVAL OF THE "SHORT" FAILURE MODE FROM THIS FMEA.

ISSUE RESOLVED AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88
(SHORT FAILURE MODE TO BE REMOVED).

REPORT DATE 2/26/88 C-963
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1000
NASA FMEA #: 05-6KF-2094 -1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 1000
ITEM: RESISTOR, 1.2K 2W

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
IOA AGREES WITH NASA FMEA.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1001
NASA FMEA #: 05-6KF-2094 -2

SUBSYSTEM: FRCS
MDAC ID: 1001
ITEM: RESISTOR, 1.2K 2W
LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-965
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1002
NASA FMEA #: 05-6KF-2096 -1
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 1002
ITEM: RESISTOR, 5.1K 1/4W

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-966
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1003
NASA FMEA #: 05-6KF-2096 -1
SUBSYSTEM: FRCS
MDAC ID: 1003
ITEM: RESISTOR, 5.1K 1/4W
LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:

A SHORT ACROSS A RLR TYPE RESISTOR IS NOT A CREDIBLE FAILURE. IOA RECOMMENDS REMOVAL OF THE "SHORT" FAILURE MODE FROM THIS FMEA.

ISSUE RESOLVED AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88 (SHORT FAILURE MODE TO BE REMOVED).

REPORT DATE 2/26/88  C-967
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1004
NASA FMEA #: 05-6KF-2098 -1

SUBSYSTEM: FRCS
MDAC ID: 1004
ITEM: RESISTOR, 1.8K 1/4W

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-968
**APPENDIX C**

**ASSESSMENT WORKSHEET**

**ASSESSMENT DATE:** 1/29/88

**ASSESSMENT ID:** FRCS-1005

**NASA FMEA #:** 05-6KF-2098 -1

**SUBSYSTEM:** FRCS

**MDAC ID:** 1005

**ITEM:** RESISTOR, 1.8K 1/4W

**LEAD ANALYST:** D. HARTMAN

**ASSESSMENT:**

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**RECOMMENDATIONS:** (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]

INADEQUATE [ ]

**REMARKS:**

A SHORT ACROSS A RLR TYPE RESISTOR IS NOT A CREDIBLE FAILURE.

IOA RECOMMENDS REMOVAL OF THE "SHORT" FAILURE MODE FROM THIS FMEA.

ISSUE RESOLVED AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88

(SHORT FAILURE MODE TO BE REMOVED).

**REPORT DATE 2/26/88**

C-969
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID:  FRCS-1006
NASA FMEA #: 05-6KF-2097 -1

SUBSYSTEM:  FRCS
MDAC ID:  1006
ITEM:  RESISTOR, 1.8K 1/4W

LEAD ANALYST:  D. HARTMAN

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RECOMMENDATIONS:  (If different from NASA)

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* CIL RETENTION RATIONALE:  (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88  C-970
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1007
NASA FMEA #: 05-6KF-2097 -1

SUBSYSTEM: FRCS
MDAC ID: 1007
ITEM: RESISTOR, 1.8K 1/4W

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
A SHORT ACROSS A RLR TYPE RESISTOR IS NOT A CREDIBLE FAILURE. IOA RECOMMENDS REMOVAL OF THE "SHORT" FAILURE MODE FROM THIS FMEA.

ISSUE RESOLVED AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88 (SHORT FAILURE MODE TO BE REMOVED).

REPORT DATE 2/26/88

C-971
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1008
NASA FMEA #: 05-6KF-2097 -1
SUBSYSTEM: FRCS
MDAC ID: 1008
ITEM: RESISTOR, 2.2K 1/2W
LEAD ANALYST: D. HARTMAN

NASA DATA:
BASELINE [ ]
NEW [ X ]

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

RECOMMENDATIONS: (If different from NASA)
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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1009
NASA FMEA #: 05-6KF-2097 -1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 1009
ITEM: RESISTOR, 2.2K 1/2W

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)
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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
A SHORT ACROSS A RLR TYPE RESISTOR IS NOT A CREDIBLE FAILURE.
IOA RECOMMENDS REMOVAL OF THE "SHORT" FAILURE MODE FROM THIS FMEA.

ISSUE RESOLVED AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88
(SHORT FAILURE MODE TO BE REMOVED).

REPORT DATE 2/26/88
C-973
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1010
NASA FMEA #: 05-6KF-2095 -1

SUBSYSTEM: FRCS
MDAC ID: 1010
ITEM: RESISTOR, 5.1K 1/4W

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

CRITICALITY REDUNDANCY SCREENS CIL
FLIGHT HDW/FUNC A B C ITEM

NASA [3/3] [ ] [ ] [ ] [ ] [ ] [ ] *
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COMPARE [ / ] [ ] [ ] [ ] [ ] [ ] [ ]

RECOMMENDATIONS: (If different from NASA)
[ / ] [ ] [ ] [ ] [ ] [ ]

* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-974
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1011
NASA FMEA #: 05-6KF-2095 -1

SUBSYSTEM: FRCS
MDAC ID: 1011
ITEM: RESISTOR, 5.1K 1/4W

LEAD ANALYST: D. HARTMAN

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NASA [3/3] [ ] [ ] [ ] [ ] [ ] *

IOA [3/3] [ ] [ ] [ ] [ ] [ ] [ ]

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

RECOMMENDATIONS: (If different from NASA)

[ / ] [ ] [ ] [ ] [ ] [ ]

(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
A SHORT ACROSS A RLR TYPE RESISTOR IS NOT A CREDIBLE FAILURE.
IOA RECOMMENDS REMOVAL OF THE "SHORT" FAILURE MODE FROM THIS FMEA.

ISSUE RESOLVED AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88
(SHORT FAILURE MODE TO BE REMOVED).

REPORT DATE 2/26/88 C-975
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1012
NASA FMEA #: 05-6KF-2093 -1
NASA DATA: BASELINE [ ] NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 1012
ITEM: RESISTOR, 5.1K 1/4W

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-976
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1013
NASA FMEA #: 05-6KF-2093 -1
SUBSYSTEM: FRCS
MDAC ID: 1013
ITEM: RESISTOR, 5.1K 1/4W
LEAD ANALYST: D. HARTMAN

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 1013
ITEM: RESISTOR, 5.1K 1/4W
LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
A SHORT ACROSS A RLR TYPE RESISTOR IS NOT A CREDIBLE FAILURE. IOA RECOMMENDS REMOVAL OF THE "SHORT" FAILURE MODE FROM THIS FMEA.

ISSUE RESOLVED AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88 (SHORT FAILURE MODE TO BE REMOVED).

REPORT DATE 2/26/88 C-977
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1014
NASA FMEA #: 05-6KF-2098 -1
SUBSYSTEM: FRCS
MDAC ID: 1014
ITEM: RESISTOR, 2.2K 1/2W
LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)
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* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-978
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1015
NASA FMEA #: 05-6KF-2098 -1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 1015
ITEM: RESISTOR, 2.2K 1/2W

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
A SHORT ACROSS A RLR TYPE RESISTOR IS NOT A CREDIBLE FAILURE.
IOA RECOMMENDS REMOVAL OF THE "SHORT" FAILURE MODE FROM THIS FMEA.

ISSUE RESOLVED AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88
(SHORT FAILURE MODE TO BE REMOVED).

REPORT DATE 2/26/88 C-979
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1016
NASA FMEA #: 05-6KF-2094 -1
SUBSYSTEM: FRCS
MDAC ID: 1016
ITEM: RESISTOR, 1.2K 2W
LEAD ANALYST: D. HARTMAN

NASA DATA:

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RECOMMENDATIONS: (If different from NASA)

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(REM) (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
IOA AGREES WITH NASA FMEA.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1017
NASA FMEA #: 05-6KF-2094 -2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 1017
ITEM: RESISTOR, 1.2K 2W
LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-981
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1018
NASA FMEA #: 05-6KF-2098 -1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 1018
ITEM: RESISTOR, 1.8K 1/4W

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-982
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1019
NASA FMEA #: 05-6KF-2098 -1
SUBSYSTEM: FRCS
MDAC ID: 1019
ITEM: RESISTOR, 1.8K 1/4W
LEAD ANALYST: D. HARTMAN

ASSESSMENT:

| CRITICALLY | REDUNDANCY SCREENS | CIL |
| FLIGHT | HDW/FUNC | A | B | C |
| NASA [3/3] | [ ] | [ ] | [ ] | [ ] | [ ] |
| IOA [3/3] | [ ] | [ ] | [ ] | [ ] | [ ] |
| COMPARE [ / ] | [ ] | [ ] | [ ] | [ ] | [ ] |

RECOMMENDATIONS: (If different from NASA)
[ / ] [ ] [ ] [ ] [ ] [ ]

* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
A SHORT ACROSS A RLR TYPE RESISTOR IS NOT A CREDIBLE FAILURE.
IOA RECOMMENDS REMOVAL OF THE "SHORT" FAILURE MODE FROM THIS FMEA.

ISSUE RESOLVED AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88
(SHORT FAILURE MODE TO BE REMOVED).

REPORT DATE 2/26/88 C-983
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1020
NASA FMEA #: 05-6KF-2097 -1

SUBSYSTEM: FRCS
MDAC ID: 1020
ITEM: RESISTOR, 1.8K 1/4W

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)
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* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1021
NASA FMEA #: 05-6KF-2097 -1

NASA DATA:
BASELINE [ ]
NEW [X]

SUBSYSTEM: FRCS
MDAC ID: 1021
ITEM: RESISTOR, 1.8K 1/4W

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

| CRITICALLY REDUNDANCY SCREENS CIL ITEM |
|-------|---|---|
| FLIGHT | A | B | C |
| HDW/FUNC | | | |
| NASA [ 3 /3 ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] |
| IOA [ 3 /3 ] [ ] [ ] [ ] [ ] [ ] [ ] |
| COMPARE [ / ] [ ] [ ] [ ] [ ] [ ] |

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
A SHORT ACROSS A RLR TYPE RESISTOR IS NOT A CREDIBLE FAILURE. IOA RECOMMENDS REMOVAL OF THE "SHORT" FAILURE MODE FROM THIS FMEA.

ISSUE RESOLVED AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88 (SHORT FAILURE MODE TO BE REMOVED).

REPORT DATE 2/26/88 C-985
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
NASA DATA:
ASSESSMENT ID: FRCS-1022
NASA FMEA #: 05-6KF-2097 -1
SUBSYSTEM: FRCS
MDAC ID: 1022
ITEM: RESISTOR, 2.2K 1/2W
LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1023
NASA FMEA #: 05-6KF-2097 -1
SUBSYSTEM: FRCS
MDAC ID: 1023
ITEM: RESISTOR, 2.2K 1/2W
LEAD ANALYST: D. HARTMAN

NASA DATA:
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NEW [ x ]

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
A SHORT ACROSS A RLR TYPE RESISTOR IS NOT A CREDIBLE FAILURE.
IOA RECOMMENDS REMOVAL OF THE "SHORT" FAILURE MODE FROM THIS FMEA.

ISSUE RESOLVED AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88
(SHORT FAILURE MODE TO BE REMOVED).

REPORT DATE 2/26/88 C-987
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1024
NASA FMEA #: 05-6KF-2096 -1
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 1024
ITEM: RESISTOR, 5.1K 1/4W

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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| COMPARE | [ / ] | [ ] | [ ] | [ ] | [ ] | [ ] |

RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-988
**APPENDIX C**  
**ASSESSMENT WORKSHEET**

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**SUBSYSTEM:** FRCS  
**MDAC ID:** 1025  
**ITEM:** RESISTOR, 5.1K 1/4W  
**LEAD ANALYST:** D. HARTMAN

**ASSESSMENT:**

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**IOA**

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**RECOMMENDATIONS:** (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

**REMARKS:**

A SHORT ACROSS A RLR TYPE RESISTOR IS NOT A CREDIBLE FAILURE. IOA RECOMMENDS REMOVAL OF THE "SHORT" FAILURE MODE FROM THIS FMEA.

ISSUE RESOLVED AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88 (SHORT FAILURE MODE TO BE REMOVED).
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1026
NASA FMEA #: 05-6KF-2098 -1
SUBSYSTEM: FRCS
MDAC ID: 1026
ITEM: RESISTOR, 2.2K 1/2W
LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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*CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]

INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-990
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1027
NASA FMEA #: 05-6KF-2098 -1

SUBSYSTEM: FRCS
MDAC ID: 1027
ITEM: RESISTOR, 2.2K 1/2W

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
A SHORT ACROSS A RLR TYPE RESISTOR IS NOT A CREDIBLE FAILURE.
IOA RECOMMENDS REMOVAL OF THE "SHORT" FAILURE MODE FROM THIS FMEA.

ISSUE RESOLVED AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88
(SHORT FAILURE MODE TO BE REMOVED).

REPORT DATE 2/26/88 C-991
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1028
NASA FMEA #: 05-6KF-2094 -1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 1028
ITEM: RESISTOR, 1.2K 2W

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)
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* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
IOA AGREES WITH NASA FMEA.

REPORT DATE 2/26/88 C-992
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1029
NASA FMEA #: 05-6KF-2094 -2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 1029
ITEM: RESISTOR, 1.2K 2W
LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRC-1030
NASA FMEA #: 05-6KF-2096 -1

SUBSYSTEM: FRC
MDAC ID: 1030
ITEM: RESISTOR, 5.1K 1/4W

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-994
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1031
NASA FMEA #: 05-6KF-2096 -1
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 1031
ITEM: RESISTOR, 5.1K 1/4W

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
A SHORT ACROSS A RLR TYPE RESISTOR IS NOT A CREDIBLE FAILURE. IOA RECOMMENDS REMOVAL OF THE "SHORT" FAILURE MODE FROM THIS FMEA.

ISSUE RESOLVED AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88 (SHORT FAILURE MODE TO BE REMOVED).

REPORT DATE 2/26/88 C-995
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1032
NASA FMEA #: 05-6KF-2098 -1
NASA DATA: BASELINE [ ]
            NEW [ x ]
SUBSYSTEM: FRCS
MDAC ID: 1032
ITEM: RESISTOR, 1.8K 1/4W
LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

[ / ] [ ] [ ] [ ] [ ] [ ]

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:

NO DIFFERENCES.

REPORT DATE 2/26/88 C-996
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1033
NASA FMEA #: 05-6KF-2098 -1
SUBSYSTEM: FRCS
MDAC ID: 1033
ITEM: RESISTOR, 1.8K 1/4W
LEAD ANALYST: D. HARTMAN

ASSESSMENT:

CRITICALITY
FLIGHT HDW/FUNC

REDUNDANCY SCREENS
A B C

NASA [ 3/3 ] [ ] [ ] [ ] [ ] *
IOA [ 3/3 ] [ ] [ ] [ ] [ ]
COMPARE [ / ] [ ] [ ] [ ] [ ]

RECOMMENDATIONS: (If different from NASA)
[ / ] [ ] [ ] [ ] [ ]
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
A SHORT ACROSS A RLR TYPE RESISTOR IS NOT A CREDIBLE FAILURE.
IOA RECOMMENDS REMOVAL OF THE "SHORT" FAILURE MODE FROM THIS
FMEA.

ISSUE RESOLVED AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88
(SHORT FAILURE MODE TO BE REMOVED).

REPORT DATE 2/26/88 C-997
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88  NASA DATA:
ASSESSMENT ID: FRCS-1034  BASELINE [ ]
NASA FMEA #: 05-6KF-2111-1  NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 1034
ITEM: RESISTOR, 1.2K 2W

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-998
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1035
NASA FMEA #: NONE
SUBSYSTEM: FRCS
MDAC ID: 1035
ITEM: RESISTOR, 1.2K 2W
LEAD ANALYST: D. HARTMAN

NASA DATA:
BASELINE [ ]
NEW [ ]

SUBSYSTEM: FRCS
MDAC ID: 1035
ITEM: RESISTOR, 1.2K 2W
LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
RLR42 TYPE RESISTORS HAVE BEEN CHANGED TO RWR80 TYPE RESISTORS WHICH CAN SHORT. IOA RECOMMENDS ITS INCLUSION INTO A FMEA.
NOTE: OPEN FAILURE MODE FOR THIS RESISTOR ON THE 05-6KF-2111-1 FMEA.

ISSUE RESOLVED AT MEETING. SHORT FAILURE MODE FOR THIS RESISTOR TO BE CREATED.

REPORT DATE 2/26/88 C-999
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88  NASA DATA:
ASSESSMENT ID: FRCS-1036  BASELINE [ ]
NASA FMEA #: 05-6KF-2094 -1  NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 1036
ITEM: RESISTOR, 1.2K 2W

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)
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* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
IOA AGREES WITH NASA FMEA.

REPORT DATE 2/26/88  C-1000
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1037
NASA FMEA #: 05-6KF-2094 -2

SUBSYSTEM: FRCS
MDAC ID: 1037
ITEM: RESISTOR, 1.2K 2W
LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88
C-1001
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1038
NASA FMEA #: 05-6KF-2096 -1
SUBSYSTEM: FRCS
MDAC ID: 1038
ITEM: RESISTOR, 5.1K 1/4W
LEAD ANALYST: D. HARTMAN

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

RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-1002
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1039
NASA FMEA #: 05-6KF-2096 -1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 1039
ITEM: RESISTOR, 5.1K 1/4W

LEAD ANALYST: D. HARTMAN

ASSESSMENT:
| CRITICALITY | REDUNDANCY SCREENS | CIL |
| FLIGHT HDW/FUNC | A | B | C |
| NASA [ 3 /3 ] | [ ] | [ ] | [ ] | [ ] | * |
| IOA [ 3 /3 ] | [ ] | [ ] | [ ] | [ ] | [ ] |
| COMPARE [ / ] | [ ] | [ ] | [ ] | [ ] | [ ] |

RECOMMENDATIONS: (If different from NASA)
[ / ] [ ] [ ] [ ] [ ] [ ]

(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
A SHORT ACROSS A RLR TYPE RESISTOR IS NOT A CREDIBLE FAILURE.
IOA RECOMMENDS REMOVAL OF THE "SHORT" FAILURE MODE FROM THIS FMEA.

ISSUE RESOLVED AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88
(SHORT FAILURE MODE TO BE REMOVED).
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1040
NASA FMEA #: 05-6KF-2097 -1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 1040
ITEM: RESISTOR, 1.8K 1/4W

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)
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* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-1004
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1041
NASA FMEA #: 05-6KF-2097 -1
SUBSYSTEM: FRCS
MDAC ID: 1041
ITEM: RESISTOR, 1.8K 1/4W
LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)
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* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
A SHORT ACROSS A RLR TYPE RESISTOR IS NOT A CREDIBLE FAILURE. IOA RECOMMENDS REMOVAL OF THE "SHORT" FAILURE MODE FROM THIS FMEA.

ISSUE RESOLVED AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88
(SHORT FAILURE MODE TO BE REMOVED).

REPORT DATE 2/26/88 C-1005
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88  NASA DATA:
ASSESSMENT ID: FRCS-1042  BASELINE [ ]
NASA FMEA #: 05-6KF-2097-1  NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 1042
ITEM: RESISTOR, 2.2K 1/2W

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)
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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88  C-1006
**APPENDIX C**

**ASSESSMENT WORKSHEET**

**ASSESSMENT DATE:** 1/29/88  
**ASSESSMENT ID:** FRCS-1043  
**NASA FMEA #:** 05-6KF-2097 -1

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

**SUBSYSTEM:** FRCS  
**MDAC ID:** 1043  
**ITEM:** RESISTOR, 2.2K 1/2W

**LEAD ANALYST:** D. HARTMAN

**ASSESSMENT:**

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**RECOMMENDATIONS:**  
(If different from NASA)

[ / ] [ ] [ ] [ ] [ ] [ ]

(ADD/DELETE)

* CIL RETENTION RATIONALE:  
(If applicable)

ADEQUATE [ ]  
INADEQUATE [ ]

**REMARKS:**

A SHORT ACROSS A RLR TYPE RESISTOR IS NOT A CREDIBLE FAILURE. IOA RECOMMENDS REMOVAL OF THE "SHORT" FAILURE MODE FROM THIS FMEA.

**ISSUE RESOLVED AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88**  
(SHORT FAILURE MODE TO BE REMOVED).

REPORT DATE 2/26/88 C-1007
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1044
NASA FMEA #: 05-6KF-2093 -1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 1044
ITEM: RESISTOR, 5.1K 1/4W

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)
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* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-1008
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1045
NASA FMEA #: 05-6KF-2093 -1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 1045
ITEM: RESISTOR, 5.1K 1/4W

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
A SHORT ACROSS A RLR TYPE RESISTOR IS NOT A CREDIBLE FAILURE.
IOA RECOMMENDS REMOVAL OF THE "SHORT" FAILURE MODE FROM THIS FMEA.

ISSUE RESOLVED AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88
(SHORT FAILURE MODE TO BE REMOVED).

REPORT DATE 2/26/88 C-1009
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1046
NASA FMEA #: 05-6KF-2098 -1
SUBSYSTEM: FRCS
MDAC ID: 1046
ITEM: RESISTOR, 2.2K 1/2W
LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-1010
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1047
NASA FMEA #: 05-6KF-2098 -1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 1047
ITEM: RESISTOR, 2.2K 1/2W

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
A SHORT ACROSS A RLR TYPE RESISTOR IS NOT A CREDIBLE FAILURE.
IOA RECOMMENDS REMOVAL OF THE "SHORT" FAILURE MODE FROM THIS FMEA.

ISSUE RESOLVED AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88
(SHORT FAILURE MODE TO BE REMOVED).

REPORT DATE 2/26/88 C-1011
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1048
NASA FMEA #: 05-6KF-2098 -1

SUBSYSTEM: FRCS
MDAC ID: 1048
ITEM: RESISTOR, 1.8K 1/4W
LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-1012
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1049
NASA FMEA #: 05-6KF-2098 -1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 1049
ITEM: RESISTOR, 1.8K 1/4W

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)
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* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
A SHORT ACROSS A RLR TYPE RESISTOR IS NOT A CREDIBLE FAILURE. IOA RECOMMENDS REMOVAL OF THE "SHORT" FAILURE MODE FROM THIS FMEA.

ISSUE RESOLVED AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88 (SHORT FAILURE MODE TO BE REMOVED).

REPORT DATE 2/26/88 C-1013
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1050
NASA FMEA #: 05-6KF-2109 -1

NASA DATA:
BASELINE [  ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 1050
ITEM: RESISTOR, 5.1K 1/4W

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1051
NASA FMEA #: 05-6KF-2109 -1
SUBSYSTEM: FRCS
MDAC ID: 1051
ITEM: RESISTOR, 5.1K 1/4W
LEAD ANALYST: D. HARTMAN

NASA DATA:
BASELINE [ ]
NEW [ X ]

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)
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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-1015
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
NASA DATA:
ASSESSMENT ID: FRCS-1052
NASA FMEA #: 05-6KF-2110 -1

SUBSYSTEM: FRCS
MDAC ID: 1052
ITEM: RESISTOR, 2.2K 1/2W

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)
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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-1016
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1053
NASA FMEA #: 05-6KF-2110 -1
SUBSYSTEM: FRCS
MDAC ID: 1053
ITEM: RESISTOR, 2.2K 1/2W
LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:

A SHORT ACROSS A RLR TYPE RESISTOR IS NOT A CREDIBLE FAILURE.
IOA RECOMMENDS REMOVAL OF THE "SHORT" FAILURE MODE FROM THIS FMEA.

ISSUE RESOLVED AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88
(SHORT FAILURE MODE TO BE REMOVED).

REPORT DATE 2/26/88 C-1017
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1054
NASA FMEA #: 05-6KF-2109 -1

SUBSYSTEM: FRCS
MDAC ID: 1054
ITEM: RESISTOR, 5.1K 2W

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.
## APPENDIX C
### ASSESSMENT WORKSHEET

**ASSESSMENT DATE:** 1/29/88  
**NASA DATA:**  
**BASELINE [ ]**  
**NEW [ X ]**  

**SUBSYSTEM:**  
FRCS  

**MDAC ID:**  
1055  

**ITEM:**  
RESISTOR, 5.1K 2W  

**LEAD ANALYST:**  
D. HARTMAN  

**ASSESSMENT:**

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**RECOMMENDATIONS:** (If different from NASA)  
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* CIL RETENTION RATIONALE: (If applicable)  
ADEQUATE [ ]  
INADEQUATE [ ]  

**REMARKS:**  
NO DIFFERENCES.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1056
NASA FMEA #: 05-6KF-2110 -1

SUBSYSTEM: FRCS
MDAC ID: 1056
ITEM: RESISTOR, 1.8K 1/4W

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)
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* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1057
NASA FMEA #: 05-6KF-2110 -1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 1057
ITEM: RESISTOR, 1.8K 1/4W

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

[ / ] [ ] [ ] [ ] [ ] [ ]

(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
A SHORT ACROSS A RLR TYPE RESISTOR IS NOT A CREDIBLE FAILURE. IOA RECOMMENDS REMOVAL OF THE "SHORT" FAILURE MODE FROM THIS FMEA.

ISSUE RESOLVED AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88 (SHORT FAILURE MODE TO BE REMOVED).

REPORT DATE 2/26/88 C-1021
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: NASA DATA:
ASSESSMENT ID: FRCS-1058 BASELINE [ ]
NASA FMEA #: NEW [ ]

SUBSYSTEM: MDAC ID: ITEM:
FRCS 1058 RJDF1B F1 MANIFOLD DRIVER SWITCH

LEAD ANALYST:

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
RJDF1B F1 MANIFOLD DRIVER SWITCH 8 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs FRCS 11120X-11124X.

REPORT DATE 2/26/88 C-1022
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: [ ]
ASSESSMENT ID: FRCS-1059
NASA FMEA #: [ ]
NASA DATA:
BASELINE [ ]
NEW [ ]

SUBSYSTEM: FRCS
MDAC ID: 1059
ITEM: RJDF1B F1 MANIFOLD DRIVER SWITCH

LEAD ANALYST:

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COMPARE [ ] / [ ]

RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

[ ] / [ ]

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
RJDF1B F1 MANIFOLD DRIVER SWITCH 8 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS FRCS 11120X-11124X.

REPORT DATE 2/26/88 C-1023
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 
ASSESSMENT ID: FRCS-1060 
NASA FMEA #: 

NASA DATA: 
BASELINE [ ] 
NEW [ ] 

ASSESSMENT:
FRCS-1060

SUBSYSTEM: FRCS
MDAC ID: 1060
ITEM: RJDF1B F1 MANIFOLD DRIVER ON SWITCH CONTACTS 1, 2

LEAD ANALYST:

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RECOMMENDATIONS: 
(If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
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REMARKS:
RJDF1B F1 MANIFOLD DRIVER SWITCH 8 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS FRCS 11120X-11124X.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: NASA DATA:
ASSESSMENT ID: FRCS-1061 BASELINE [ ]
NASA FMEA #: NEW [ ]

SUBSYSTEM: FRCS NASA DATA:
MDAC ID: 1061 BASELINE [ ]
ITEM: RJDF1B F1 MANIFOLD DRIVER ON SWITCH CONTACTS 1, NEW [ ]

2 LEAD ANALYST:

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
RJDF1B F1 MANIFOLD DRIVER SWITCH 8 RE-ANALYZED BY IOA. SEE
ASSESSMENT IDs FRCS 11120X-11124X.

REPORT DATE 2/26/88  C-1025
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 
ASSESSMENT ID: FRCS-1062
NASA FMEA #: 
NASA DATA:  
BASELINE [ ]  
NEW [ ]

SUBSYSTEM: FRCS
MDAC ID: 1062
ITEM: RJDF1B F1 MANIFOLD DRIVER OFF SWITCH CONTACTS 3, 4

LEAD ANALYST: 

ASSESSMENT:

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| IOA  | 3 /3 | [ ] | [ ] | [ ] | [ ] | [ ] | [ ] |

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

RECOMMENDATIONS: (If different from NASA)
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* CIL RETENTION RATIONALE: (If applicable)

REMARKS:
RJDF1B F1 MANIFOLD DRIVER SWITCH 8 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS FRCS 11120X-11124X.

REPORT DATE 2/26/88  
C-1026
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: NASA DATA: NASA FMEA #:
ASSESSMENT ID: FRCS-1063 BASELINE [ ] NEW [ ]
MDAC ID: 1063
ITEM: RJDF1B F1 MANIFOLD DRIVER OFF SWITCH CONTACTS 3, 4

LEAD ANALYST:

ASSESSMENT:

CRITICALITY REDUNDANCY SCREENS CIL ITEM
FLIGHT HDW/FUNC A B C ITEM

NASA [ ] [ ] [ ] [ ] [ ] [ ]
IOA [ 3 /3 ] [ ] [ ] [ ] [ ] [ ]
COMPARE [ N /N ] [ ] [ ] [ ] [ ] [ ]

RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
RJDF1B F1 MANIFOLD DRIVER SWITCH 8 RE-ANALYZED BY IOA. See ASSESSMENT IDs FRCS 11120X-11124X.

REPORT DATE 2/26/88 C-1027
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: NASA DATA:
ASSESSMENT ID: FRCS-1064 NASA FMEA #:
MDAC ID: 1064
SUBSYSTEM: FRCS
ITEM: RJDF1B F1 MANIFOLD DRIVER ON SWITCH CONTACTS 5, 6

LEAD ANALYST:

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
RJDF1B F1 MANIFOLD DRIVER SWITCH 8 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs FRCS 11120X-11124X.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE:     NASA DATA:
ASSESSMENT ID:       FRCS-1065
FRCS-1065
NASA FMEA #:  
BASELINE [ ]
NEW [ ]

SUBSYSTEM:  FRCS
MDAC ID:  1065
ITEM:  RJDF1B F1 MANIFOLD DRIVER ON SWITCH CONTACTS 5, 6

LEAD ANALYST:

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]

INADEQUATE [ ]

REMARKS:

RJDF1B F1 MANIFOLD DRIVER SWITCH 8 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs FRCS 11120X-11124X.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: NASA DATA:
ASSESSMENT ID: FRCS-1066 BASELINE [ ]
NASA FMEA #: NEW [ ]

SUBSYSTEM: FRCS
MDAC ID: 1066
ITEM: RJDF1B F1 MANIFOLD DRIVER OFF SWITCH CONTACTS 7, 8

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* CIL RETENTION RATIONALE: (If applicable)
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INADEQUATE [ ]

REMARKS:
RJDF1B F1 MANIFOLD DRIVER SWITCH 8 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS FRCS 11120X-11124X.

REPORT DATE 2/26/88 C-1030
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 
ASSESSMENT ID: FRCS-1067 
NASA FMEA #: 
NASA DATA: 
BASELINE [ ] 
NEW [ ]

SUBSYSTEM: FRCS
MDAC ID: 1067
ITEM: RJDF1B F1 MANIFOLD DRIVER OFF SWITCH CONTACTS 7, 8

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
RJDF1B F1 MANIFOLD DRIVER SWITCH 8 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS FRCS 11120X-11124X.

REPORT DATE 2/26/88 C-1031
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: NASA DATA:
ASSESSMENT ID: FRCS-1068 BASELINE [ ]
NASA FMEA #: NEW [ ]
SUBSYSTEM: FRCS
MDAC ID: 1068
ITEM: RJDF1B F1 MANIFOLD LOGIC SWITCH
LEAD ANALYST:

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
RJDF1B F1 MANIFOLD LOGIC SWITCH 7 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs FRCS 11115X-11119X.

REPORT DATE 2/26/88 C-1032
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: NASA DATA:
ASSessment ID: FRCS-1069 BASELINE [ ]
NASA FMEA #: NEW [ ]

SUBSYSTEM: FRCS MDAC ID: 1069
ITEM: RJDF1B F1 MANIFOLD LOGIC SWITCH

LEAD ANALYST:

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| ITEM |
| FLIGHT |
| HDW/FUNC |
| A | B | C |

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IOA [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]

COMPARE [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]

RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

 Adequate [ ]

 Inadequate [ ]

REMARKS:

RJDF1B F1 MANIFOLD LOGIC SWITCH 7 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs FRCS 11115X-11119X.

REPORT DATE 2/26/88 C-1033
APPENDIX C
ASSESSMENT WORKSHEET

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ASSESSMENT ID: FRCS-1070 BASELINE [ ]
NASA FMEA #: NEW [ ]

SUBSYSTEM: FRCS
MDAC ID: 1070
ITEM: RJDF1B F1 MANIFOLD LOGIC SWITCH ON CONTACTS 1, 2

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
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REMARKS:
RJDF1B F1 MANIFOLD LOGIC SWITCH 7 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs FRCS 11115X-11119X.

REPORT DATE 2/26/88 C-1034
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: ASSESSMENT ID: NASA FMEA #: NASA DATA:
NASA DATA: BASELINE [ ] NEW [ ]
FRCS-1071
SUBSYSTEM: FRCS MDAC ID: 1071
ITEM: RJDF1B F1 MANIFOLD LOGIC SWITCH ON CONTACTS 1, 2
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* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
RJDF1B F1 MANIFOLD LOGIC SWITCH 7 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS FRCS 11115X-11119X.

REPORT DATE 2/26/88 C-1035
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: [ ] NASA DATA: [ ]
ASSESSMENT ID: FRCS-1072 NASA FMEA #: [ ]
MDAC ID: 1072 BASELINE [ ]
ITEM: RJDF1B F1 MANIFOLD LOGIC SWITCH OFF CONTACTS 3, 4 NEW [ ]

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:

RJDF1B F1 MANIFOLD LOGIC SWITCH 7 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs FRCS 11115X-11119X.

REPORT DATE 2/26/88 C-1036
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: [ ]
ASSESSMENT ID: FRCS-1073
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NASA DATA: BASELINE [ ]
NEW [ ]
SUBSYSTEM: FRCS
MDAC ID: 1073
ITEM: RJDF1B F1 MANIFOLD LOGIC SWITCH OFF CONTACTS 3, 4
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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
RJDF1B F1 MANIFOLD LOGIC SWITCH 7 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS FRCS 11115X-11119X.

REPORT DATE 2/26/88 C-1037
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 
ASSESSMENT ID: FRCS-1074 
NASA FMEA #: 
NASA DATA: 
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NEW [ ] 
SUBSYSTEM: FRCS 
MDAC ID: 1074 
ITEM: RJDF1A F2 MANIFOLD DRIVER SWITCH 
LEAD ANALYST: 
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RECOMMENDATIONS: (If different from NASA) 
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* CIL RETENTION RATIONALE: (If applicable) 
ADEQUATE [ ] 
INADEQUATE [ ] 

REMARKS: 
RJDF1A F2 MANIFOLD DRIVER SWITCH 8 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs FRCS 11130X-11134X.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: [ ] NASA DATA:
ASSESSMENT ID: FRCS-1075 BASELINE [ ]
NASA FMEA #: [ ] NEW [ ]

SUBSYSTEM: FRCS
MDAC ID: 1075
ITEM: RJDF1A F2 MANIFOLD DRIVER SWITCH

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
RJDF1A F2 MANIFOLD DRIVER SWITCH 8 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS FRCS 11130X-11134X.

REPORT DATE 2/26/88 C-1039
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 
ASSESSMENT ID: FRCS-1076 
NASA FMEA #: 
SUBSYSTEM: FRCS 
MDAC ID: 1076 
ITEM: RJDF1A F2 MANIFOLD DRIVER ON SWITCH CONTACTS 1, 2

LEAD ANALYST: 

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RECOMMENDATIONS: (If different from NASA)

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ADEQUATE [ ]
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REMARKS:

RJDF1A F2 MANIFOLD DRIVER SWITCH 8 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs FRCS 11130X-11134X.

REPORT DATE 2/26/88 C-1040
APPENDIX C
ASSESSMENT WORKSHEET

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ASSESSMENT ID: FRCS-1077
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NASA DATA:
BASELINE  [ ]
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SUBSYSTEM: FRCS
MDAC ID: 1077
ITEM: RJDF1A F2 MANIFOLD DRIVER ON SWITCH CONTACTS 1, 2

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* CIL RETENTION RATIONALE: (If applicable)  
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REMARKS:  
RJDF1A F2 MANIFOLD DRIVER SWITCH 8 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs FRCS 11130X-11134X.

REPORT DATE 2/26/88  C-1041
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: NASA DATA:
ASSESSMENT ID: FRCS-1078 BASELINE [ ]
NASA FMEA #: NEW [ ]
SUBSYSTEM: FRCS MDAC ID: 1078
ITEM: RJDF1A F2 MANIFOLD DRIVER OFF SWITCH CONTACTS 3, 4

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
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REMARKS:
RJDF1A F2 MANIFOLD DRIVER SWITCH 8 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs FRCS 11130X-11134X.

REPORT DATE 2/26/88 C-1042
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE:  
ASSESSMENT ID: FRCS-1079  
NASA FMEA #:  
NASA DATA: 
BASELINE [ ] 
NEW [ ] 

SUBSYSTEM: FRCS  
MDAC ID: 1079  
ITEM: RJDF1A F2 MANIFOLD DRIVER OFF SWITCH CONTACTS 3, 4  

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RECOMMENDATIONS:  (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
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REMARKS:
RJDF1A F2 MANIFOLD DRIVER SWITCH 8 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS FRCS 11130X-11134X.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE:         NASA DATA:         NASA FMEA #:
ASSESSMENT ID: FRCS-1080  BASELINE [ ]          SUBSYSTEM:
NASA MDAC ID: 1080       NEW [ ]          MDAC ID:
ITEM: RJDF1A F2 MANIFOLD DRIVER ON SWITCH CONTACTS 5, 6

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
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REMARKS:
RJDF1A F2 MANIFOLD DRIVER SWITCH 8 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS FRCS 11130X-11134X.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 
ASSESSMENT ID: FRCS-1081
NASA FMEA #: 
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SUBSYSTEM: FRCS
MDAC ID: 1081
ITEM: RJDFIA F2 MANIFOLD DRIVER ON SWITCH CONTACTS 5, 6

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:

RJDFIA F2 MANIFOLD DRIVER SWITCH 8 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS FRCS 11130X-11134X.

REPORT DATE 2/26/88 C-1045
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: NASA DATA:
ASSESSMENT ID: FRCS-1082 BASELINE [ ]
NASA FMEA #: NEW [ ]

SUBSYSTEM: FRCS MDAC ID: 1082
ITEM: RJDF1A F2 MANIFOLD DRIVER OFF SWITCH CONTACTS 7, 8

LEAD ANALYST:

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
RJDF1A F2 MANIFOLD DRIVER SWITCH 8 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs FRCS 11130X-11134X.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: [ ]
ASSESSMENT ID: FRCS-1083
NASA FMEA #: [ ]
NASA DATA: BASELINE [ ]
BASELINE [ ]
NEW [ ]

SUBSYSTEM: FRCS
MDAC ID: 1083
ITEM: RJDF1A F2 MANIFOLD DRIVER OFF SWITCH CONTACTS 7, 8

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
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REMARKS:
RJDF1A F2 MANIFOLD DRIVER SWITCH 8 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS FRCS 11130X-11134X.

REPORT DATE 2/26/88 C-1047
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: [Date]
ASSESSMENT ID: FRCS-1084
NASA FMEA #: [FMEA Number]

SUBSYSTEM: FRCS
MDAC ID: 1084
ITEM: RJDF1A F2 MANIFOLD LOGIC SWITCH

LEAD ANALYST:

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RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
RJDF1A F2 MANIFOLD DRIVER SWITCH 7 RE-ANALYZED BY IOA. SEE ASSESSMENT ID's FRCS 11125X-11129X.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE:     NASA DATA:  
ASSESSMENT ID:       FRCS-1085       BASELINE [ ]  
NASA FMEA #:         NEW [ ]
SUBSYSTEM:           FRCS         
MDAC ID:             1085               
ITEM:                RJDFIA F2 MANIFOLD LOGIC SWITCH
LEAD ANALYST:       

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RECOMMENDATIONS: (If different from NASA)
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* CIL RETENTION RATIONALE: (If applicable)
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REMARKS:
RJDFIA F2 MANIFOLD DRIVER SWITCH 7 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs FRCS 11125X-11129X.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: NASA DATA:  NASA FMEA #:
ASSESSMENT ID:  FRCS-1086 BASELINE [ ]
NASA [ ]
FMEA [ ]
SUBSYSTEM:  FRCS NEW [ ]
MDAC ID:  1086
ITEM:  RJDF1A F2 MANIFOLD LOGIC SWITCH ON CONTACTS 1, 2
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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
RJDF1A F2 MANIFOLD DRIVER SWITCH 7 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs FRCS 11125X-11129X.

REPORT DATE 2/26/88 C-1050
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: NASA DATA:
ASSESSMENT ID: FRCS-1087 BASELINE [ ]
NASA FMEA #: NEW [ ]
SUBSYSTEM: FRCS
MDAC ID: 1087
ITEM: RJDF1A F2 MANIFOLD LOGIC SWITCH ON CONTACTS 1, 2

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* CIL RETENTION RATIONALE: (If applicable)
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REMARKS:
RJDF1A F2 MANIFOLD DRIVER SWITCH 7 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs FRCS 11125X-11129X.

REPORT DATE 2/26/88
C-1051
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: NASA DATA:
ASSESSMENT ID: FRCS-1088 NASA FMEA #:
FRCS BASELINE [ ]
NASA FMEA #:
FRCS NEW [ ]
SUBSYSTEM: RJDF1A F2 MANIFOLD LOGIC SWITCH OFF CONTACTS 3, 4
MDAC ID: 1088
ITEM: FRCS-1088
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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

Adequate [ ]
Inadequate [ ]

REMARKS:
RJDF1A F2 MANIFOLD DRIVER SWITCH 7 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS FRCS 11125X-11129X.

REPORT DATE 2/26/88 C-1052
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 
ASSESSMENT ID: FRCS-1089
NASA FMEA #: 
SUBSYSTEM: FRCS
MDAC ID: 1089
ITEM: RJDF1A F2 MANIFOLD LOGIC SWITCH OFF CONTACTS 3, 4

LEAD ANALYST: 
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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
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REMARKS:
RJDF1A F2 MANIFOLD DRIVER SWITCH 7 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs FRCS 11125X-11129X.

REPORT DATE 2/26/88 C-1053
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: [ ] NASA DATA: [ ]
ASSESSMENT ID: FRCS-1090 BASELINE [ ]
NASA FMEA #: NEW [ ]
SUBSYSTEM: FRCS
MDAC ID: 1090
ITEM: RJDF2A F3 MANIFOLD DRIVER SWITCH

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:

RJDF2A F3 MANIFOLD DRIVER SWITCH 6 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS FRCS 11140X-11144X.

REPORT DATE 2/26/88 C-1054
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 
ASSESSMENT ID: FRCS-1091 
NASA FMEA #: 
NASA DATA: 
BASELINE [ ] 
NEW [ ] 

SUBSYSTEM: FRCS 
MDAC ID: 1091 
ITEM: RJDF2A F3 MANIFOLD DRIVER SWITCH 

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
RJDF2A F3 MANIFOLD DRIVER SWITCH 6 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS FRCS 11140X-11144X.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: NASA DATA:
ASSESSMENT ID: FRCS-1092 BASELINE [ ]
NASA FMEA #: NEW [ ]
SUBSYSTEM: FRCS
MDAC ID: 1092
ITEM: RJDF2A F3 MANIFOLD DRIVER ON SWITCH CONTACTS 1, 2

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:

RJDF2A F3 MANIFOLD DRIVER SWITCH 6 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS FRCS 11140X-11144X.

REPORT DATE 2/26/88 C-1056
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: ASSESSMENT ID: ASSESSMENT FMEA #: NASA DATA:
NASA FMEA #: NASA DATA:

SUBSYSTEM: MDAC ID: ITEM:
FRCS 1093 RJDF2A F3 MANIFOLD DRIVER ON SWITCH CONTACTS 1, 2

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]

INADEQUATE [ ]

REMARKS:

RJDF2A F3 MANIFOLD DRIVER SWITCH 6 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs FRCS 11140X-11144X.

REPORT DATE 2/26/88 C-1057
APPENDIX C  
ASSESSMENT WORKSHEET

ASSESSMENT DATE:  
ASSESSMENT ID:  FRCS-1094  
NASA FMEA #:  
NASA DATA:  
BASELINE [ ]  
NEW [ ]

SUBSYSTEM:  FRCS  
MDAC ID:  1094  
ITEM:  RJDF2A F3 MANIFOLD DRIVER OFF SWITCH CONTACTS 3, 4

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* CIL RETENTION RATIONALE:  (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:

RJDF2A F3 MANIFOLD DRIVER SWITCH 6 RE-ANALYZED BY IOA.  SEE ASSESSMENT IDS FRCS 11140X-11144X.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE:     NASA DATA:
ASSESSMENT ID:       FRCS-1095     BASELINE [ ]
NASA FMEA #:         NEW [ ]
SUBSYSTEM:           FRCS
MDAC ID:             1095
ITEM:                RJDF2A F3 MANIFOLD DRIVER OFF SWITCH CONTACTS 3, 4
LEAD ANALYST:

ASSESSMENT:

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|             | A | B | C   | ITEM |

NASA [ ] [ ] [ ] [ ] [ ] [ ] *
IOA [ 3 /3 ] [ ] [ ] [ ] [ ] [ ]
COMPARE [ N /N ] [ ] [ ] [ ] [ ] [ ]

RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:

RJDF2A F3 MANIFOLD DRIVER SWITCH 6 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS FRCS 11140X-11144X.

REPORT DATE 2/26/88     C-1059
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 
ASSESSMENT ID: FRCS-1096 
NASA FMEA #: 

NASA DATA: 
BASELINE [ ] 
NEW [ ] 

SUBSYSTEM: FRCS 
MDAC ID: 1096 
ITEM: RJDF2A F3 MANIFOLD DRIVER ON SWITCH CONTACTS 5, 6 

LEAD ANALYST: 

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
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REMARKS:
RJDF2A F3 MANIFOLD DRIVER SWITCH 6 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs FRCS 11140X-11144X.

REPORT DATE 2/26/88 C-1060
APPENDIX C
ASSESSMENT WORKSHEET

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ASSESSMENT ID: FRCS-1097 BASELINE [ ]
NASA FMEA #: NASA DATA: NEW [ ]
SUBSYSTEM: FRCS
MDAC ID: 1097
ITEM: RJDF2A F3 MANIFOLD DRIVER ON SWITCH CONTACTS 5, 6
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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
RJDF2A F3 MANIFOLD DRIVER SWITCH 6 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS FRCS 11140X-11144X.

REPORT DATE 2/26/88 C-1061
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: NASA DATA:
ASSESSMENT ID: FRCS-1098 BASELINE [ ]
NASA FMEA #: NEW [ ]

SUBSYSTEM: FRCS
MDAC ID: 1098
ITEM: RJDF2A F3 MANIFOLD DRIVER OFF SWITCH CONTACTS 7, 8

LEAD ANALYST:

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:

RJDF2A F3 MANIFOLD DRIVER SWITCH 6 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS FRCS 11140X-11144X.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: ____________________________
ASSESSMENT ID: FRCS-1099
NASA FMEA #: ____________________________

SUBSYSTEM: FRCS
MDAC ID: 1099
ITEM: RJDF2A F3 MANIFOLD DRIVER OFF SWITCH CONTACTS 7, 8

LEAD ANALYST: ____________________________

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RECOMMENDATIONS: (If different from NASA)

* CIL RETENTION RATIONALE: (If applicable)

REMARKS:
RJDF2A F3 MANIFOLD DRIVER SWITCH 6 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS FRCS 11140X-11144X.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: NASA DATA:
ASSESSMENT ID: FRCS-1100 BASELINE [ ]
NASA FMEA #: NEW [ ]
SUBSYSTEM: FRCS
MDAC ID: 1100
ITEM: RJDF2A F3 MANIFOLD LOGIC SWITCH

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:

RJDF2A F3 MANIFOLD LOGIC SWITCH 5 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs FRCS 11135X-11139X.

REPORT DATE 2/26/88 C-1064
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: [Blank]
ASSESSMENT ID: FRCS-1101
NASA FMEA #: [Blank]

NASA DATA:
BASELINE [ ]
NEW [ ]

SUBSYSTEM: FRCS
MDAC ID: 1101
ITEM: RJDF2A F3 MANIFOLD LOGIC SWITCH

LEAD ANALYST: [Blank]

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* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
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REMARKS:
RJDF2A F3 MANIFOLD LOGIC SWITCH 5 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs FRCS 11135X-11139X.

REPORT DATE 2/26/88 C-1065
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE:  
ASSESSMENT ID: FRCS-1102  
NASA FMEA #:  

NASA DATA:  
BASELINE [ ]  
NEW [ ]  

SUBSYSTEM: FRCS  
MDAC ID: 1102  
ITEM: RJDF2A F3 MANIFOLD LOGIC SWITCH ON CONTACTS 1, 2  

LEAD ANALYST:  
ASSESSMENT:  

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* CIL RETENTION RATIONALE:  
(If applicable)  
ADEQUATE [ ]  
INADEQUATE [ ]  

REMARKS:  
RJDF2A F3 MANIFOLD LOGIC SWITCH 5 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS FRCS 11135X-11139X.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: NASA DATA:
ASSESSMENT ID: FRCS-1103 BASELINE [ ]
NASA FMEA #: NEW [ ]

SUBSYSTEM: FRCS
MDAC ID: 1103
ITEM: RJDF2A F3 MANIFOLD LOGIC SWITCH ON CONTACTS 1, 2

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
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REMARKS:
RJDF2A F3 MANIFOLD LOGIC SWITCH 5 RE-ANALYZED BY IOA. SEE
ASSESSMENT IDS FRCS 11135X-11139X.

REPORT DATE 2/26/88 C-1067
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE:  
ASSESSMENT ID: FRCS-1104  
NASA FMEA #:  
SUBSYSTEM: FRCS  
MDAC ID: 1104  
ITEM: RJDF2A F3 MANIFOLD LOGIC SWITCH OFF CONTACTS 3, 4

LEAD ANALYST:

ASSESSMENT:

| CRITICALITY | REDUNDANCY SCREENS | CIL ITEM |
| FLIGHT | HDW/FUNC | A | B | C |
| NASA | [ / ] | [ ] | [ ] | [ ] | [ ] | *
| IOA | [ 3 /3 ] | [ ] | [ ] | [ ] | [ ] |
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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
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REMARKS:

RJDF2A F3 MANIFOLD LOGIC SWITCH 5 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs FRCS 11135X-11139X.

REPORT DATE 2/26/88 C-1068
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE:  NASA DATA:
ASSESSMENT ID:   FRCS-1105      BASELINE [ ]
NASA FMEA #:      NEW [ ]

SUBSYSTEM:        FRCS
MDAC ID:          1105
ITEM:             RJDF2A F3 MANIFOLD LOGIC SWITCH OFF CONTACTS 3, 4

LEAD ANALYST:

ASSESSMENT:

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|             |                  | ITEM |
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| HDW/FUNC     |       |       |     |
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| IOA          | [ 3/3 ] | [ ]  | [ ] | [ ] |
| COMPARE      | [ N/N ] | [ ]  | [ ] | [ ] |

RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
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REMARKS:
RJDF2A F3 MANIFOLD LOGIC SWITCH 5 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs FRCS 11135X-11139X.

REPORT DATE 2/26/88 C-1069
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE:  
ASSESSMENT ID:  FRCS-1106  
NASA FMEA #:  
NASA DATA:  BASELINE [ ]  
NEW [ ]

SUBSYSTEM:  FRCS  
MDAC ID:  1106  
ITEM:  RJDF2B F4/F5 MANIFOLD DRIVER SWITCH  
LEAD ANALYST:  
ASSESSMENT:  

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RECOMMENDATIONS:  (If different from NASA)  
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* CIL RETENTION RATIONALE:  (If applicable)  
ADEQUATE [ ]  
INADEQUATE [ ]

REMARKS:  
RJDF2B F4/F5 MANIFOLD DRIVER SWITCH 13 RE-ANALYZED BY IOA.  SEE ASSESSMENT IDS FRCS 11150X-11154X.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: NASA DATA: 
ASSESSMENT ID: FRCS-1107 BASELINE [ ] 
NASA FMEA #: NEW [ ] 
SUBSYSTEM: FRCS MDAC ID: 1107 
ITEM: RJDF2B F4/F5 MANIFOLD DRIVER SWITCH

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RECOMMENDATIONS: (If different from NASA) 

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* CIL RETENTION RATIONALE: (If applicable) 

ADEQUATE [ ] 
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REMARKS: 
RJDF2B F4/F5 MANIFOLD DRIVER SWITCH 13 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs FRCS 11150X-11154X.

REPORT DATE 2/26/88 C-1071
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: NASA DATA: NASA FMEA #:
ASSESSMENT ID: FRCS-1108 BASELINE [ ]
NASA MDAC ID: 1108 NEW [ ]
SUBSYSTEM: FRCS
ITEM: RJDF2B F4/F5 MANIFOLD DRIVER ON SWITCH CONTACTS
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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
RJDF2B F4/F5 MANIFOLD DRIVER SWITCH 13 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs FRCS 11150X-11154X.
# APPENDIX C
## ASSESSMENT WORKSHEET

**ASSESSMENT DATE:**

**ASSESSMENT ID:** FRCS-1109

**NASA FMEA #:**

**NASA DATA:**

- BASELINE
- NEW

**SUBSYSTEM:** FRCS

**MDAC ID:** 1109

**ITEM:** RJDF2B F4/F5 MANIFOLD DRIVER ON SWITCH CONTACTS 1, 2

**LEAD ANALYST:**

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**RECOMMENDATIONS:** (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

- ADEQUATE [ ]
- INADEQUATE [ ]

**REMARKS:**
RJDF2B F4/F5 MANIFOLD DRIVER SWITCH 13 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS FRCS 11150X-11154X.

**REPORT DATE 2/26/88**

C-1073
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 
ASSESSMENT ID: FRCS-1110
NASA FMEA #: 
SUBSYSTEM: FRCS
MDAC ID: 1110
ITEM: RJDF2B F4/F5 MANIFOLD DRIVER OFF SWITCH CONTACTS 3, 4

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RECOMMENDATIONS: (If different from NASA)
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* CIL RETENTION RATIONALE: (If applicable)
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INADEQUATE [ ]

REMARKS:
RJDF2B F4/F5 MANIFOLD DRIVER SWITCH 13 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs FRCS 11150X-11154X.

REPORT DATE 2/26/88 C-1074
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE:          NASA DATA:
ASSESSMENT ID:   FRCS-1111    BASELINE [ ]
NASA FMEA #:          NEW [ ]

SUBSYSTEM:          FRCS
MDAC ID:            1111
ITEM:               RJDF2B F4/F5 MANIFOLD DRIVER OFF SWITCH CONTACTS 3, 4

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
RJDF2B F4/F5 MANIFOLD DRIVER SWITCH 13 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS FRCS 11150X-11154X.

REPORT DATE 2/26/88  C-1075
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: NASA DATA:
ASSESSMENT ID: FRCS-1112 BASELINE [ ]
NASA FMEA #: NEW [ ]

SUBSYSTEM: FRCS
MDAC ID: 1112
ITEM: RJDF2B F4/F5 MANIFOLD DRIVER ON SWITCH CONTACTS 5, 6

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
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REMARKS:
RJDF2B F4/F5 MANIFOLD DRIVER SWITCH 13 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs FRCS 11150X-11154X.

REPORT DATE 2/26/88 C-1076
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE:  
ASSESSMENT ID: FRCS-1113  
NASA FMEA #: 

NASA DATA:  
BASELINE [ ]  
NEW [ ]  

SUBSYSTEM: FRCS  
MDAC ID: 1113  
ITEM: RJDF2B F4/F5 MANIFOLD DRIVER ON SWITCH CONTACTS 5, 6  

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

RECOMMENDATIONS:  (If different from NASA)  
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* CIL RETENTION RATIONALE: (If applicable)  
ADEQUATE [ ]  
INADEQUATE [ ]  

REMARKS:  
RJDF2B F4/F5 MANIFOLD DRIVER SWITCH 13 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs FRCS 11150X-11154X.

REPORT DATE 2/26/88  
C-1077
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: NASA DATA:
ASSESSMENT ID: FRCS-1114 BASELINE [ ]
NASA FMEA #: NEW [ ]

SUBSYSTEM: FRCS
MDAC ID: 1114
ITEM: RJDF2B F4/F5 MANIFOLD DRIVER OFF SWITCH CONTACTS 7, 8

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ] INADEQUATE [ ]

REMARKS:
RJDF2B F4/F5 MANIFOLD DRIVER SWITCH 13 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs FRCS 11150X-11154X.

REPORT DATE 2/26/88 C-1078
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE:
ASSESSMENT ID: FRCS-1115
NASA FMEA #:

NASA DATA:
ASSESSMENT ID:
NASA FMEA #:

SUBSYSTEM: FRCS
MDAC ID: 1115
ITEM: RJDF2B F4/F5 MANIFOLD DRIVER OFF SWITCH CONTACTS 7, 8

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REMARKS:
RJDF2B F4/F5 MANIFOLD DRIVER SWITCH 13 RE-ANALYZED BY IOA.
SEE ASSESSMENT IDS FRCS 11150X-11154X.

REPORT DATE 2/26/88 C-1079
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: NASA DATA:
ASSESSMENT ID: FRCS-1116 BASELINE [ ]
NASA FMEA #: NEW [ ]

SUBSYSTEM: FRCS
MDAC ID: 1116
ITEM: RJDF2B F4/F5 MANIFOLD LOGIC SWITCH

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
RJDF2B F4/F5 MANIFOLD LOGIC RE-ANALYZED BY IOA. SEE ASSESSMENT IDs FRCS 11145X-11149X.

REPORT DATE 2/26/88 C-1080
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: NASA DATA:
ASSESSMENT ID: NASA FMEA #:
FRCS-1117 BASELINE [ ]
NASA FMEA #: NEW [ ]

SUBSYSTEM: FRCS NASA DATA:
MDAC ID: BASELINE [ ]
1117 NEW [ ]
ITEM: FRCS

RJDF2B F4/F5 MANIFOLD LOGIC SWITCH

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:

RJDF2B F4/F5 MANIFOLD LOGIC RE-ANALYZED BY IOA. SEE ASSESSMENT
IDS FRCS 11145X-11149X.

REPORT DATE 2/26/88 C-1081
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE:  
ASSESSMENT ID: FRCS-1118  
NASA DATA:  
BASELINE [ ]  
NEW [ ]

NASA FMEA #:  
SUBSYSTEM: FRCS  
MDAC ID: 1118  
ITEM: RJDF2B F4/F5 MANIFOLD LOGIC SWITCH ON CONTACTS 1, 2

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
RJDF2B F4/F5 MANIFOLD LOGIC RE-ANALYZED BY IOA. SEE ASSESSMENT IDS FRCS 11145X-11149X.

REPORT DATE 2/26/88 C-1082
APPENDIX C
ASSESSMENT WORKSHEET

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RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
RJDF2B F4/F5 MANIFOLD LOGIC RE-ANALYZED BY IOA. SEE ASSESSMENT IDS FRCS 11145X-11149X.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE:  
ASSESSMENT ID: FRCS-1120  
NASA FMEA #:  

NASA DATA:  
BASELINE [ ]  
NEW [ ]  

SUBSYSTEM: FRCS  
MDAC ID: 1120  
ITEM: RJDF2B F4/F5 MANIFOLD LOGIC SWITCH OFF CONTACTS 3, 4  

LEAD ANALYST:  

ASSESSMENT:

CRITICALITY REDUNDANCY SCREENS CIL ITEM  
FLIGHT HDW/FUNC A B C ITEM

NASA [ / / ] [ ] [ ] [ ] [ ] [ ]  

IOA [ 3 /3 ] [ ] [ ] [ ] [ ] [ ]  

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

RECOMMENDATIONS: (If different from NASA)  
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(ADD/DELETE)  

* CIL RETENTION RATIONALE: (If applicable)  
ADEQUATE [ ]  
INADEQUATE [ ]  

REMARKS:  
RJDF2B F4/F5 MANIFOLD LOGIC RE-ANALYZED BY IOA. SEE ASSESSMENT IDS FRCS 11145X-11149X.  

REPORT DATE 2/26/88  
C-1084
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 
ASSESSMENT ID: FRCS-1121
NASA FMEA #: 
NASA DATA: 
BASELINE [ ] 
NEW [ ]

SUBSYSTEM: FRCS
MDAC ID: 1121
ITEM: RJDF2B F4/F5 MANIFOLD LOGIC SWITCH OFF CONTACTS 3, 4

LEAD ANALYST: 

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
RJDF2B F4/F5 MANIFOLD LOGIC RE-ANALYZED BY IOA. SEE ASSESSMENT IDs FRCS 11145X-11149X.

REPORT DATE 2/26/88 C-1085
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: NASA DATA:
ASSESSMENT ID: FRCS-1122 BASELINE [ ]
NASA FMEA #: NEW [ ]

SUBSYSTEM: FRCS NASA DATA:
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ITEM: RJDF2B L5/F5/R5 MANIFOLD DRIVER SWITCH NEW [ ]

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

RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

*CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]

INADEQUATE [ ]

REMARKS:
RJDF2B F4/F5 MANIFOLD DRIVER SWITCH 15 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS FRCS 11155X-11159X.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 
ASSESSMENT ID: FRCS-1123
NASA FMEA #: NASA DATA:
SUBSYSTEM: FRCS 
MDAC ID: 1123 
ITEM: RJDF2B L5/F5/R5 MANIFOLD DRIVER SWITCH

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
RJDF2B F4/F5 MANIFOLD DRIVER SWITCH 15 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs FRCS 11155X-11159X.

REPORT DATE 2/26/88 C-1087
APPENDIX C
ASSESSMENT WORKSHEET

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| SUBSYSTEM:      | FRCS        |
| MDAC ID:        | 1124        |
| ITEM:           | RJDF2B L5/F5/R5 MANIFOLD DRIVER ON SWITCH |
| CONTACTS 1, 2   |             |

| LEAD ANALYST:   |             |

| ASSESSMENT:     |             |

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

| RECOMMENDATIONS: | (If different from NASA) |
|                  | [ / ] | [ ] | [ ] | [ ] | [ ] | [ ] | (ADD/DELETE) |

* CIL RETENTION RATIONALE: (If applicable)

| ADEQUATE [ ] |
| INADEQUATE [ ] |

| REMARKS:        |
| RJDF2B F4/F5 MANIFOLD DRIVER SWITCH 15 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs FRCS 11155X-11159X. |

REPORT DATE 2/26/88 C-1088
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: [ ]
ASSESSMENT ID: FRCS-1125
NASA FMEA #: [ ]

NASA DATA:
BASELINE [ ]
NEW [ ]

SUBSYSTEM: FRCS
MDAC ID: 1125
ITEM: RJDF2B L5/F5/R5 MANIFOLD DRIVER ON SWITCH CONTACTS 1, 2 OR 5, 6

LEAD ANALYST:

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
RJDF2B F4/F5 MANIFOLD DRIVER SWITCH 15 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS FRCS 11155X-11159X.

REPORT DATE 2/26/88 C-1089
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 
ASSESSMENT ID: FRCS-1126 
NASA FMEA #: 
NASA DATA: 
BASELINE [ ] 
NEW [ ]

SUBSYSTEM: FRCS 
MDAC ID: 1126 
ITEM: RJDF2B L5/F5/R5 MANIFOLD DRIVER OFF SWITCH 
CONTACTS 3, 4 

LEAD ANALYST: 

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

RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:

RJDF2B F4/F5 MANIFOLD DRIVER SWITCH 15 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS FRCS 11155X-11159X.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE:      NASA DATA:        NASA FMEA #:      BASELINE [ ]
ASSESSMENT ID:        ASSESSMENT ID:      NEW [ ]
FRCS-1127             NASA FMEA #:      SUBSYSTEM:        FRCS
MDAC ID:              MDAC ID:          MDAC ID:          1127
ITEM:                 ITEM:             ITEM:             RJDF2B L5/F5/R5 MANIFOLD DRIVER OFF SWITCH
CONTACTS 3, 4         CONTACTS 3, 4     CONTACTS 3, 4     LEAD ANALYST:          LEAD ANALYST:          LEAD ANALYST:
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RECOMMENDATIONS:   (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

Adequate [ ]

Inadequate [ ]

REMARKS:
RJDF2B F4/F5 MANIFOLD DRIVER SWITCH 15 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs FRCS 11155X-11159X.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 
ASSESSMENT ID: FRCS-1128  
NASA FMEA #: 
NASA DATA:
BASELINE [ ]  NEW [ ]

SUBSYSTEM: FRCS  
MDAC ID: 1128  
ITEM: RJDF2B L5/F5/R5 MANIFOLD DRIVER ON SWITCH CONTACTS 5, 6  
LEAD ANALYST:  

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

RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]  
INADEQUATE [ ]

REMARKS:
RJDF2B F4/F5 MANIFOLD DRIVER SWITCH 15 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS FRCS 11155X-11159X.

REPORT DATE 2/26/88  
C-1092
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: NASA DATA:
ASSESSMENT ID: FRCS-1129 BASELINE [ ]
NASA FMEA #: NASA NEW [ ]

SUBSYSTEM: FRCS NASA / IOA [3/2R]
MDAC ID: 1129
ITEM: RJDF2B L5/F5/R5 MANIFOLD DRIVER ON SWITCH
CONTACTS 5, 6
LEAD ANALYST:

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
RJDF2B F4/F5 MANIFOLD DRIVER SWITCH 15 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS FRCS 11155X-11159X.

REPORT DATE 2/26/88 C-1093
ASSESSMENT DATE: NASA DATA:
ASSESSMENT ID: FRCS-1130 BASELINE [ ]
NASA FMEA #: NEW [ ]

SUBSYSTEM: FRCS
MDAC ID: 1130
ITEM: RJDF2B L5/F5/R5 MANIFOLD DRIVER OFF SWITCH CONTACTS 3, 4 OR 7, 8

LEAD ANALYST:

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)
[ ] / [ ] [ ] [ ] [ ]
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

REMARKS:
RJDF2B F4/F5 MANIFOLD DRIVER SWITCH 15 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs FRCS 11155X-11159X.

REPORT DATE 2/26/88 C-1094
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: [ ]
ASSESSMENT ID: FRCS-1131
NASA FMEA #: [ ]

NASA DATA:
BASELINE [ ]
NEW [ ]

SUBSYSTEM: FRCS
MDAC ID: 1131
ITEM: RJDF2B L5/F5/R5 MANIFOLD DRIVER OFF SWITCH CONTACTS 3, 4 OR 7, 8

LEAD ANALYST:

ASSESSMENT:

CRITICALITY REDUNDANCY SCREENS CIL
FLIGHT HDW/FUNC A B C ITEM

NASA [ ] [ ] [ ] [ ] [ ] [ ] * N/A
IOA [ ] [ ] [ ] [ ] [ ] [ ]
COMPARE [ ] [ ] [ ] [ ] [ ] [ ]

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:

RJDF2B F4/F5 MANIFOLD DRIVER SWITCH 15 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs FRCS 11155X-11159X.

REPORT DATE 2/26/88 C-1095
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88  
ASSESSMENT ID: FRCS-1132  
NASA FMEA #: NONE

SUBSYSTEM:  
MDAC ID: 1132  
ITEM: RJDF1B MANIFOLD F1 TRICKLE TEST

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

*CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
The three RJDF TRICKLE TESTS IMPLEMENT A SOFTWARE ROUTINE TO VERIFY LOGIC OUTPUTS FROM VARYING A AND B PULSE COMMAND INPUTS. ASSOCIATED FAILURES HAVE BEEN CONSIDERED IN THE HARDWARE/EPD&C ANALYSIS AND ASSESSMENT.

REPORT DATE 2/26/88 C-1096
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1133
NASA FMEA #: NONE
NASA DATA:
BASELINE [ ]
NEW [ ]

SUBSYSTEM: FRCS
MDAC ID: 1133
ITEM: RJDF1A MANIFOLD F2 TRICKLE TEST

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:

THE THREE RJDF TRICKLE TESTS IMPLEMENT A SOFTWARE ROUTINE TO VERIFY LOGIC OUTPUTS FROM VARYING A AND B PULSE COMMAND INPUTS. ASSOCIATED FAILURES HAVE BEEN CONSIDERED IN THE HARDWARE/EPD&C ANALYSIS AND ASSESSMENT.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1134
NASA FMEA #: NONE

SUBSYSTEM: FRCS
MDAC ID: 1134
ITEM: RJDF2A MANIFOLD F3 TRICKLE TEST

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

| CRITICALITY | REDUNDANCY SCREENS | CIL |
| HDW/FUNC | A | B | C |
| NASA | [ ] | [ ] | [ ] | [ ] | [ ] |
| IOA | [3/3] | [ ] | [ ] | [ ] | [ ] |
| COMPARE | [N/N] | [ ] | [ ] | [ ] | [ ] |

RECOMMENDATIONS: (If different from NASA)

[ / ] [ ] [ ] [ ] [ ] [ ] [ ]

(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:

THE THREE RJDF TRICKLE TESTS IMPLEMENT A SOFTWARE ROUTINE TO VERIFY LOGIC OUTPUTS FROM VARYING A AND B PULSE COMMAND INPUTS. ASSOCIATED FAILURES HAVE BEEN CONSIDERED IN THE HARDWARE/EPD&C ANALYSIS AND ASSESSMENT.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88  NASA DATA:
ASSESSMENT ID: FRCS-1135  BASELINE [  ]
NASA FMEA #: NONE  NEW [  ]

SUBSYSTEM: FRCS
MDAC ID: 1135
ITEM: RJDF2B MANIFOLD F4, F5 TRICKLE TEST

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
THE THREE RJDF TRICKLE TESTS IMPLEMENT A SOFTWARE ROUTINE TO VERIFY LOGIC OUTPUTS FROM VARYING A AND B PULSE COMMAND INPUTS. ASSOCIATED FAILURES HAVE BEEN CONSIDERED IN THE HARDWARE/EPD&C ANALYSIS AND ASSESSMENT.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1136
NASA FMEA #: 03-2F-121314 -2

SUBSYSTEM: FRCS
MDAC ID: 1136
ITEM: CHAMBER PRESSURE (Pc) SENSOR, THRUSTERS F1D, F3D, F2D, F4D

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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| IOA           | [ 3 /2R ]          | [ P ] | [ P ] | [ P ] | [ ] |
| COMPARE       | [ /N ]             | [ ]   | [ ]   | [ ]   | [ ] |

RECOMMENDATIONS: (If different from NASA)

[ / ] [ ] [ ] [ ] [ ] [ ]

(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
IOA AGREES WITH NASA FMEA.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
NASA DATA:
ASSESSMENT ID: FRCS-1137
NASA FMEA #: 03-2F-121314 -1
SUBSYSTEM: FRCS
MDAC ID: 1137
ITEM: CHAMBER PRESSURE (Pc) SENSOR, THRUSTERS F1D, F3D, F2D, F4D
LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

* CIL RETENTION RATIONALE: (If applicable)

REMARKS:
IOA AGREES WITH NASA FMEA.

REPORT DATE 2/26/88 C-1101
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1138
NASA FMEA #: 03-2F-121314 -2

ASSESSMENT ID: FRCS-1138
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 1138
ITEM: CHAMBER PRESSURE (Pc) SENSOR, THRUSTERS F1F, F2F, F3F

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
IOA AGREES WITH NASA FMEA.

REPORT DATE 2/26/88 C-1102
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1139
NASA FMEA #: 03-2F-121314 -1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 1139
ITEM: CHAMBER PRESSURE (Pc) SENSOR, THRUSTERS F1F, F2F, F3F

LEAD ANALYST: D. HARTMAN

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COMPARE [ /N ]

RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
IOA AGREES WITH NASA FMEA.

REPORT DATE 2/26/88 C-1103
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1140
NASA FMEA #: 03-2F-121314-2

NASA DATA: BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 1140
ITEM: CHAMBER PRESSURE (Pc) SENSOR, THRUSTERS F1L, F3L, F2R, F4R

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
IOA AGREES WITH NASA FMEA.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1141
NASA FMEA #: 03-2F-121314 -1

SUBSYSTEM: FRCS
MDAC ID: 1141
ITEM: CHAMBER PRESSURE (Pc) SENSOR, THRUSTERS F1L, F3L, F2R, F4R

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
IOA AGREES WITH NASA FMEA.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1142
NASA FMEA #: 03-2F-121314 -2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 1142
ITEM: CHAMBER PRESSURE (Pc) SENSOR, THRUSTERS F1U, F2U, F3U

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)
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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
IOA AGREES WITH NASA FMEA.

REPORT DATE 2/26/88 C-1106
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1143
NASA FMEA #: 03-2P-121314-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 1143
ITEM: CHAMBER PRESSURE (Pc) SENSOR, THRUSTERS F1U, F2U, F3U

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

CRITICALITY
FLIGHT HDW/FUNC

REDUNDANCY SCREENS
A B C

CIL ITEM

NASA [ 3 /1R ] [ P ] [ P ] [ P ] [ ] *
IOA [ 3 /2R ] [ P ] [ P ] [ P ] [ ]

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

RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
IOA AGREES WITH NASA FMEA.

REPORT DATE 2/26/88 C-1107
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1144
NASA FMEA #: NONE

NASA DATA:
BASELINE [ ]
NEW [ ]

SUBSYSTEM: MDAC
MDAC ID: 1144
ITEM: CHAMBER PRESSURE (Pc) SENSOR, THRUSTERS F5L, F5R

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

[ 3/2R ] [ P ] [ F ] [ P ] [ A ]
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
VERNIER THRUSTERS CHAMBER PRESSURE SENSORS NOT ADDRESSED BY A FMEA. IOA RECOMMENDS THEIR INCLUSION INTO A FMEA. NOTE: PRIMARY SENSORS CONTAINED IN 03-2F-121314-2 FMEA.

SUBSYSTEM MANAGER STATED THAT THE SENSORS WERE PART OF THE VERNIER THRUSTER ASSEMBLY. FOR COMPLETENESS, IOA RECOMMENDS THE FAILURE BE INCORPORATED INTO A FMEA.

REPORT DATE 2/26/88
C-1108
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1145
NASA FMEA #: NONE

SUBSYSTEM: FRCS
MDAC ID: 1145
ITEM: CHAMBER PRESSURE (Pc) SENSOR, THRUSTERS F5L, F5R

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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IOA [ 3 /2R ] [ P ] [ P ] [ P ] [ ]

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

RECOMMENDATIONS: (If different from NASA)

[ 3 /2R ] [ P ] [ F ] [ P ] [ A ]
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
VERNIER THRUSTERS CHAMBER PRESSURE SENSORS NOT ADDRESSED BY A
FMEA. IOA RECOMMENDS THEIR INCLUSION INTO A FMEA. NOTE:
PRIMARY SENSORS CONTAINED IN 03-2F-121314-1 FMEA.

SUBSYSTEM MANAGER STATED THAT THE SENSORS WERE PART OF THE
VERNIER THRUSTER ASSEMBLY. FOR COMPLETENESS, IOA RECOMMENDS THE
FAILURE BE INCORPORATED INTO A FMEA.

REPORT DATE 2/26/88 C-1109
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1146
NASA FMEA #: 03-2F-121315 -2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 1146
ITEM: OX OR FU INJECTOR TEMP SENSOR, THRUSTERS F1D, F2D, F3D, F4D

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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| IOA [ 3 /2R ] | [ P ] | [ P ] | [ P ] |
| COMPARE [ /N ] | [ ] | [ ] | [ ] | [ ] |

RECOMMENDATIONS: (If different from NASA)

[ / ] [ ] [ ] [ ] [ ]

(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
IOA AGREES WITH NASA FMEA.

REPORT DATE 2/26/88 C-1110
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1147
NASA FMEA #: 03-2F-121315 -1

SUBSYSTEM: FRCS
MDAC ID: 1147
ITEM: OX OR FU INJECTOR TEMP SENSOR, THRUSTERS F1D, F2D, F3D, F4D

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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*CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]

INADEQUATE [ ]

REMARKS:

IOA AGREES WITH NASA FMEA.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1148
NASA FMEA #: 03-2F-121315 -2
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 1148
ITEM: OX OR FU INJECTOR TEMP SENSOR, THRUSTERS F1F, F2F, F3F

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
IOA AGREES WITH NASA FMEA.

REPORT DATE 2/26/88 C-1112
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1149
NASA FMEA #: 03-2F-121315 -1
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 1149
ITEM: OX OR FU INJECTOR TEMP SENSOR, THRUSTERS F1F,
F2F, F3F

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)
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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
IOA AGREES WITH NASA FMEA.

REPORT DATE 2/26/88 C-1113
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1150
NASA FMEA #: 03-2F-121315 -2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 1150
ITEM: OX OR FU INJECTOR TEMP SENSOR, THRUSTERS F1L, F3L, F2R, F4R

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
IOA AGREES WITH NASA FMEA.

REPORT DATE 2/26/88
C-1114
## APPENDIX C
### ASSESSMENT WORKSHEET

**ASSESSMENT DATE:** 1/29/88  |  **NASA DATA:**
**ASSESSMENT ID:** FRCS-II51     |  **BASELINE** [ ]
**NASA FMEA #:** 03-2F-121315 -1  |  **NEW** [ X ]

**SUBSYSTEM:** FRCS
**MDAC ID:** 1151
**ITEM:** OX OR FU INJECTOR TEMP SENSOR, THRUSTERS F1L, F3L, F2R, F4R

**LEAD ANALYST:** D. HARTMAN

**ASSESSMENT:**

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**COMPARE [ /N ]**

**RECOMMENDATIONS:** (If different from NASA)

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(ADD/DELETE)

*** CIL RETENTION RATIONALE:** (If applicable)

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**REMARKS:**
IOA AGREES WITH NASA FMEA.

**REPORT DATE 2/26/88** C-1115
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1152
NASA FMEA #: 03-2F-121315 -2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 1152
ITEM: OX OR FU INJECTOR TEMP SENSOR, THRUSTERS F1U, F2U, F3U

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)
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* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
IOA AGREES WITH NASA FMEA.

REPORT DATE 2/26/88 C-1116
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1153
NASA FMEA #: 03-2F-121315 -1
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 1153
ITEM: OX OR FU INJECTOR TEMP SENSOR, THRUSTERS F1U, F2U, F3U
LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
IOA AGREES WITH NASA FMEA.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1154
NASA FMEA #: NONE

SUBSYSTEM: FRCS
MDAC ID: 1154
ITEM: OX OR FU INJECTOR TEMP SENSOR, THRUSTERS F5L, F5R

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

| 3/2R | P | F | P | A |

(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:

VERNIER THRUSTERS INJECTOR TEMPERATURE SENSORS NOT ADDRESSED BY A FMEA. IOA RECOMMENDS THEIR INCLUSION INTO A FMEA. NOTE:
PRIMARY SENSORS CONTAINED IN 03-2F-121315-2 FMEA.

SUBSYSTEM MANAGER STATED THAT THE SENSORS WERE PART OF THE VERNIER THRUSTER ASSEMBLY. FOR COMPLETENESS, IOA RECOMMENDS THE FAILURE BE INCORPORATED INTO A FMEA.

REPORT DATE 2/26/88 C-1118
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1155
NASA FMEA #: FRCS
NASA DATA:
BASELINE [ ]
NEW [ ]

SUBSYSTEM: FRCS
MDAC ID: 1155
ITEM: OX OR Fu INJECTOR TEMP SENSOR, THRUSTERS F5L, F5R

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONAL: (If applicable)

Adequate [ ]
Inadequate [ ]

REMARKS:
VERNIER THRUSTERS INJECTOR TEMPERATURE SENSORS NOT ADDRESSED BY A FMEA. IOA RECOMMENDS THEIR INCLUSION INTO A FMEA. NOTE:
PRIMARY SENSORS CONTAINED IN 03-2F-121315-1 FMEA.

SUBSYSTEM MANAGER STATED THAT THE SENSORS WERE PART OF THE VERNIER THRUSTER ASSEMBLY. FOR COMPLETENESS, IOA RECOMMENDS THE FAILURE BE INCORPORATED INTO A FMEA.

REPORT DATE 2/26/88
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1156
NASA FMEA #: 05-6KF-2215 -1

SUBSYSTEM: FRCS
MDAC ID: 1156
ITEM: DRIVER, HYBRID
LEAD ANALYST: D. HARTMAN

ASSESSMENT:

CRITICALITY
FLIGHT
HDW/FUNC

REDUNDANCY SCREENS
A     B     C

CIL
ITEM

NASA [ 3 /2R ] [ P ] [ P ] [ P ] [ ] *

IOA [ 3 /2R ] [ P ] [ P ] [ P ] [ ]

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

RECOMMENDATIONS: (If different from NASA)

[ / ] [ ] [ ] [ ] [ ]

(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]

INADEQUATE [ ]

REMARKS:

NO DIFFERENCES.

REPORT DATE 2/26/88 C-1120
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1157
NASA FMEA #: 05-6KF-2215 -2
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 1157
ITEM: DRIVER, HYBRID

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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*CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
INABILITY TO TURN HEATER OFF MAY CAUSE LOSS OF MISSION OBJECTIVES DUE TO ORBITER POINTING DEEP SPACE FOR COOLING.

ISSUE NOT RESOLVED AT THE MEETING WITH THE SUBSYSTEM MANAGER ON 1/20/88.

REPORT DATE 2/26/88 C-1121
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1158
NASA FMEA #: 05-6KF-2215 -I
SUBSYSTEM: FRCS
MDAC ID: 1158
ITEM: DRIVER, HYBRID
LEAD ANALYST: D. HARTMAN

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

RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-1122
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1159
NASA FMEA #: 05-6KF-2215 -2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 1159
ITEM: DRIVER, HYBRID

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)
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* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
INABILITY TO TURN HEATER OFF MAY CAUSE LOSS OF MISSION OBJECTIVES DUE TO ORBITER POINTING DEEP SPACE FOR COOLING.

ISSUE NOT RESOLVED AT THE MEETING WITH THE SUBSYSTEM MANAGER ON 1/20/88.

REPORT DATE 2/26/88 C-1123
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1160
NASA FMEA #: 05-6KF-2215 -1
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 1160
ITEM: DRIVER, HYBRID
LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)
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* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-1124
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1161
NASA FMEA #: 05-6KF-2215-2
NASA DATA: BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 1161
ITEM: DRIVER, HYBRID
LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)
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INADEQUATE [ ]

REMARKS:
INABILITY TO TURN HEATER OFF MAY CAUSE LOSS OF MISSION OBJECTIVES DUE TO ORBITER POINTING DEEP SPACE FOR COOLING.

ISSUE NOT RESOLVED AT THE MEETING WITH THE SUBSYSTEM MANAGER ON 1/20/88.

REPORT DATE 2/26/88 C-1125
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1162
NASA FMEA #: 05-6KF-2215 -1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 1162
ITEM: DRIVER, HYBRID

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)
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* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1163
NASA FMEA #: 05-6KF-2215 -2
NASA DATA: BASELINE [ ] NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 1163
ITEM: DRIVER, HYBRID

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)
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*CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ] INADEQUATE [ ]

REMARKS:
INABILITY TO TURN HEATER OFF MAY CAUSE LOSS OF MISSION OBJECTIVES DUE TO ORBITER POINTING DEEP SPACE FOR COOLING.

ISSUE NOT RESOLVED AT THE MEETING WITH THE SUBSYSTEM MANAGER ON 1/20/88.

REPORT DATE 2/26/88 C-1127
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1164
NASA FMEA #: 05-6KF-2215 -1
SUBSYSTEM: FRCS
MDAC ID: 1164
ITEM: DRIVER, HYBRID
LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)
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* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-1128
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1165
NASA FMEA #: 05-6KF-2215 -2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 1165
ITEM: DRIVER, HYBRID

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
INABILITY TO TURN HEATER OFF MAY CAUSE LOSS OF MISSION OBJECTIVES DUE TO ORBITER POINTING DEEP SPACE FOR COOLING.

ISSUE NOT RESOLVED AT THE MEETING WITH THE SUBSYSTEM MANAGER ON 1/20/88.

REPORT DATE 2/26/88 C-1129
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88  NASA DATA:  
ASSESSMENT ID: FRCS-1166  BASELINE [ ]  
NASA FMEA #: 05-6KF-2215 -1  NEW [ X ]  

SUBSYSTEM: FRCS  
MDAC ID: 1166  
ITEM: DRIVER, HYBRID  

LEAD ANALYST: D. HARTMAN  

ASSESSMENT:  

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RECOMMENDATIONS: (If different from NASA)  
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* CIL RETENTION RATIONALE: (If applicable)  
ADEQUATE [ ]  
INADEQUATE [ ]

REMARKS:  
NO DIFFERENCES.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1167
NASA FMEA #: 05-6KF-2215 -2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 1167
ITEM: DRIVER, HYBRID

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)
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*(ADD/DELETE)*

* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
INABILITY TO TURN HEATER OFF MAY CAUSE LOSS OF MISSION OBJECTIVES DUE TO ORBITER POINTING DEEP SPACE FOR COOLING.

ISSUE NOT RESOLVED AT THE MEETING WITH THE SUBSYSTEM MANAGER ON 1/20/88.

REPORT DATE 2/26/88 C-1131
ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1168
NASA FMEA #: 05-6KF-2215 -1
SUBSYSTEM: FRCS
MDAC ID: 1168
ITEM: DRIVER, HYBRID
LEAD ANALYST: D. HARTMAN
ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1169
NASA FMEA #: 05-6KF-2215 -2
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 1169
ITEM: DRIVER, HYBRID
LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
INABILITY TO TURN HEATER OFF MAY CAUSE LOSS OF MISSION OBJECTIVES DUE TO ORBITER POINTING DEEP SPACE FOR COOLING.

ISSUE NOT RESOLVED AT THE MEETING WITH THE SUBSYSTEM MANAGER ON 1/20/88.

REPORT DATE 2/26/88 C-1133
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1170
NASA FMEA #: 05-6KF-2215 -1

SUBSYSTEM: FRCS
MDAC ID: 1170
ITEM: DRIVER, HYBRID
LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1171
NASA FMEA #: 05-6KF-2215-2
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 1171
ITEM: DRIVER, HYBRID

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
INABILITY TO TURN HEATER OFF MAY CAUSE LOSS OF MISSION OBJECTIVES DUE TO ORBITER POINTING DEEP SPACE FOR COOLING.

ISSUE NOT RESOLVED AT THE MEETING WITH THE SUBSYSTEM MANAGER ON 1/20/88.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1172
NASA FMEA #: 05-6KF-2215 -1
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 1172
ITEM: DRIVER, HYBRID

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-1136
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1173
NASA FMEA #: 05-6KF-2215 -2

SUBSYSTEM: FRCS
MDAC ID: 1173
ITEM: DRIVER, HYBRID
LEAD ANALYST: D. HARTMAN

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

RECOMMENDATIONS: (If different from NASA)

[ 3 /2R ] [ P ] [ P ] [ P ] [ ] (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
INABILITY TO TURN HEATER OFF MAY CAUSE LOSS OF MISSION OBJECTIVES DUE TO ORBITER POINTING DEEP SPACE FOR COOLING.

ISSUE NOT RESOLVED AT THE MEETING WITH THE SUBSYSTEM MANAGER ON 1/20/88.

REPORT DATE 2/26/88 C-1137
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1174
NASA FMEA #: 05-6KF-2215 -1
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 1174
ITEM: DRIVER, HYBRID
LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-1138
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1175
NASA FMEA #: 05-6KF-2215 -2

SUBSYSTEM: FRCS
MDAC ID: 1175
ITEM: DRIVER, HYBRID
LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
INABILITY&127HEATER OFF MAY CAUSE LOSS OF MISSION OBJECTIVES DUE TO ORBITER POINTING DEEP SPACE FOR COOLING.

ISSUE NOT RESOLVED AT THE MEETING WITH THE SUBSYSTEM MANAGER ON 1/20/88.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1176
NASA FMEA #: 05-6KF-2215 -1

SUBSYSTEM: FRCS
MDAC ID: 1176
ITEM: DRIVER, HYBRID
LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1177
NASA FMEA #: 05-6KF-2215 -2

SUBSYSTEM: FRCS
MDAC ID: 1177
ITEM: DRIVER, HYBRID

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

| CRITICALLY | REDUNDANCY SCREENS | CIL |
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| COMPARE    | [N/| [N] | [N] | [N] | [ ] |

RECOMMENDATIONS: (If different from NASA)

[3/2R] [P] [P] [P] [ ]

* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
INABILITY TO TURN HEATER OFF MAY CAUSE LOSS OF MISSION OBJECTIVES DUE TO ORBITER POINTING DEEP SP A E FOR COOLING.

ISSUE NOT RESOLVED AT THE MEETING WITH THE SUBSYSTEM MANAGER ON 1/20/88.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1178
NASA FMEA #: 05-6KF-2215 -I

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 1178
ITEM: DRIVER, HYBRID
LED ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

[ ] (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-1142
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1179
NASA FMEA #: 05-6KF-2215 -2

SUBSYSTEM: FRCS
MDAC ID: 1179
ITEM: DRIVER, HYBRID
LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
INABILITY TO TURN HEATER OFF MAY CAUSE LOSS OF MISSION OBJECTIVES DUE TO ORBITER POINTING DEEP SPACE FOR COOLING.

ISSUE NOT RESOLVED AT THE MEETING WITH THE SUBSYSTEM MANAGER ON 1/20/88.

REPORT DATE 2/26/88 C-1143
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1180
NASA FMEA #: 05-6KF-2013-1
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 1180
ITEM: FUSE, 20A

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)
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* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-1144
### APPENDIX C
#### ASSESSMENT WORKSHEET

**ASSESSMENT DATE:** 1/29/88  
**ASSESSMENT ID:** FRCS-1181  
**NASA FMEA #:** 05-6KF-2013 -1  
**SUBSYSTEM:** FRCS  
**MDAC ID:** 1181  
**ITEM:** FUSE, 20A  
**LEAD ANALYST:** D. HARTMAN

**ASSESSMENT:**

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**RECOMMENDATIONS:** (If different from NASA)

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(ADD/DELETE)

* **CIL RETENTION RATIONALE:** (If applicable)

ADEQUATE [ ]  
INADEQUATE [ ]

**REMARKS:**

NO DIFFERENCES.

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**REPORT DATE 2/26/88 C-1145**
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1182
NASA FMEA #: 05-6KF-2013 -1
SUBSYSTEM: FRCS
MDAC ID: 1182
ITEM: FUSE, 20A
LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1183
NASA FMEA #: 05-6KF-2013-1

SUBSYSTEM: FRCS
MDAC ID: 1183
ITEM: FUSE, 20A
LEAD ANALYST: D. HARTMAN

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 1183
ITEM: FUSE, 20A

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)
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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-1147
**APPENDIX C**

**ASSESSMENT WORKSHEET**

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**SUBSYSTEM:** FRCS  
**MDAC ID:** 1184  
**ITEM:** FUSE, 20A  
**LEAD ANALYST:** D. HARTMAN

**ASSESSMENT:**

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**RECOMMENDATIONS:**  (If different from NASA)

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* (ADD/DELETE)

**CIL RETENTION RATIONALE:**  (If applicable)

| ADEQUATE | [ ] |
| INADEQUATE | [ ] |

**REMARKS:**

NO DIFFERENCES.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1185
NASA FMEA #: 05-6KF-2013-I

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 1185
ITEM: FUSE, 20A

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)
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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-1149
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1186
NASA FMEA #: 05-6KF-2013 -1
SUBSYSTEM: FRCS
MDAC ID: 1186
ITEM: FUSE, 20A
LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1187
NASA FMEA #: 05-6KF-2013 -1

NASA DATA: BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 1187
ITEM: FUSE, 20A

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-1151
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1188
NASA FMEA #: 05-6KF-2012 -1
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 1188
ITEM: FUSE, 1A

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES. NOTE: SPACE SHUTTLE SYSTEMS HANDBOOK SHOWS 3 AMP FUSES BUT SCHEMATIC VS70-942099 SHOWS 1 AMP FUSES.

REPORT DATE 2/26/88 C-1152
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1189
NASA FMEA #: 05-6KF-2012 -1
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 1189
ITEM: FUSE, 1A
LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)
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* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES. NOTE: SPACE SHUTTLE SYSTEMS HANDBOOK SHOWS 3 AMP FUSES BUT SCHEMATIC VS70-942099 SHOWS 1 AMP FUSES.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1190
NASA FMEA #: 05-6KF-2012 -1
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 1190
ITEM: FUSE, 1A

LEAD ANALYST: D. HARTMAN

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

RECOMMENDATIONS: (If different from NASA)
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* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES. NOTE: SPACE SHUTTLE SYSTEMS HANDBOOK SHOWS 3 AMP FUSES BUT SCHEMATIC VS70-942099 SHOWS 1 AMP FUSES.

REPORT DATE 2/26/88 C-1154
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88  NASA DATA:
ASSESSMENT ID: FRCS-1191  BASELINE [ ]
NASA FMEA #: 05-6KF-2012 -1  NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 1191
ITEM: FUSE, 1A

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS:  (If different from NASA)

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* CIL RETENTION RATIONALE:  (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.  NOTE:  SPACE SHUTTLE SYSTEMS HANDBOOK SHOWS 3 AMP FUSES BUT SCHEMATIC VS70-942099 SHOWS 1 AMP FUSES.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1192
NASA FMEA #: 05-6KF-2011 -1

SUBSYSTEM: FRCS
MDAC ID: 1192
ITEM: FUSE, 7.5A
LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
IOA AGREES WITH NASA FMEA.

REPORT DATE 2/26/88 C-1156
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1193
NASA FMEA #: 05-6KF-2011 -1
SUBSYSTEM: FRCS
MDAC ID: 1193
ITEM: FUSE, 7.5A
LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
IOA AGREES WITH NASA FMEA.

REPORT DATE 2/26/88 C-1157
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88  NASA DATA:
ASSESSMENT ID:  FRCS-1194  BASELINE [   ]
NASA FMEA #:  05-6KF-2011 -1  NEW [ X ]

SUBSYSTEM:  FRCS
MDAC ID:  1194
ITEM:  FUSE, 7.5A

LEAD ANALYST:  D. HARTMAN

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RECOMMENDATIONS:  (If different from NASA)

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* CIL RETENTION RATIONALE:  (If applicable)
ADEQUATE [   ]
INADEQUATE [   ]

REMARKS:
IOA AGREES WITH NASA FMEA.

REPORT DATE 2/26/88  C-1158
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1195
NASA FMEA #: 05-6KF-2011A-1

SUBSYSTEM: FRCS
MDAC ID: 1195
ITEM: FUSE, 7.5A
LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA) [ / ] [ ] [ ] [ ] [ ] (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable) ADEQUATE [ ] INADEQUATE [ ]

REMARKS:
NO DIFFERENCES. NOTE: THE 7.5 AMP FUSE LISTED ABOVE IS INCORRECT. IT SHOULD BE A 5 AMP FUSE.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1196
NASA FMEA #: 05-6KF-2010 -1
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 1196
ITEM: FUSE, 7.5A

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)
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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES. NOTE: THE 7.5 AMP FUSE LISTED ABOVE IS INCORRECT. IT SHOULD BE A 5 AMP FUSE.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1197
NASA FMEA #: 03-2F-103340 -2
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM:
MDAC ID: FRCS
ITEM: HEATER 90W, A & B OX LWR HTR PNL 3

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-1161
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1198
NASA FMEA #: 03-2F-103340 -2

SUBSYSTEM: FRCS
MDAC ID: 1198
ITEM: HEATER 90W, A & B OX LWR HTR PNL 3
LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-1162
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88  NASA DATA:
ASSESSMENT ID: FRCS-1199  BASELINE [ ]
NASA FMEA #: 03-2P-103340 -2   NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 1199
ITEM: HEATER 90W, A & B OX LWR HTR PNL 1

LEAD ANALYST: D. HARTMAN

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* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1200
NASA FMEA #: 03-2F-103340 -2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 1200
ITEM: HEATER 90W, A & B OX LWR HTR PNL 1

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-1164
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1201
NASA FMEA #: 03-2F-103340-2
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 1201
ITEM: HEATER 90W, A & B OX FWD HTR PNL 4

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)
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* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88
C-1165
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1202
NASA FMEA #: 03-2F-103340 -2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 1202
ITEM: HEATER 90W, A & B OX FWD HTR PNL 4

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
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REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-1166
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1203
NASA FMEA #: 03-2F-103340 -2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 1203
ITEM: HEATER 90W, A & B OX LWR HTR PNL 2

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)
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* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-1167
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1204
NASA FMEA #: 03-2F-103340 -2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 1204
ITEM: HEATER 90W, A & B OX LWR HTR PNL 2

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)
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* CIL RETENTION RATIONALE: (If applicable)
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INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/6/88 C-1168
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1205
NASA FMEA #: 03-2F-103340 -2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 1205
ITEM: HEATER 90W, A & B FU FWD HTR PNL 5

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.
APPENDIX C
ASSessment WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1206
NASA FMEA #: 03-2F-103340 -2

SUBSYSTEM: FRCS
MDAC ID: 1206
ITEM: HEATER 90W, A & B FU FWD HTR PNL 5
LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
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REMARKS:
NO DIFFERENCES.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1207
NASA FMEA #: 03-2F-103340 -2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 1207
ITEM: HEATER 90W, A & B OX LWR HTR PNL 6

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
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REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88
C-1171
**APPENDIX C**  
**ASSESSMENT WORKSHEET**

ASSESSMENT DATE: 1/29/88  
ASSESSMENT ID: FRCS-1208  
NASA FMEA #: 03-2F-103340 -2

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

**SUBSYSTEM:** FRCS  
MDAC ID: 1208  
ITEM: HEATER 90W, A & B OX LWR HTR PNL 6

**LEAD ANALYST:** D. HARTMAN

**ASSESSMENT:**

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**RECOMMENDATIONS:** (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

**REMARKS:**

NO DIFFERENCES.

REPORT DATE 2/26/88  
C-1172
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1209
NASA FMEA #: 03-2F-121316 -1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 1209
ITEM: HEATER 20W, THRUSTER, PRIMARY, -X AXIS

LEAD ANALYST: D. HARTMAN

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
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REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-1173
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1210
NASA FMEA #: 03-2F-121316 -2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 1210
ITEM: HEATER 20W, THRUSTER, PRIMARY, -X AXIS

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS:
(If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:

IOA AGREES WITH NASA FMEA.

REPORT DATE 2/26/88 C-1174
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1211
NASA FMEA #: 03-2F-121316 -1
SUBSYSTEM: FRCS
MDAC ID: 1211
ITEM: HEATER 20W, THRUSTER, PRIMARY, Y AXIS
LEAD ANALYST: D. HARTMAN

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
IOA AGREES WITH NASA FMEA.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1212
NASA FMEA #: 03-2F-121316 -2

NASA DATA:
BASELINE [  ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 1212
ITEM: HEATER 20W, THRUSTER, PRIMARY, Y AXIS

LEAD ANALYST: D. HARTMAN

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* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
IOA AGREES WITH NASA FMEA.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1213
NASA FMEA #: 03-2F-121316 -i

SUBSYSTEM: FRCS
MDAC ID: 1213
ITEM: HEATER 20W, THRUSTER, PRIMARY, Z AXIS

LEAD ANALYST: D. HARTMAN

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* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-1177
**APPENDIX C**

**ASSESSMENT WORKSHEET**

**ASSESSMENT DATE:** 1/29/88  
**NASJ DATA:**  
**ASSESSMENT ID:** FRCS-1214  
**NASA FMEA #:** 03-2F-121316 -2  
**SUBSYSTEM:** FRCS  
**MDAC ID:** 1214  
**ITEM:** HEATER 20W, THRUSTER, PRIMARY, Z AXIS  
**LEAD ANALYST:** D. HARTMAN  

**ASSESSMENT:**

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**RECOMMENDATIONS:** (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

**REMARKS:**

IOA AGREES WITH NASA FMEA.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1215
NASA FMEA #: 03-2F-121317 -1

SUBSYSTEM: FRCS
MDAC ID: 1215
ITEM: HEATER 10W, THRUSTER, VERNIER, ALL AXES

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1216
NASA FMEA #: 03-2F-121317 -2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 1216
ITEM: HEATER 10W, THRUSTER, VERNIER, ALL AXES

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
IOA AGREES WITH NASA FMEA.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1217
NASA FMEA #: 05-6KF-2131 -1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 1217
ITEM: RELAY

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1218
NASA FMEA #: 05-6KF-2131 -2

SUBSYSTEM: FRCS
MDAC ID: 1218
ITEM: RELAY

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
IOA AGREES WITH NASA FMEA.

REPORT DATE 2/26/88 C-1182
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1219
NASA FMEA #: 05-6KF-2131 -1
SUBSYSTEM: FRCS
MDAC ID: 1219
ITEM: RELAY
LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1220
NASA FMEA #: 05-6KF-2131 -2
SUBSYSTEM: FRCS
MDAC ID: 1220
ITEM: RELAY
LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
IOA AGREES WITH NASA FMEA.

REPORT DATE 2/26/88 C-1184
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1221
NASA FMEA #: 05-6KF-2101 -1
SUBSYSTEM: FRCS
MDAC ID: 1221
ITEM: RESISTOR, 1.2K 2W
LEAD ANALYST: D. HARTMAN

NASA DATA:
BASELINE [ ]
NEW [ X ]

CRITICALITY
FLIGHT
HDW/FUNC
REDUNDANCY SCREENS
CIL
ITEM

NASA [ 3 /2R ] [ P ] [ P ] [ P ] [ P ] [ ] *
IOA [ 3 /2R ] [ P ] [ P ] [ P ] [ P ] [ ]
COMPARE [ / ] [ ] [ ] [ ] [ ] [ ]

RECOMMENDATIONS: (If different from NASA)
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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-1185
# APPENDIX C
## ASSESSMENT WORKSHEET

**ASSESSMENT DATE:** 1/29/88  
**ASSESSMENT ID:** FRCS-1222  
**NASA FMEA #:** 05-6KF-2101 -2  
**SUBSYSTEM:** FRCS  
**MDAC ID:** 1222  
**ITEM:** RESISTOR, 1.2K 2W  
**LEAD ANALYST:** D. HARTMAN  

**ASSESSMENT:**

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| COMPARE | / | [ ] | [ ] | [ ] | [ ] | [ ] | [ ] |

**RECOMMENDATIONS:**  
(If different from NASA)

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(ADD/DELETE)

* **CIL RETENTION RATIONALE:**  
(If applicable)

**ADEQUATE** [ ]  
**INADEQUATE** [ ]

**REMARKS:**

NO DIFFERENCES.
ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1223
NASA FMEA #: 05-6KF-2101 -1
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 1223
ITEM: RESISTOR, 1.2K 2W

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)
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* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-1187
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1224
NASA FMEA #: 05-6KF-2101 -2
SUBSYSTEM: FRCS
MDAC ID: 1224
ITEM: RESISTOR, 1.2K 2W
LEAD ANALYST: D. HARTMAN

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IOA [ 3 /3 ] [ ] [ ] [ ] [ ] [ ]

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

RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-1188
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1225
NASA FMEA #: 05-6KF-2100 -1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 1225
ITEM: RESISTOR, 5.1K 1/4W

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)
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* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-1189
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1226
NASA FMEA #: 05-6KF-2100 -1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 1226
ITEM: RESISTOR, 5.1K 1/4W

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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

RECOMMENDATIONS:  (If different from NASA)

[ / ] [ ] [ ] [ ] [ ] [ ] [ ]

(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
A SHORT ACROSS A RLR TYPE RESISTOR IS NOT A CREDIBLE FAILURE. IOA RECOMMENDS REMOVAL OF THE "SHORT" FAILURE MODE FROM THIS FMEA.

ISSUE RESOLVED AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88 (SHORT FAILURE MODE TO BE REMOVED).
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1227
NASA FMEA #: NONE

NASA DATA:
BASELINE [ ]
NEW [ ]

SUBSYSTEM: FRCS
MDAC ID: 1227
ITEM: RESISTOR, 1.2K 2W

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

| ADEQUATE [ ] |
| INADEQUATE [ ] |

REMARKS:
NO NASA FMEA FOR THIS RESISTOR. CIRCUIT IS NOT WIRED ON OTHER SIDE OF RESISTOR.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1228
NASA FMEA #: NONE

NASA DATA:
BASELINE [ ]
NEW [ ]

SUBSYSTEM: FRCS
MDAC ID: 1228
ITEM: RESISTOR, 1.2K 2W

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

CRITICALITY REDUNDANCY SCREENS CIL
FLIGHT HDW/FUNC A B C ITEM

NASA [ ] [ ] [ ] [ ] [ ] *
IOA [ 3 /3 ] [ ] [ ] [ ] [ ] [ ]
COMPARE [ N /N ] [ ] [ ] [ ] [ ] [ ]

RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO NASA FMEA FOR THIS RESISTOR. CIRCUIT IS NOT WIRED ON OTHER
SIDE OF RESISTOR.

REPORT DATE 2/26/88 C-1192
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1229
NASA FMEA #: NONE

NASA DATA:
BASELINE [ ]
NEW [ ]

SUBSYSTEM: FRCS
MDAC ID: 1229
ITEM: RESISTOR, 1.2K 2W

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO NASA FMEA FOR THIS RESISTOR. CIRCUIT IS NOT WIRED ON OTHER SIDE OF RESISTOR.

REPORT DATE 2/26/88 C-1193
### APPENDIX C

#### ASSESSMENT WORKSHEET

**ASSESSMENT DATE:** 1/29/88  
**NASA DATA:**  
**ASSESSMENT ID:** FRCS-1230  
**NASA FMEA #:** NONE  

**SUBSYSTEM:** FRCS  
**MDAC ID:** 1230  
**ITEM:** RESISTOR, 1.2K 2W  
**LEAD ANALYST:** D. HARTMAN  

**ASSESSMENT:**

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**RECOMMENDATIONS:**  
(If different from NASA)

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* **CIL RETENTION RATIONALE:** (If applicable)

ADEQUATE [ ]  
INADEQUATE [ ]

**REMARKS:**  
NO NASA FMEA FOR THIS RESISTOR. CIRCUIT IS NOT WIRED ON OTHER SIDE OF RESISTOR.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1231
NASA FMEA #: 05-6KF-2101 -1
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 1231
ITEM: RESISTOR, 1.2K 2W

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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IOA [ 3 /2R ] [ P ] [ P ] [ P ] [ ]

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

RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-1195
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1232
NASA FMEA #: 05-6KF-2101 -2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 1232
ITEM: RESISTOR, 1.2K 2W

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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| IOA | [ 3 /3 ] | [ ] | [ ] | [ ] | [ ] |
| COMPARE | [ / ] | [ ] | [ ] | [ ] | [ ] |

RECOMMENDATIONS: (If different from NASA)

[ / ] [ ] [ ] [ ] [ ]

(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1233
NASA FMEA #: 05-6KF-2100 -1

SUBSYSTEM: MDAC
MDAC ID: 1233
ITEM: RESISTOR, 5.1K 1/4W
LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-1197
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1234
NASA FMEA #: 05-6KF-2100 -1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 1234
ITEM: RESISTOR, 5.1K 1/4W

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

| COMPARE | / | / | / | / | / | / |

REPORT DATE 2/26/88 C-1198

REMARKS:
A SHORT ACROSS A RLR TYPE RESISTOR IS NOT A CREDIBLE FAILURE.
IOA RECOMMENDS REMOVAL OF THE "SHORT" FAILURE MODE FROM THIS FMEA.

ISSUE RESOLVED AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88
(SHORT FAILURE MODE TO BE REMOVED).
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1235
NASA FMEA #: 05-6KF-2101 -1
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 1235
ITEM: RESISTOR, 1.2K 2W

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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IAO [ 3 /2R ] [ P ] [ P ] [ P ] [ ]

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

RECOMMENDATIONS: (If different from NASA)

[ / ] [ ] [ ] [ ] [ ] [ ]

(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1236
NASA FMEA #: 05-6KF-2101 -2
SUBSYSTEM: FRCS
MDAC ID: 1236
ITEM: RESISTOR, 1.2K 2W
LEAD ANALYST: D. HARTMAN

NASA DATA:
BASELINE [ ]
NEW [ X ]

ASSESSMENT:

| CRITICALITY | REDUNDANCY SCREENS | CIL |
|            | FLIGHT HDW/FUNC    | ITEM |
|            | A   | B   | C  |     |

| NASA | 3 /3 |   |   |   | * |
| IOA  | 3 /3 |   |   |   |   |
| COMPARE | / |   |   |   |   |

RECOMMENDATIONS: (If different from NASA)

[ / ] [ ] [ ] [ ] [ ] [ ]

* CIL RETENTION RATIONALE: (If applicable)

Adequate [ ]
Inadequate [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-1200
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1237
NASA FMEA #: 05-6KF-2099 -1
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 1237
ITEM: RESISTOR, 5.1K 1/4W

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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IOA [ 3 /3 ] [ ] [ ] [ ] [ ] [ ]

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

RECOMMENDATIONS: (If different from NASA)
[ / ] [ ] [ ] [ ] [ ] [ ]

(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88

C-1201
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1238
NASA FMEA #: 05-6KF-2099 -1
NASA DATA:
BASELINE [ ]
NEW [ X ]
SUBSYSTEM: FRCS
MDAC ID: 1238
ITEM: RESISTOR, 5.1K 1/4W
LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
A SHORT ACROSS A RLR TYPE RESISTOR IS NOT A CREDIBLE FAILURE.
IOA RECOMMENDS REMOVAL OF THE "SHORT" FAILURE MODE FROM THIS FMEA.

ISSUE RESOLVED AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88
(SHORT FAILURE MODE TO BE REMOVED).

REPORT DATE 2/26/88 C-1202
### APPENDIX C
#### ASSESSMENT WORKSHEET

**ASSESSMENT DATE:** 1/29/88  
**ASSESSMENT ID:** FRCS-1239  
**NASA FMEA #:** 05-6KF-2099 -1  
**NASA DATA:**  
- **BASELINE:** [ ]  
- **NEW:** [ X ]  

**SUBSYSTEM:** FRCS  
**MDAC ID:** 1239  
**ITEM:** RESISTOR, 5.1K 1/4W  
**LEAD ANALYST:** D. HARTMAN  

**ASSESSMENT:**

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| IOA        | [ 3 / 3 ] | [ ] | [ ] | [ ] | [ ] |     |
| COMPARE    | [ / ]     | [ ] | [ ] | [ ] | [ ] |     |

**RECOMMENDATIONS:**  
(If different from NASA)  
[ / ] [ ] [ ] [ ] [ ] [ ]  
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)  
ADEQUATE [ ]  
INADEQUATE [ ]

**REMARKS:**  
NO DIFFERENCES.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1240
NASA FMEA #: 05-6KF-2099 -1
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 1240
ITEM: RESISTOR, 5.1K 1/4W

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
A SHORT ACROSS A RLR TYPE RESISTOR IS NOT A CREDIBLE FAILURE. IOA RECOMMENDS REMOVAL OF THE "SHORT" FAILURE MODE FROM THIS FMEA.

ISSUE RESOLVED AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88 (SHORT FAILURE MODE TO BE REMOVED).

REPORT DATE 2/26/88 C-1204
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1241
NASA FMEA #: 05-6KF-2099 -1
SUBSYSTEM: FRCS
MDAC ID: 1241
ITEM: RESISTOR, 5.1K 1/4W
LEAD ANALYST: D. HARTMAN

NASA DATA:
BASELINE [ ]
NEW [ X ]

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)
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* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-1205
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1242
NASA FMEA #: 05-6KF-2099 -1
SUBSYSTEM: FRCS
MDAC ID: 1242
ITEM: RESISTOR, 5.1K 1/4W
LEAD ANALYST: D. HARTMAN

ASSESSMENT:

CRITICALITY REDUNDANCY SCREENS CIL
FLIGHT HDW/FUNC A B C ITEM

NASA [3/3] [ ] [ ] [ ] [ ] [ ] [ ] *
IOA [3/3] [ ] [ ] [ ] [ ] [ ] [ ]
COMPARE [ / ] [ ] [ ] [ ] [ ] [ ] [ ]

RECOMMENDATIONS: (If different from NASA)

[ / ] [ ] [ ] [ ] [ ] [ ]

(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
A SHORT ACROSS A RLR TYPE RESISTOR IS NOT A CREDIBLE FAILURE.
IOA RECOMMENDS REMOVAL OF THE "SHORT" FAILURE MODE FROM THIS FMEA.

ISSUE RESOLVED AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88
(SHORT FAILURE MODE TO BE REMOVED).

REPORT DATE 2/26/88 C-1206
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1243
NASA FMEA #: 05-6KF-2099 -1
SUBSYSTEM: FRCS
MDAC ID: 1243
ITEM: RESISTOR, 5.1K 1/4W
LEAD ANALYST: D. HARTMAN

NASA DATA:
BASELINE [ ]
NEW [ X ]

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88  C-1207
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1244
NASA FMEA #: 05-6KF-2099 -1
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 1244
ITEM: RESISTOR, 5.1K 1/4W

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
A SHORT ACROSS A RLR TYPE RESISTOR IS NOT A CREDIBLE FAILURE. IOA RECOMMENDS REMOVAL OF THE "SHORT" FAILURE MODE FROM THIS FMEA.

ISSUE RESOLVED AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88 (SHORT FAILURE MODE TO BE REMOVED).

REPORT DATE 2/26/88 C-1208
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1245
NASA FMEA #: 05-6KF-2099-1

SUBSYSTEM: FRCS
MDAC ID: 1245
ITEM: RESISTOR, 5.1K 1/4W
LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1246
NASA FMEA #: 05-6KF-2099 -1
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 1246
ITEM: RESISTOR, 5.1K 1/4W

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
A SHORT ACROSS A RLR TYPE RESISTOR IS NOT A CREDIBLE FAILURE.
IOA RECOMMENDS REMOVAL OF THE "SHORT" FAILURE MODE FROM THIS FMEA.

ISSUE RESOLVED AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88
(SHORT FAILURE MODE TO BE REMOVED).

REPORT DATE 2/26/88 C-1210
APPENDIX C
ASSESSMENT WORKSHEET

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:

RCS/OMS FORWARD HEATER SWITCH S3 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs FRCS 11185X-11189X.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE:  
ASSESSMENT ID: FRCS-1248  
NASA FMEA #:  
NASA DATA:  
BASELINE [ ]  
NEW [ ]

SUBSYSTEM: FRCS  
MDAC ID: 1248  
ITEM: SWITCH, TOGGLE RCS/OMS HEATERS FWD RCS

LEAD ANALYST:  
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RECOMMENDATIONS:  (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]  INADEQUATE [ ]

REMARKS:
RCS/OMS FORWARD HEATER SWITCH S3 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS FRCS 11185X-11189X.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE:  
ASSESSMENT ID:  FRCS-1249  
NASA FMEA #:  

NASA DATA:  
BASELINE [ ]  
NEW [ ]  

SUBSYSTEM:  FRCS  
MDAC ID:  1249  
ITEM:  SWITCH, TOGGLE RCS/OMS HEATERS FWD RCS  

LEAD ANALYST:  

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RECOMMENDATIONS:  (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)  
ADEQUATE [ ]  
INADEQUATE [ ]  

REMARKS:  
RCS/OMS FORWARD HEATER SWITCH S3 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs FRCS 11185X-11189X.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: NASA DATA:
ASSESSMENT ID: FRCS-1250 BASELINE [ ]
NASA FMEA #: NEW [ ]

SUBSYSTEM: FRCS MDAC ID:
ITEM: 1250 MANIFOLD 1, JETS HEATER CONTROL SWITCH

LEAD ANALYST:

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NASA [ / ] [ ] [ ] [ ] [ ] [ ] *
IOA [ 3 /1R ] [ P ] [ P ] [ P ] [ ]
COMPARE [ N /N ] [ N ] [ N ] [ N ] [ ]

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
FORWARD MANIFOLD 1 JETS HEATER CONTROL SWITCH 14 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS 11160X-11164X.

REPORT DATE 2/26/88 C-1214
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: [Blank]
ASSESSMENT ID: FRCS-1251
NASA FMEA #: [Blank]
NASA DATA:
BASELINE [ ]
NEW [ ]

SUBSYSTEM: FRCS
MDAC ID: 1251
ITEM: MANIFOLD 1, JETS HEATER CONTROL SWITCH

LEAD ANALYST: [Blank]

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RECOMMENDATIONS: (If different from NASA)
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* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
FORWARD MANIFOLD 1 JETS HEATER CONTROL SWITCH 14 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS 11160X-11164X.

REPORT DATE 2/26/88 C-1215
APPENDIX C
ASSESSMENT WORKSHEET

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RECOMMENDATIONS: (If different from NASA)

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*CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
FORWARD MANIFOLD 1 JETS HEATER CONTROL SWITCH 14 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS 11160X-11164X.

REPORT DATE 2/26/88  C-1216
APPENDIX C
ASSESSMENT WORKSHEET

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SUBSYSTEM: FRC
MDAC ID: 1253
ITEM: MANIFOLD 1, JETS HEATER CONTROL SWITCH ON CONTACTS 1, 2
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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ] INADEQUATE [ ]

REMARKS:
FORWARD MANIFOLD 1 JETS HEATER CONTROL SWITCH 14 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs 11160X-11164X.

REPORT DATE 2/26/88 C-1217
APPENDIX C
ASSESSMENT WORKSHEET

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ASSESSMENT ID: FRCS-1254 BASELINE [ ]
NASA FMEA #: NEW [ ]

SUBSYSTEM: FRCS
MDAC ID: 1254
ITEM: MANIFOLD 1, JETS HEATER CONTROL SWITCH OFF
CONTACTS 3, 4

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*  CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
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REMARKS:
FORWARD MANIFOLD 1 JETS HEATER CONTROL SWITCH 14 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS 11160X-11164X.

REPORT DATE 2/26/88 C-1218
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE:
ASSESSMENT ID: FRCS-1255
NASA FMEA #:

NASA DATA:
BASELINE [ ]
NEW [ ]

SUBSYSTEM: FRCS
MDAC ID: 1255
ITEM: MANIFOLD 1, JETS HEATER CONTROL SWITCH OFF CONTACTS 3, 4

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
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REMARKS:
FORWARD MANIFOLD 1 JETS HEATER CONTROL SWITCH 14 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS 11160X-11164X.

REPORT DATE 2/26/88 C-1219
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE:
ASSESSMENT ID: FRCS-1256
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NEW [ ]

SUBSYSTEM: FRCS
MDAC ID: 1256
ITEM: SWITCH, TOGGLE RCS/OMS HEATERS FWD RCS JET 1

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REMARKS:
FORWARD MANIFOLD 1 JETS HEATER CONTROL SWITCH 14 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs 11160X-11164X.

REPORT DATE 2/26/88

C-1220
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: [ ]
ASSESSMENT ID: FRCS-1257
NASA FMEA #: [ ]

NASA DATA:
BASELINE [ ]
NEW [ ]

SUBSYSTEM: FRCS
MDAC ID: 1257
ITEM: SWITCH, TOGGLE RCS/OMS HEATERS FWD RCS JET 1

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
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REMARKS:
FORWARD MANIFOLD 1 JETS HEATER CONTROL SWITCH 14 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs 11160X-11164X.

REPORT DATE 2/26/88 C-1221
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: NASA DATA:
ASSESSMENT ID: FRCS-1258 BASELINE [ ]
NASA FMEA #: NEW [ ]
SUBSYSTEM: FRCS NASA DATA:
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ITEM: MANIFOLD 2, JETS HEATER CONTROL SWITCH NEW [ ]
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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]

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REMARKS:

FORWARD MANIFOLD 2 JETS HEATER CONTROL SWITCH 15 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS 11165X-11169X.

REPORT DATE 2/26/88 C-1222
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE:
ASSESSMENT ID: FRCS-1259
NASA FMEA #:

NASA DATA:
BASELINE [ ]
NEW [ ]

SUBSYSTEM: FRCS
MDAC ID: 1259
ITEM: MANIFOLD 2, JETS HEATER CONTROL SWITCH

LEAD ANALYST:

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RECOMMENDATIONS: (If different from NASA)
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* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ] INADEQUATE [ ]

REMARKS:
FORWARD MANIFOLD 2 JETS HEATER CONTROL SWITCH 15 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS 11165X-11169X.

REPORT DATE 2/26/88 C-1223
APPENDIX C
ASSESSMENT WORKSHEET

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MDAC ID: 1260 NEW [ ]
ITEM: MANIFOLD 2, JETS HEATER CONTROL SWITCH ON
CONTACTS 1, 2
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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
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REMARKS:
FORWARD MANIFOLD 2 JETS HEATER CONTROL SWITCH 15 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS 11165X-11169X.

REPORT DATE 2/26/88 C-1224
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SUBSYSTEM: FRCS
MDAC ID: 1261
ITEM: MANIFOLD 2, JETS HEATER CONTROL SWITCH ON CONTACTS 1, 2

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* CIL RETENTION RATIONALE: (If applicable)
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REMARKS:
FORWARD MANIFOLD 2 JETS HEATER CONTROL SWITCH 15 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs 11165X-11169X.

REPORT DATE 2/26/88
C-1225
APPENDIX C
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ASSESSMENT ID: FRCS-1262 BASELINE [ ]
NASA FMEA #: NEW [ ]

SUBSYSTEM: FRCS MDAC ID: 1262
ITEM: MANIFOLD 2, JETS HEATER CONTROL SWITCH OFF
CONTACTS 3, 4

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ADEQUATE [ ]
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REMARKS:
FORWARD MANIFOLD 2 JETS HEATER CONTROL SWITCH 15 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs 11165X-11169X.

REPORT DATE 2/26/88 C-1226
APPENDIX C
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NASA DATA: 
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SUBSYSTEM: FRCS 
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ITEM: MANIFOLD 2, JETS HEATER CONTROL SWITCH OFF 
CONTACTS 3, 4 

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RECOMMENDATIONS: (If different from NASA) 

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* CIL RETENTION RATIONALE: (If applicable) 
ADEQUATE [ ] 
INADEQUATE [ ]

REMARKS: 
FORWARD MANIFOLD 2 JETS HEATING CONTROL SWITCH 15 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS 11165X-11169X.

REPORT DATE 2/26/88  
C-1227
APPENDIX C
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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
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REMARKS:
FORWARD MANIFOLD 2 JETS HEATER CONTROL SWITCH 15 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs 11165X-11169X.

REPORT DATE 2/26/88 C-1228
APPENDIX C
ASSESSMENT WORKSHEET

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ASSESSMENT ID:                  NASA FMEA #:               NEW [ ]
FRCS-1265                       FRCS-1265
NASA FMEA #:                   MDAC ID:                     1265
SUBSYSTEM:                      ITEM:                     SWITCH, TOGGLE RCS/OMS HEATERS FWD RCS JET 2
FRCS                            SWITCH, TOGGLE RCS/OMS HEATERS FWD RCS JET 2

LEAD ANALYST:

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
FORWARD MANIFOLD 2 JETS HEATER CONTROL SWITCH 15 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS 11165X-11169X.

REPORT DATE 2/26/88  C-1229
## APPENDIX C
### ASSESSMENT WORKSHEET

**ASSESSMENT DATE:**
**ASSESSMENT ID:** FRCS-1266
**NASA FMEA #:**
**ASSESSMENT ID:** NASA IOA [3/IR]
**ITEM:** MANIFOLD 3, JETS HEATER CONTROL SWITCH

**LEAD ANALYST:**
**ASSESSMENT:** FRCS-1266

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**RECOMMENDATIONS:** (If different from NASA)

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* * CIL RETENTION RATIONALE: (If applicable) ADEQUATE [ ] INADEQUATE [ ]

**REMARKS:**
FORWARD MANIFOLD 3 JETS HEATER CONTROL SWITCH 16 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS 11170X-11174X.

**REPORT DATE 2/26/88**

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C-1230
APPENDIX C
ASSESSMENT WORKSHEET

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RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:

FORWARD MANIFOLD 3 JETS HEATER CONTROL SWITCH 16 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS 11170X-11174X.

REPORT DATE 2/26/88 C-1231
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: NASA DATA:
ASSESSMENT ID: FRCS-1268 Baseline [ ]
NASA FMEA #: NEW [ ]

SUBSYSTEM: FRCS NASA DATA:
MDAC ID: 1268 BASELINE [ ]
ITEM: MANIFOLD 3, JETS HEATER CONTROL SWITCH ON NEW [ ]
CONTACTS 1, 2

LEAD ANALYST:

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RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
FORWARD MANIFOLD 3 JETS HEATER CONTROL SWITCH 16 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS 11170X-11174X.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: [ ]
ASSESSMENT ID: FRCS-1269
NASA FMEA #: [ ]

SUBSYSTEM: FRCS
MDAC ID: 1269
ITEM: MANIFOLD 3, JETS HEATER CONTROL SWITCH ON CONTACTS 1, 2
LEAD ANALYST: [ ]

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* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
FORWARD MANIFOLD 3 JETS HEATER CONTROL SWITCH 16 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs 11170X-11174X.

REPORT DATE 2/26/88 C-1233
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: [Blank]
ASSESSMENT ID: FRCS-1270
NASA FMEA #: [Blank]

NASA DATA:
BASELINE [ ]
NEW [ ]

SUBSYSTEM: FRCS
MDAC ID: 1270
ITEM: MANIFOLD 3, JETS HEATER CONTROL SWITCH OFF CONTACTS 3, 4

LEAD ANALYST: [Blank]

ASSESSMENT:

CRITICALITY REDUNDANCY CIL
FLIGHT HDW/FUNC SCREENS ITEM

NASA [ / ] [ ] [ ] [ ] [ ] [ ] [ ] *
IOA [ 3 /3 ] [ ] [ ] [ ] [ ] [ ]
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RECOMMENDATIONS: (If different from NASA)
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* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
FORWARD MANIFOLD 3 JETS HEATER CONTROL SWITCH 16 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs 11170X-11174X.

REPORT DATE 2/26/88 C-1234
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE:
ASSESSMENT ID: FRCS-1271
NASA FMEA #:
SUBSYSTEM: FRCS
MDAC ID: 1271
ITEM: MANIFOLD 3, JETS HEATER CONTROL SWITCH OFF CONTACTS 3, 4
LEAD ANALYST:

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* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
FORWARD MANIFOLD 3 JETS HEATER CONTROL SWITCH 16 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS 11170X-11174X.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE:
ASSESSMENT ID: FRCS-1272
NASA FMEA #:

NASA DATA:
BASELINE [ ]
NEW [ ]

SUBSYSTEM:
FRCS
MDAC ID:
1272
ITEM:
SWITCH, TOGGLE RCS/OMS HEATERS FWD RCS JET 3

LEAD ANALYST:

ASSESSMENT:

| CRITICALITY | REDUNDANCY SCREENS | CIL |
| HDW/FUNC | A | B | C | ITEM |
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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

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REMARKS:
FORWARD MANIFOLD 3 JETS HEATER CONTROL SWITCH 16 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs 11170X-11174X.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE:  
ASSESSMENT ID:  FRCS-1273  
NASA FMEA #:  

NASA DATA:  
BASELINE [ ]  
NEW [ ]  

SUBSYSTEM:  FRCS  
MDAC ID:  1273  
ITEM:  SWITCH, TOGGLE RCS/OMS HEATERS FWD RCS JET 3  

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* CIL RETENTION RATIONALE:  (If applicable)  
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REMARKS:  
FORWARD MANIFOLD 3 JETS HEATER CONTROL SWITCH 16 RE-ANALYZED BY IOA.  SEE ASSESSMENT IDs 11170X-11174X.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE:   NASA DATA:
ASSESSMENT ID:    FRCS-1274   BASELINE [ ]
NASA FMEA #:      NEW [ ]
SUBSYSTEM:        FRCS
MDAC ID:          1274
ITEM:             MANIFOLD 4, JETS HEATER CONTROL SWITCH

LEAD ANALYST:

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
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REMARKS:
FORWARD MANIFOLD 4 JETS HEATER CONTROL SWITCH 17 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS 11175X-11179X.

REPORT DATE 2/26/88 C-1238
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 
ASSESSMENT ID: FRCS-1275
NASA FMEA #: 
NASA DATA:
BASELINE [ ] NEW [ ]

SUBSYSTEM: FRCS
MDAC ID: 1275
ITEM: MANIFOLD 4, JETS HEATER CONTROL SWITCH

LEAD ANALYST:

ASSESSMENT:

CRITICALITY REDUNDANCY SCREENS CIL ITEM
FLIGHT HDW/FUNC A B C

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IOA [ 2 /2 ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ N ]
COMPARE [ N /N ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]

RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
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REMARKS:
FORWARD MANIFOLD 4 JETS HEATER CONTROL SWITCH 17 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs 11175X-11179X.

REPORT DATE 2/26/88 C-1239
**APPENDIX C**  
**ASSESSMENT WORKSHEET**

**ASSESSMENT DATE:**  
**NASA DATA:**

**ASSESSMENT ID:** FRCS-1276  
**BASELINE [ ]**

**NASA FMEA #:**  
**NEW [ ]**

**SUBSYSTEM:** FRCS  
**MDAC ID:** 1276

**ITEM:** MANIFOLD 4, JETS HEATER CONTROL SWITCH ON CONTACTS 1, 2

**LEAD ANALYST:**

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* **CIL RETENTION RATIONALE:** (If applicable)

ADEQUATE [ ]

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**REMARKS:**

FORWARD MANIFOLD 4 JETS HEATER CONTROL SWITCH 17 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs 11175X-11179X.

**REPORT DATE 2/26/88 C-1240**
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE:   NASA DATA:  
ASSESSMENT ID:     FRCS-1277     BASELINE [ ]  
NASA FMEA #:       FRCS-1277     NEW [ ]  
SUBSYSTEM:         FRCS            
MDAC ID:           1277            
ITEM:              MANIFOLD 4, JETS HEATER CONTROL SWITCH ON CONTACTS 1, 2  
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* CIL RETENTION RATIONALE: (If applicable)

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REMARKS:
FORWARD MANIFOLD 4 JETS HEATER CONTROL SWITCH 17 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs 11175X-11179X.

REPORT DATE 2/26/88  C-1241
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE:    NASA DATA:
ASSESSMENT ID:    FRCS-1278    BASELINE [ ]
NASA FMEA #:    NEW [ ]

SUBSYSTEM:    FRCS
MDAC ID:    1278
ITEM:    MANIFOLD 4, JETS HEATER CONTROL SWITCH OFF
CONTACTS 3, 4

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
FORWARD MANIFOLD 4 JETS HEATER CONTROL SWITCH 17 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS 11175X-11179X.

REPORT DATE 2/26/88    C-1242
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE:  
ASSESSMENT ID:  FRCS-1279  
NASA FMEA #:  

NASA DATA:  
BASELINE [ ]  
NEW [ ]  

SUBSYSTEM:  FRCS  
MDAC ID:  1279  
ITEM:  MANIFOLD 4, JETS HEATER CONTROL SWITCH OFF  
CONTACTS 3, 4  

LEAD ANALYST:  

ASSESSMENT:  

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| FLIGHT | A | B | C | ITEM |
| HDW/FUNC | | | | |
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RECOMMENDATIONS:  (If different from NASA)  
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* CIL RETENTION RATIONALE: (If applicable)  
ADEQUATE [ ]  
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REMARKS:  
FORWARD MANIFOLD 4 JETS HEATER CONTROL SWITCH 17 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs 11175X-11179X.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: NASA DATA:
ASSESSMENT ID: FRCS-1280 BASELINE [ ]
NASA FMEA #: NEW [ ]

SUBSYSTEM: FRCS MDAC ID: 1280
ITEM: SWITCH, TOGGLE RCS/OMS HEATERS FWD RCS JET 4

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
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REMARKS:
FORWARD MANIFOLD 4 JETS HEATER CONTROL SWITCH 17 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS 11175X-11179X.

REPORT DATE 2/26/88 C-1244
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 
ASSESSMENT ID: FRCS-1281 
NASA FMEA #: 

NASA DATA: BASELINE [ ] NEW [ ]

SUBSYSTEM: FRCS
MDAC ID: 1281
ITEM: SWITCH, TOGGLE RCS/OMS HEATERS FWD RCS JET 4

LEAD ANALYST: 

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
FORWARD MANIFOLD 4 JETS HEATER CONTROL SWITCH 17 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs 11175X-11179X.

REPORT DATE 2/26/88 C-1245
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 
ASSESSMENT ID:  FRCS-1282  
NASA FMEA #:  NASA DATA:  BASELINE [ ]  
SUBSYSTEM:  FRCS  NEW [ ]  
MDAC ID:  1282  
ITEM:  MANIFOLD 5, JETS HEATER CONTROL SWITCH  
LEAD ANALYST:  
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* CIL RETENTION RATIONALE:  (If applicable)

ADEQUATE  [ ]
INADEQUATE  [ ]

REMARKS:
FORWARD MANIFOLD 5 JETS HEATER CONTROL SWITCH 18 RE-ANALYZED BY IOA.  SEE ASSESSMENT IDs 11180X-11184X.

REPORT DATE 2/26/88  C-1246
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE:                        NASA DATA:
ASSESSMENT ID: FRCS-1283                        BASELINE [ ]
NASA FMEA #:                              NEW [ ]
SUBSYSTEM: FRCS
MDAC ID: 1283
ITEM: MANIFOLD 5, JETS HEATER CONTROL SWITCH

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RECOMMENDATIONS: (If different from NASA)

[ / ] [ ] [ ] [ ] [ ] [ ]

(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

 REMARKS:
FORWARD MANIFOLD 5 JETS HEATER CONTROL SWITCH 18 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs 11180X-11184X.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 
ASSESSMENT ID: FRCS-1284
NASA FMEA #: NAS A DATA: 
NASA DATA: BASELINE [ ] NEW [ ]

SUBSYSTEM: FRCS
MDAC ID: 1284
ITEM: MANIFOLD 5, JETS HEATER CONTROL SWITCH ON
CONTACTS 1, 2

LEAD ANALYST:

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RECOMMENDATIONS: (If different from NASA)

[ / ] [ ] [ ] [ ] [ ]

(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
FORWARD MANIFOLD 5 JETS HEATER CONTROL SWITCH 18 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS 11180X-11184X.

REPORT DATE 2/26/88 C-1248
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: NASA DATA:
ASSESSMENT ID: FRCS-1285 BASELINE [ ]
NASA FMEA #: NEW [ ]
SUBSYSTEM: FRCS
MDAC ID: 1285
ITEM: MANIFOLD 5, JETS HEATER CONTROL SWITCH ON
CONTACTS 1, 2

LEAD ANALYST:

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RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
FORWARD MANIFOLD 5 JETS HEATER CONTROL SWITCH 18 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs 11180X-11184X.

REPORT DATE 2/26/88 C-1249
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: NASA DATA:
ASSESSMENT ID: FRCS-1286 NASA FMEA #:
MDAC ID: 1286 NEW [
ITEM: MANIFOLD 5, JETS HEATER CONTROL SWITCH OFF
CONTACTS 3, 4

LEAD ANALYST:

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RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
FORWARD MANIFOLD 5 JETS HEATER CONTROL SWITCH 18 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs 11180X-11184X.

REPORT DATE 2/26/88 C-1250
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE:  
ASSESSMENT ID:  FRCS-1287  
NASA FMEA #:  
NASA DATA:  
BASELINE [ ]  
NEW [ ]  

SUBSYSTEM:  FRCS  
MDAC ID:  1287  
ITEM:  MANIFOLD 5, JETS HEATER CONTROL SWITCH OFF CONTACTS 3, 4  
LEAD ANALYST:  

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RECOMMENDATIONS:  (If different from NASA)  
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(ADD/DELETE)  

* CIL RETENTION RATIONALE:  (If applicable)  
ADEQUATE [ ]  
INADEQUATE [ ]  

REMARKS:  
FORWARD MANIFOLD 5 JETS HEATER CONTROL SWITCH 18 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs 11180X-11184X.

REPORT DATE 2/26/88  
C-1251
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: NASA DATA:
ASSESSMENT ID: FRCS-1288 BASELINE [ ]
NASA FMEA #: NEW [ ]

SUBSYSTEM: FRCS
MDAC ID: 1288
ITEM: SWITCH, TOGGLE RCS/OMS HEATERS FWD RCS JET 5

LEAD ANALYST:

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

RECOMMENDATIONS: (If different from NASA)

[ / ] [ ] [ ] [ ] [ ] [ ]

(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
FORWARD MANIFOLD 5 JETS HEATER CONTROL SWITCH 18 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS 11180X-11184X.

REPORT DATE 2/26/88 C-1252
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: NASA DATA:
ASSESSMENT ID: FRCS-1289 BASELINE [ ]
NASA FMEA #: FRCS-1289 NEW [ ]

SUBSYSTEM: NASA DATA:
FRCS BASELINE [ ]
MDAC ID: 1289 NEW [ ]
ITEM: SWITCH, TOGGLE RCS/OMS HEATERS FWD RCS JET 5

LEAD ANALYST:

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RECOMMENDATIONS: (If different from NASA)

[ / ] [ ] [ ] [ ] [ ] [ ] [ ]

(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
FORWARD MANIFOLD 5 JETS HEATER CONTROL SWITCH 18 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS 11180X-11184X.

REPORT DATE 2/26/88 C-1253
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1290
NASA FMEA #: 03-2F-103345-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 1290
ITEM: FU SYSTEM A & B THERMOSTAT

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.
**APPENDIX C**

**ASSESSMENT WORKSHEET**

**ASSESSMENT DATE:** 1/29/88  
**ASSESSMENT ID:** FRCS-1291  
**NASA FMEA #:** 03-2F-103345 -1

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

**SUBSYSTEM:**  
**MDAC ID:** 1291  
**ITEM:** FU SYSTEM A & B THERMOSTAT

**LEAD ANALYST:** D. HARTMAN

**ASSESSMENT:**

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**IOA** [ 3 /2R ]

**COMPARE** [ / ]

**RECOMMENDATIONS:** (If different from NASA)

[ / ]

(ADD/DELETE)

**CIL RETENTION RATIONALE:** (If applicable)

ADEQUATE [ ]

INADEQUATE [ ]

**REMARKS:**

NO DIFFERENCES.

**REPORT DATE 2/26/88**  
**C-1255**
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1292
NASA FMEA #: 03-2F-103345 -1
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 1292
ITEM: OX SYSTEM A & B THERMOSTAT

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

| CRITICALITY | REDUNDANCY SCREENS | CIL |
| FLIGHT HDW/FUNC | A | B | C |
| NASA [ 3 /2R ] | [ P ] | [ P ] | [ P ] |
| IOA [ 3 /2R ] | [ P ] | [ P ] | [ P ] |
| COMPARE [ / ] | [ ] | [ ] | [ ] |

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-1256
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1293
NASA FMEA #: 03-2F-103345 -2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 1293
ITEM: OX SYSTEM A & B THERMOSTAT

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-1257
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1294
NASA FMEA #: 03-2F-121345 -1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 1294
ITEM: THERMOSTAT, PRIMARY THRUSTERS, - X AXIS

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-1258
ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1295
NASA FMEA #: 03-2F-103345 -2
NASA DATA:
BASELINE [ ]
NEW [ X ]
SUBSYSTEM: FRCS
MDAC ID: 1295
ITEM: THERMOSTAT, PRIMARY THRUSTERS, - X AXIS
LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
IOA AGREES WITH NASA FMEA.

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:

IOA AGREES WITH NASA FMEA.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1297
NASA FMEA #: 03-2F-103345 -2
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 1297
ITEM: THERMOSTAT, PRIMARY THRUSTERS, Y AXIS

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
IOA AGREES WITH NASA FMEA.

REPORT DATE 2/26/88
C-1261
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1298
NASA FMEA #: 03-2F-103345 -1
NASA DATA:
BASELINE [ ]
NEW [ X ]
SUBSYSTEM: FRCS
MDAC ID: 1298
ITEM: THERMOSTAT, PRIMARY THRUSTERS, Z AXIS
LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88   C-1262
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1299
NASA FMEA #: 03-2F-103345 -2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM:  FRCS
MDAC ID:  1299
ITEM: THERMOSTAT, PRIMARY THRUSTERS, Z AXIS

LEAD ANALYST: D. HARTMAN

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| IOA   | 2 /1R | [ P ]  | [ F ]  | [ P ]  | [ X ] |
| COMPA | R [ N /N ] | [ ]  | [ N ]  | [ ]  | [ N ] |

RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

Adequate [ ]
Inadequate [ ]

REMARKS:
IOA AGREES WITH NASA FMEA.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
NASA DATA:
ASSESSMENT ID: FRCS-1300
NASA FMEA #: 03-2F-103345 -2

SUBSYSTEM: FRCS
MDAC ID: 1300
ITEM: THERMOSTAT, VERNIER THRUSTERS, ALL AXES
LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
THIS FAILURE MAY CAUSE LOSS OF MISSION OPERATIONS. NOTE:
VERNIER THRUSTERS THERMAL SWITCH NOT SPECIFICALLY ADDRESSED ON
THIS FMEA.

ISSUE NOT RESOLVED AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1301
NASA FMEA #: NONE
NASA DATA: BASELINE [ ] NEW [ ]

SUBSYSTEM: FRCS
MDAC ID: 1301
ITEM: THERMOSTAT, VERNIER THRUSTERS, ALL AXES

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

[ ] / [ ] [ ] [ ] [ ] [ ]

(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
VERNIER THRUSTERS THERMAL SWITCH NOT ADDRESSED.

SUBSYSTEM MANAGER STATED THAT THE VERNIER THERMAL SWITCH WAS PART OF THE VERNIER THRUSTER ASSEMBLY AND DID NOT REQUIRE A SEPARATE FMEA. FOR CONSISTENCY WITH THE PRIMARY THRUSTERS, IOA RECOMMENDS A FMEA BE CREATED TO COVER THIS FAILURE MODE.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11001X
NASA FMEA #: 05-6KF-2006-1

SUBSYSTEM: FRCS
MDAC ID: 11001
ITEM: FUSE, 1A
LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:

FAILURE CAUSE THE INABILITY TO CLOSE THE VALVE. LOSS OF ALL REDUNDANCY PREVENTS ISOLATION OF A THRUSTER LEAK.

ISSUE IS TIED TO THE IOA HARDWARE CRITICALITY FOR THE FAILED OPEN MANIFOLD 5 ISOLATION VALVE.

REPORT DATE 2/26/88 C-1266
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11002X
NASA FMEA #: 05-6KF-2006-1
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 11002
ITEM: FUSE, 1A

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
FAILURE CAUSE THE INABILITY TO CLOSE THE VALVE. LOSS OF ALL REDUNDANCY PREVENTS ISOLATION OF A THRUSTER LEAK.

ISSUE IS TIED TO THE IOA HARDWARE CRITICALITY FOR THE FAILED OPEN MANIFOLD 5 ISOLATION VALVE.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11003X
NASA FMEA #: 05-6KF-2032-1

SUBSYSTEM: FRCS
MDAC ID: 11003
ITEM: MANIFOLD 5, OX & FU ISOL VLV SWITCH

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

[ 3 /1R ] [ P ] [ NA] [ P ] [ ]

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
SWITCHED FAILED OPEN CAUSES THE INABILITY TO CLOSE THE VALVE.
LOSS OF ALL REDUNDANCY PREVENTS ISOLATION OF A THRUSTER LEAK.

ISSUE IS TIED TO THE IOA HARDWARE CRITICALITY FOR THE FAILED OPEN MANIFOLD 5 ISOLATION VALVE.

REPORT DATE 2/26/88 C-1268
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11004X
NASA FMEA #: 05-6KF-2032-1

SUBSYSTEM: FRCS
MDAC ID: 11004
ITEM: MANIFOLD 5, OX & FU ISOL VLV SWITCH

LEAD ANALYST: D. HARTMAN

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

RECOMMENDATIONS: (If different from NASA)

[ 3 /1R ] [ P ] [ NA] [ P ] [ ]

(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
SWITCHED FAILED OPEN CAUSES THE INABILITY TO CLOSE THE VALVE.
LOSS OF ALL REDUNDANCY PREVENTS ISOLATION OF A THRUSTER LEAK.

ISSUE IS TIED TO THE IOA HARDWARE CRITICALITY FOR THE FAILED OPEN MANIFOLD 5 ISOLATION VALVE.

REPORT DATE 2/26/88 C-1269
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11005X
NASA FMEA #: 05-6KF-2032-2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 11005
ITEM: MANIFOLD 5, OX & FU ISOL VLV SWITCH

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:

NASA FMEA CONTAINS MULTIPLE FAILURES. LOSE CAPABILITY TO OPEN THE VALVE. THIS CAUSES LOSS OF VERNIERS THUS MISSION OPERATIONS.

AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88, NSTS 22206 WAS DISCUSSED. IT WAS AGREED UPON THAT THE ISSUE RAISED ABOVE WAS DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THE ISSUE REMAINS OPEN.

REPORT DATE 2/26/88 C-1270
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11006X
NASA FMEA #: 05-6KF-2032-1

SUBSYSTEM: FRCS
MDAC ID: 11006
ITEM: MANIFOLD 5, OX & FU ISOL VALV SWITCH

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)
[ 3 /1R ] [ P ] [ NA] [ P ] [ ]
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

REMARKS:
SWITCHED FAILED OPEN CAUSES THE INABILITY TO CLOSE THE VALVE.
LOSS OF ALL REDUNDANCY PREVENTS ISOLATION OF A THRUSTER LEAK.

ISSUE IS TIED TO THE IOA HARDWARE CRITICALITY FOR THE FAILED OPEN MANIFOLD 5 ISOLATION VALVE.

REPORT DATE 2/26/88 C-1271
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11007X
NASA FMEA #: 05-6KF-2032-2

SUBSYSTEM: FRCS
MDAC ID: 11007
ITEM: MANIFOLD 5, OX & FU ISOL VLV SWITCH

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)
[3/1R] [P] [F] [P] [A] (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [   ]
INADEQUATE [   ]

REMARKS:
NASA FMEA CONTAINS MULTIPLE FAILURES. LOSE CAPABILITY TO CLOSE THE VALVE TO ISOLATE A THRUSTER LEAK.

AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88, NSTS 22206 WAS DISCUSSED. IT WAS AGREED UPON THAT THE ISSUE RAISED ABOVE WAS DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THE ISSUE REMAINS OPEN.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11008X
NASA FMEA #: 05-6KF-2090-1

SUBSYSTEM: FRCS
MDAC ID: 11008
ITEM: RESISTOR, 1.2K 2W
LEAD ANALYST: D. HARTMAN

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 11008
ITEM: RESISTOR, 1.2K 2W

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

[ 3 /2R ] [ P ] [ P ] [ P ] [ D ] (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:

NASA FMEA CONTAINS MULTIPLE FAILURES. THIS FAILURE MAY CAUSE LOSS OF ACCURATE INDICATION OF THE VALVE STATUS. REDUNDANCY PROVIDED. LOSS OF ALL REDUNDANCY MAY LEAD TO FALSELY FAILING THE VALVE CLOSED, POSSIBLY EFFECTING MISSION OPERATIONS.

AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88, NSTS 22206 WAS DISCUSSED. IT WAS AGREED UPON THAT THE ISSUE RAISED ABOVE WAS DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THE ISSUE REMAINS OPEN.

REPORT DATE 2/26/88 C-1273
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11009X
NASA FMEA #: 05-6KF-2090-2

SUBSYSTEM: FRCS
MDAC ID: 11009
ITEM: RESISTOR, 1.2K 2W

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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| (ADD/DELETE) |

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11010X
NASA FMEA #: 05-6KF-2092-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 11010
ITEM: RESISTOR, 5.1K 1/4W

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-1275
### APPENDIX C
### ASSESSMENT WORKSHEET

**ASSESSMENT DATE:** 1/29/88  
**ASSESSMENT ID:** FRCS-11011X  
**NASA FMEA #:** 05-6KF-2092-1

**SUBSYSTEM:** FRCS  
**MDAC ID:** 11011  
**ITEM:** RESISTOR, 5.1K 1/4W

**LEAD ANALYST:** D. HARTMAN

**ASSESSMENT:**

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**RECOMMENDATIONS:** (If different from NASA)

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(ADD/DELETE)

* **CIL RETENTION RATIONALE:** (If applicable)

  ADEQUATE [ ]
  INADEQUATE [ ]

**REMARKS:**

NO DIFFERENCES.

**REPORT DATE 2/26/88**

C-1276
### APPENDIX C
### ASSESSMENT WORKSHEET

**ASSESSMENT DATE:** 1/29/88  
**ASSESSMENT ID:** FRCS-11012X  
**NASA FMEA #:** 05-6KF-2091-1  

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

**SUBSYSTEM:** FRCS  
**MDAC ID:** 11012  
**ITEM:** RESISTOR, 5.1K 1/4W

**LEAD ANALYST:** D. HARTMAN

**ASSESSMENT:**

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**RECOMMENDATIONS:**  
(If different from NASA)

[ 3 /2R ]  
- [ P ]  
- [ P ]  
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- [ ]

(ADD/DELETE)

* **CIL RETENTION RATIONALE:** (If applicable)

  - ADEQUATE [ ]
  - INADEQUATE [ ]

**REMARKS:**

- THIS FAILURE MAY CAUSE LOSS OF ACCURATE INDICATION OF THE VALVE POSITION. REDUNDANCY PROVIDED. LOSS OF ALL REDUNDANCY MAY LEAD TO FALSELY FAILING THE VALVE CLOSED, POSSIBLY EFFECTING MISSION OPERATIONS.

- ISSUE NOT RESOLVED AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88.

**REPORT DATE 2/26/88**  
**C-1277**
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11013X
NASA FMEA #: 05-6KF-2091-1

SUBSYSTEM: FRCS
MDAC ID: 11013
ITEM: RESISTOR, 5.1K 1/4W

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)
[ 3 /2R ] [ P ] [ P ] [ P ]

(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
THIS FAILURE MAY CAUSE LOSS OF ACCURATE INDICATION OF THE VALVE POSITION. REDUNDANCY PROVIDED. LOSS OF ALL REDUNDANCY MAY LEAD TO FALSELY FAILING THE VALVE CLOSED, POSSIBLY EFFECTING MISSION OPERATIONS.

ISSUE NOT RESOLVED AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88.

REPORT DATE 2/26/88  C-1278
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11014X
NASA FMEA #: 05-6KF-2091-1

NASA DATA: 
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 11014
ITEM: RESISTOR, 5.1K 1/4W

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

CRITICALITY
FLIGHT HDW/FUNC

REdundancy Screens
A   B   C

NASA [ 3 /3 ] [ ] [ ] [ ] [ ] [ ] *
IOA [ 3 /2R ] [ P ] [ P ] [ P ] [ ]
COMPARE [ /N ] [ N ] [ N ] [ N ] [ ]

RECOMMENDATIONS: (If different from NASA)

[ 3 /2R ] [ P ] [ P ] [ P ] [ ]
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
THIS FAILURE MAY CAUSE LOSS OF ACCURATE INDICATION OF THE VALVE POSITION. REDUNDANCY PROVIDED. LOSS OF ALL REDUNDANCY MAY LEAD TO FALSELY FAILING THE VALVE CLOSED, POSSIBLY EFFECTING MISSION OPERATIONS.

ISSUE NOT RESOLVED AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88.

REPORT DATE 2/26/88

C-1279
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11015X
NASA FMEA #: 05-6KF-2091-1

SUBSYSTEM: FRCS
MDAC ID: 11015
ITEM: RESISTOR, 5.1K 1/4W

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
THIS FAILURE MAY CAUSE LOSS OF ACCURATE INDICATION OF THE VALVE POSITION. REDUNDANCY PROVIDED. LOSS OF ALL REDUNDANCY MAY LEAD TO FALSELY FAILING THE VALVE CLOSED, POSSIBLY EFFECTING MISSION OPERATIONS.

ISSUE NOT RESOLVED AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88.

REPORT DATE 2/26/88  C-1280
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11016X
NASA FMEA #: 05-6KF-2156-2
SUBSYSTEM: FRCS
MDAC ID: 11016
ITEM: EVENT INDICATOR
LEAD ANALYST: D. HARTMAN

RECOMMENDATIONS: (If different from NASA)

[ 3 /2R ] [ P ] [ P ] [ P ] [ ]
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
THIS FAILURE MAY CAUSE LOSS OF ACCURATE INDICATION OF THE VALVE POSITION. REDUNDANCY PROVIDED. LOSS OF ALL REDUNDANCY MAY LEAD TO FALSELY FAILING THE VALVE CLOSED, POSSIBLY EFFECTING MISSION OPERATIONS.

ISSUE NOT RESOLVED AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11017X
NASA FMEA #: 05-6KF-2156-1
SUBSYSTEM: FRCS
MDAC ID: 11017
ITEM: EVENT INDICATOR
LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

[ 3 /2R ] [ P ] [ P ] [ P ] [ D ] (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

- ADEQUATE [ ]
- INADEQUATE [ ]

REMARKS:

NASA FMEA CONTAINS MULTIPLE FAILURES. THIS FAILURE MAY CAUSE LOSS OF ACCURATE INDICATION OF THE VALVE STATUS. REDUNDANCY PROVIDED. LOSS OF ALL REDUNDANCY MAY LEAD TO FALSELY FAILING THE VALVE CLOSED, POSSIBLY EFFECTING MISSION OPERATIONS.

AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88, NSTS 22206 WAS DISCUSSED. IT WAS AGREED UPON THAT THE ISSUE RAISED ABOVE WAS DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THE ISSUE REMAINS OPEN.

REPORT DATE 2/26/88 C-1282
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88  NASA DATA:
ASSESSMENT ID:  FRCS-11018X  BASELINE [ ]
NASA FMEA #:  05-6KF-2177-1  NEW [ X ]

SUBSYSTEM:  FRCS
MDAC ID:  11018
ITEM:  CONTROLLER, REMOTE POWER

LEAD ANALYST:  D. HARTMAN

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RECOMMENDATIONS:  (If different from NASA)

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

* CIL RETENTION RATIONALE:  (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
FAILURE CAUSES INABILITY TO CLOSE THE VALVE TO ISOLATE A THRUSTER LEAK.

ISSUE IS TIED TO THE IOA HARDWARE CRITICALITY FOR THE FAILED OPEN MANIFOLD 5 ISOLATION VALVE.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11019X
NASA FMEA #: 05-6KF-2177-2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 11019
ITEM: CONTROLLER, REMOTE POWER

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NASA FMEA CONTAINS MULTIPLE FAILURES. THIS FAILURE ALONE HAS NO EFFECT.

AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88, NSTS 22206 WAS DISCUSSED. IT WAS AGREED UPON THAT THE ISSUE RAISED ABOVE WAS DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THE ISSUE REMAINS OPEN.

REPORT DATE 2/26/88 C-1284
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88  
ASSESSMENT ID: FRCS-11020X  
NASA FMEA #: 05-6KF-2178-1

NASA DATA:  
BASELINE [ ]  
NEW [ X ]

SUBSYSTEM:  
FRCS

MDAC ID:  
11020

ITEM:  
CONTROLLER, REMOTE POWER

LEAD ANALYST:  
D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS:  
(If different from NASA)

[ 2 /2 ] [ ] [ ] [ ] [ A ]
(ADD/DELETE)

* CIL RETENTION RATIONALE:  
(If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:

FAILURE CAUSES THE INABILITY TO OPEN THE ISOLATION VALVE TO PERFORM MISSION OPERATIONS

ISSUE IS TIED TO THE IOA HARDWARE CRITICALITY FOR THE FAILED CLOSED MANIFOLD 5 ISOLATION VALVE.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11021X
NASA FMEA #: 05-6KF-2178-2
SUBSYSTEM: FRCS
MDAC ID: 11021
ITEM: CONTROLLER, REMOTE POWER
LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

[ 3 /3 ] [ ] [ ] [ ] [ ] [ D ]

(ADD/DELETE)

*CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:

NASA FMEA CONTAINS MULTIPLE FAILURES. THIS FAILURE ALONE HAS NO EFFECT.

AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88, NSTS 22206 WAS DISCUSSED. IT WAS AGREED UPON THAT THE ISSUE RAISED ABOVE WAS DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THE ISSUE REMAINS OPEN.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11022X
NASA FMEA #: 05-6KF-2210A-1

SUBSYSTEM: FRCS
MDAC ID: 11022
ITEM: DRIVER, HYBRID
LEAD ANALYST: D. HARTMAN

ASSESSMENT:

CRITICALLY REDUNDANCY SCREENS CIL
FLIGHT HDW/FUNC A B C ITEM

NASA [ 3 /1R ] [ P ] [ F ] [ P ] [ X ] *
IOA [ 3 /2R ] [ P ] [ P ] [ P ] [ ]
COMPARE [ /N ] [ ] [ N ] [ ] [ N ]

RECOMMENDATIONS: (If different from NASA)
[ 3 /2R ] [ P ] [ P ] [ P ] [ D ]
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

REMARKS:
NASA FMEA CONTAINS MULTIPLE FAILURES. THIS FAILURE MAY CAUSE
LOSS OF ACCURATE INDICATION OF THE VALVE POSITION. REDUNDANCY
PROVIDED. LOSS OF ALL REDUNDANCY MAY LEAD TO FALSELY FAILING THE
VALVE CLOSED, POSSIBLY EFFECTING MISSION OPERATIONS.

AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88, NSTS 22206 WAS
DISCUSSED. IT WAS AGREED UPON THAT THE ISSUE RAISED ABOVE WAS
DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THE
ISSUE REMAINS OPEN.

REPORT DATE 2/26/88 C-1287
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11023X
NASA FMEA #: 05-6KF-2210A-2
SUBSYSTEM: FRCS
MDAC ID: 11023
ITEM: DRIVER, HYBRID
LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)
[ 3 /1R ] [ P ] [ P ] [ P ] [ ]
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
THIS FAILURE CAUSES THE INABILITY TO CLOSE THE VALVE TO ISOLATE A THRUSTER LEAK.

ISSUE IS TIED TO THE IOA HARDWARE CRITICALITY FOR THE FAILED OPEN MANIFOLD 5 ISOLATION VALVE.

REPORT DATE 2/26/88 C-1288
ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11024X
NASA FMEA #: 05-6KF-2210-1
SUBSYSTEM: FRCS
MDAC ID: 11024
ITEM: DRIVER, HYBRID
LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

|                  | [ 3/2R ] | [ P ] | [ P ] | [ P ] | [ D ] | (ADD/DELETE) |

* CIL RETENTION RATIONALE: (If applicable)

- ADEQUATE [ ]
- INADEQUATE [ ]

REMARKS:

NASA FMEA CONTAINS MULTIPLE FAILURES. THIS FAILURE CAUSES LOSS OF ACCURATE INDICATION OF THE VALVE POSITION. REDUNDANCY PROVIDED. LOSS OF ALL REDUNDANCY MAY LEAD TO FALSELY FAILING THE VALVE CLOSED, POSSIBLY EFFECTING MISSION OPERATIONS.

AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88, NSTS 22206 WAS DISCUSSED. IT WAS AGREED UPON THAT THE ISSUE RAISED ABOVE WAS DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THE ISSUE REMAINS OPEN.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11025X
NASA FMEA #: 05-6KF-2210-2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 11025
ITEM: DRIVER, HYBRID

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)
[ 2 /2 ] [ ] [ ] [ ] [ ] [ A ]
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
THIS FAILURE CAUSES THE INABILITY TO OPEN THE VALVE, CAUSING LOSS OF VERNIERS FOR MISSION OPERATIONS.

ISSUE IS TIED TO THE IOA HARDWARE CRITICALITY FOR THE FAILED CLOSED MANIFOLD 5 ISOLATION VALVE.

REPORT DATE 2/26/88 C-1290
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
NASA DATA:
ASSESSMENT ID: FRCS-11026X
NASA FMEA #: 05-6KF-2213-1
SUBSYSTEM: FRCS
MDAC ID: 11026
ITEM: DRIVER, HYBRID
LEAD ANALYST: D. HARTMAN

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| IOA [3/1R] | [P] | [NA] | [P] | [ ] |
| COMPARE [N] | [ ] | [N] | [ ] | [ ] |

RECOMMENDATIONS: (If different from NASA)

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

*CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
THIS FAILURE CAUSES INABILITY TO CLOSE THE VALVE TO ISOLATE A THRUSTER LEAK.

ISSUE IS TIED TO THE IOA HARDWARE CRITICALLY FOR A FAILED OPEN MANIFOLD 5 ISOLATION VALVE.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11027X
NASA FMEA #: 05-6KF-2213-2

SUBSYSTEM: FRCS
MDAC ID: 11027
ITEM: DRIVER, HYBRID
LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

[ 3 /3 ] [ ] [ ] [ ] [ ] [ D ]

(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NASA FMEA CONTAINS MULTIPLE FAILURES. THIS FAILURE ALONE HAS NO EFFECT.

AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88, NSTS 22206 WAS DISCUSSED. IT WAS AGREED UPON THAT THE ISSUE RAISED ABOVE WAS DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THE ISSUE REMAINS OPEN.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11028X
NASA FMEA #: 05-6KF-2212-1
NASA DATA: BASELINE [ ] NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 11028
ITEM: DRIVER, HYBRID

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ] INADEQUATE [ ]

REMARKS:

This failure causes the inability to close the valve to isolate a thruster leak.

ISSUE IS TIED TO THE IOA HARDWARE CRITICALITY FOR THE FAILED OPEN MANIFOLD 5 ISOLATION VALVE.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11029X
NASA FMEA #: 05-6KF-2212-2
SUBSYSTEM: FRCS
MDAC ID: 11029
ITEM: DRIVER, HYBRID
LEAD ANALYST: D. HARTMAN

NASA DATA:
BASELINE [ ]
NEW [ X ]

ITEM
NASA [ 3 /1R ] [ P ] [ F ] [ P ] [ X ] *
IOA [ 2 /2 ] [ ] [ ] [ ] [ X ]
COMPARE [ N /N ] [ N ] [ N ] [ N ] [ ]

RECOMMENDATIONS: (If different from NASA)
[ 3 /1R ] [ P ] [ NA] [ P ] [ D ]
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NASA FMEA CONTAINS MULTIPLE FAILURES. THIS DRIVER FAILED HIGH CAUSES INABILITY TO OPEN THE ISOLATION VALVE. THIS CAUSES LOSS OF VERNIERS THUS MISSION OPERATIONS.

ISSUE TIED TO THE IOA HARDWARE CRITICALITY FOR THE FAILED CLOSED MANIFOLD 5 ISOLATION VALVE.

REPORT DATE 2/26/88 C-1294
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11030X
NASA FMEA #: 05-6KF-2211-1
SUBSYSTEM: FRCS
MDAC ID: 11030
ITEM: DRIVER, HYBRID
LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

[2 /2] [ ] [ ] [ ] [ A ]
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
THIS FAILURE CAUSES INABILITY TO OPEN THE VALVE FOR VERNIERS, THUS CAUSING LOSS OF MISSION OPERATIONS.

ISSUE IS TIED TO THE IOA HARDWARE CRITICALITY FOR THE FAILED CLOSED MANIFOLD 5 ISOLATION VALVE.

REPORT DATE 2/26/88 C-1295
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11031X
NASA FMEA #: 05-6KF-2211-2

SUBSYSTEM: FRCS
MDAC ID: 11031
ITEM: DRIVER, HYBRID
LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:

NASA FMEA CONTAINS MULTIPLE FAILURES. THIS FAILURE ALONE HAS NO EFFECT.

AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88, NSTS 22206 WAS DISCUSSED. IT WAS AGREED UPON THAT THE ISSUE RAISED ABOVE WAS DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THE ISSUE REMAINS OPEN.

REPORT DATE 2/26/88 C-1296
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11032X
NASA FMEA #: 05-6KF-2113A-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 11032
ITEM: DRIVER, HYBRID

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)
[ 2 /2 ] [ ] [ ] [ ] [ A ]
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
THIS FAILURE CAUSES THE INABILITY TO OPEN THE VALVE, CAUSING LOSS
OF VERNIERS THUS MISSION OPERATIONS.

ISSUE IS TIED TO THE IOA HARDWARE CRITICALITY FOR THE FAILED
CLOSED MANIFOLD 5 ISOLATION VALVE.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88  
ASSESSMENT ID: FRCS-11033X  
NASA FMEA #: 05-6KF-2113A-2  

NASA DATA:  
BASELINE [ ]  
NEW [ X ]

SUBSYSTEM: FRCS  
MDAC ID: 11033  
ITEM: DRIVER, HYBRID

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:

NASA FMEA CONTAINS MULTIPLE FAILURES. LOSE CAPABILITY TO CLOSE THE VALVE TO ISOLATE A THRUSTER LEAK.

AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88, NSTS 22206 WAS DISCUSSED. IT WAS AGREED UPON THAT THE ISSUE RAISED ABOVE WAS DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THE ISSUE REMAINS OPEN.

REPORT DATE 2/26/88 C-1298
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11034X
NASA FMEA #: 05-6KF-2224-1
NASA DATA:
BASELINE [ ]
NEW [ X ]
SUBSYSTEM: FRCS
MDAC ID: 11034
ITEM: DRIVER, HYBRID
LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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IOA [ 2 /2 ] [ ] [ ] [ ] [ X ]
COMPARE [ N /N ] [ N ] [ N ] [ N ] [ N ]

RECOMMENDATIONS: (If different from NASA)

[ 2 /2 ] [ ] [ ] [ ] [ A ] (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
THIS FAILURE CAUSES THE INABILITY TO OPEN THE VALVE, CAUSING LOSS OF VERNIERS THUS MISSION OPERATIONS.

ISSUE IS TIED TO THE IOA HARDWARE CRITICALITY FOR THE FAILED CLOSED MANIFOLD 5 ISOLATION VALVE.
### APPENDIX C
### ASSESSMENT WORKSHEET

**ASSessment DATE:** 1/29/88

**Assessment ID:** FRCS-11035X

**NASA FMEA #:** 05-6KF-2224-2

**SUBSYSTEM:** FRCS

**MDAC ID:** 11035

**ITEM:** DRIVER, HYBRID

**LEAD ANALYST:** D. HARTMAN

**ASSESSMENT:** CRITICALITY REDUNDANCY SCREENS CIL ITEM

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**RECOMMENDATIONS:** (If different from NASA)

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

* **CIL RETENTION RATIONALE:** (If applicable)

ADEQUATE [ ]

INADEQUATE [ ]

**REMARKS:**

NASA FMEA CONTAINS MULTIPLE FailURES. THIS FAILURE ALONE HAS NO EFFECT.

AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88, NSTS 22206 WAS DISCUSSED. IT WAS AGREED UPON THAT THE ISSUE RAISED ABOVE WAS DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THE ISSUE REMAINS OPEN.

**REPORT DATE 2/26/88** C-1300
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11036X
NASA FMEA #: 05-6KF-2257-1
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 11036
ITEM: DIODE

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:

NASA FMEA CONTAINS MULTIPLE FAILURES. THIS FAILURE ALONE HAS NO EFFECT.

AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88, NSTS 22206 WAS DISCUSSED. IT WAS AGREED UPON THAT THE ISSUE RAISED ABOVE WAS DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THE ISSUE REMAINS OPEN.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11037X
NASA FMEA #: 05-6KF-2257-2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 11037
ITEM: DIODE

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

[ 3 /2R ] [ P ] [ P ] [ P ] [ ]

(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:

THIS FAILURE MAY CAUSE LOSS OF ACCURATE INDICATION OF THE VALVE POSITION. REDUNDANCY PROVIDED. LOSS OF ALL REDUNDANCY MAY LEAD TO FALSELY FAILING THE VALVE CLOSED, POSSIBLY EFFECTING MISSION OPERATIONS.

ISSUE NOT RESOLVED AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88.

REPORT DATE 2/26/88 C-1302
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11038X
NASA FMEA #: 05-6KF-2257A-1

SUBSYSTEM: FRCS
MDAC ID: 11038
ITEM: DIODE
LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NASA FMEA CONTAINS MULTIPLE FAILURES. THIS FAILURE ALONE HAS NO EFFECT.

AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88, NSTS 22206 WAS DISCUSSED. IT WAS AGREED UPON THAT THE ISSUE RAISED ABOVE WAS DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THE ISSUE REMAINS OPEN.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11039X
NASA FMEA #: 05-6KF-2257A-2

SUBSYSTEM: FRCS
MDAC ID: 11039
ITEM: DIODE
LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

[3/2R] [P] [P] [P] [ ]

(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:

THIS FAILURE CAUSES LOSS OF ACCURATE INDICATION OF THE VALVE POSITION. REDUNDANCY PROVIDED. LOSS OF ALL REDUNDANCY MAY LEAD TO FALSELY FAILING THE VALVE CLOSED, POSSIBLY EFFECTING MISSION OPERATIONS.

ISSUE NOT RESOLVED AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88.

REPORT DATE 2/26/88 C-1304
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11044X
NASA FMEA #: 05-6KF-2257D-1

SUBSYSTEM: FRCS
MDAC ID: 11044
ITEM: DIODE

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

[ 3 /1R ] [ P ] [ NA] [ P ] [ ] |

(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:

THIS FAILURE CAUSES INABILITY TO CLOSE THE VALVE TO ISOLATE A THRUSTER LEAK.

ISSUE IS TIED TO THE IOA HARDWARE CRITICALITY FOR THE FAILED OPEN MANIFOLD 5 ISOLATION VALVE.
### APPENDIX C
### ASSESSMENT WORKSHEET

**ASSESSMENT DATE:** 1/29/88  
**ASSESSMENT ID:** FRCS-11045X  
**NASA FMEA #:** 05-6KF-2257D-2  
**SUBSYSTEM:** FRCS  
**MDAC ID:** 11045  
**ITEM:** DIODE  
**LEAD ANALYST:** D. HARTMAN

**ASSESSMENT:**

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**RECOMMENDATIONS:** (If different from NASA)

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(ADD/DELETE)

* **CIL RETENTION RATIONALE:** (If applicable)

  ADEQUATE [ ]  
  INADEQUATE [ ]

**REMARKS:**

NO DIFFERENCES.

**REPORT DATE** 2/26/88  
C-1306
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11046X
NASA FMEA #: 05-6KF-2257E-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 11046
ITEM: DIODE

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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| IOA  | 3 /1R| [ P ] [ P ] [ P ] [ ] | [ ] |

COMPARE [ ] [ ] [ ] [ ] [ ] [ ]

RECOMMENDATIONS: (If different from NASA)

[ ] [ ] [ ] [ ] [ ] [ ]

(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
LOSE CAPABILITY TO CLOSE THE VALVE WITH THE GPC. MANUAL
REDUNDANCY PROVIDED. LOSS OF ALL REDUNDANCY CAUSES INABILITY TO
ISOLATE A THRUSTER LEAK.

SUBSYSTEM MANAGER STATED THAT THE GPC IS NOT USED TO ISOLATE A
THRUSTER LEAK BECAUSE TIME TO EFFECT IS UP TO 24 HOURS (SOFTWARE
HAS TO BE MANUALLY LOADED). IOA WITHDRAWS THEIR ISSUE BASED ON
THIS RATIONALE.

REPORT DATE 2/26/88  C-1307
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11047X
NASA FMEA #: 05-6KF-2257E-2
SUBSYSTEM: FRCS
MDAC ID: 11047
ITEM: DIODE
LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-1308
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11048X
NASA FMEA #: 05-6KF-2257B-1
SUBSYSTEM: FRCS
MDAC ID: 11048
ITEM: DIODE
LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

*CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-1309
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11049X
NASA FMEA #: 05-6KF-2257B-2
SUBSYSTEM: FRCS
MDAC ID: 11049
ITEM: DIODE
LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
IOA AGREES WITH NASA FMEA.

REPORT DATE 2/26/88 C-1310
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11050X
NASA FMEA #: 05-6KF-2257C-1
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 11050
ITEM: DIODE
LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)
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* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-1311
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11051X
NASA FMEA #: 05-6KF-2257C-2
SUBSYSTEM: FRCS
MDAC ID: 11051
ITEM: DIODE
LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-1312
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11052X
NASA FMEA #: 05-6KF-2257B-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 11052
ITEM: DIODE

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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COMPARE [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]

RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-1313
APPENDIX C  
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88  
ASSESSMENT ID: FRCS-11053X  
NASA FMEA #: 05-6KF-2257B-2  
SUBSYSTEM: FRCS  
MDAC ID: 11053  
ITEM: DIODE  
LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS:  (If different from NASA)
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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
IOA AGREES WITH NASA FMEA.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11054X
NASA FMEA #: 05-6KF-2257C-1

SUBSYSTEM: FRCS
MDAC ID: 11054
ITEM: DIODE
LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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*(ADD/DELETE)*

*CIL RETENTION RATIONALE: (If applicable)*

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:

NO DIFFERENCES.

REPORT DATE 2/26/88 C-1315
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11055X
NASA FMEA #: 05-6KF-2257C-2
SUBSYSTEM: FRCS
MDAC ID: 11055
ITEM: DIODE
LEAD ANALYST: D. HARTMAN

NASA DATA:
BASELINE [ ]
NEW [ X ]

ASSESSMENT:
CRITICALITY
FLIGHT
HDW/FUNC
A B C
NASA [ 3 /3 ] [ ] [ ] [ ] [ ] [ ] *
IOA [ 3 /3 ] [ ] [ ] [ ] [ ] [ ]
COMPARE [ / ] [ ] [ ] [ ] [ ] [ ]

RECOMMENDATIONS: (If different from NASA)
[ / ] [ ] [ ] [ ] [ ] (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-1316
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11056X
NASA FMEA #: 05-6KF-2269-1
SUBSYSTEM: FRCS
MDAC ID: 11056
ITEM: DIODE
LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)
[ 3 /2R ] [ P ] [ P ] [ P ] [ ]

* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
THIS FAILURE MAY CAUSE LOSS OF ACCURATE INDICATION OF THE VALVE POSITION. REDUNDANCY PROVIDED. LOSS OF ALL REDUNDANCY MAY LEAD TO FALSELY FAILING THE VALVE CLOSED, POSSIBLY EFFECTING MISSION OPERATIONS.

ISSUE NOT RESOLVED AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88.

REPORT DATE 2/26/88 C-1317
APPENDIX C  
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88  
ASSESSMENT ID: FRCS-11057X  
NASA FMEA #: 05-6KF-2269-2  
NASA DATA:  
BASELINE [ ]  
NEW [ X ]  
SUBSYSTEM: FRCS  
MDAC ID: 11057  
ITEM: DIODE  
LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)  
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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)  
ADEQUATE [ ]  
INADEQUATE [ ]

REMARKS:  
NO DIFFERENCES.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11058X
NASA FMEA #: 05-6KF-2269-1
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 11058
ITEM: DIODE
LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

[ 3 /2R ] [ P ] [ P ] [ P ] [ ]
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
THIS FAILURE MAY CAUSE LOSS OF ACCURATE INDICATION OF THE VALVE POSITION. REDUNDANCY PROVIDED. LOSS OF ALL REDUNDANCY MAY LEAD TO FALSELY FAILING THE VALVE CLOSED, POSSIBLY EFFECTING MISSION OPERATIONS.

ISSUE NOT RESOLVED AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88.

REPORT DATE 2/26/88 C-1319
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11059X
NASA FMEA #: 05-6KF-2269-2

SUBSYSTEM: FRCS
MDAC ID: 11059
ITEM: DIODE

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-1320
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11060X
NASA FMEA #: 05-6KF-2257D-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 11060
ITEM: DIODE

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
LOSE CAPABILITY TO CLOSE THE VALVE WITH MANUALLY. LOSS OF ALL REDUNDANCY CAUSES INABILITY TO ISOLATE A THRUSTER LEAK.

ISSUE IS TIED TO THE IOA HARDWARE CRITICALITY FOR THE FAILED OPEN MANIFOLD 5 ISOLATION VALVE.

REPORT DATE 2/26/88 C-1321
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11061X
NASA FMEA #: 05-6KF-2257D-2

SUBSYSTEM: FRCS
MDAC ID: 11061
ITEM: DIODE
LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

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REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-1322
**APPENDIX C**

**ASSESSMENT WORKSHEET**

**ASSESSMENT DATE:** 1/29/88

**ASSESSMENT ID:** FRCS-11062X

**NASA FMEA #:** 05-6KF-2257E-1

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**SUBSYSTEM:** FRCS

**MDAC ID:** 11062

**ITEM:** DIODE

**LEAD ANALYST:** D. HARTMAN

**ASSESSMENT:**

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**RECOMMENDATIONS:** (If different from NASA)

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**CIL RETENTION RATIONALE:** (If applicable)

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*ADEQUATE [ ]
INADEQUATE [ ]

**REMARKS:**

LOSE CAPABILITY TO CLOSE THE VALVE WITH THE GPC. MANUAL REDUNDANCY PROVIDED. LOSS OF ALL REDUNDANCY CAUSES INABILITY TO ISOLATE A THRUSTER LEAK.

SUBSYSTEM MANAGER STATED THAT THE GPC IS NOT USED TO ISOLATE A THRUSTER LEAK BECAUSE TIME TO EFFECT IS UP TO 24 HOURS (SOFTWARE HAS TO BE MANUALLY LOADED). IOA WITHDRAWS THEIR ISSUE BASED ON THIS RATIONALE.

**REPORT DATE** 2/26/88

C-1323
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11063X
NASA FMEA #: 05-6KF-2257E-2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 11063
ITEM: DIODE

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-1324
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11064X
NASA FMEA #: 05-6KF-2257F-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 11064
ITEM: DIODE

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
LOSE CAPABILITY TO CLOSE THE VALVE. LOSS OF ALL REDUNDANCY
CAUSES INABILITY TO ISOLATE A THRUSTER LEAK.

ISSUE IS TIED TO THE IOA HARDWARE CRITICALITY FOR THE FAILED OPEN
MANIFOLD 5 ISOLATION VALVE.

REPORT DATE 2/26/88 C-1325
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11065X
NASA FMEA #: 05-6KF-2257F-2

SUBSYSTEM: FRCS
MDAC ID: 11065
ITEM: DIODE

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

CRITICALITY
FLIGHT
HDW/FUNC

REDUNDANCY SCREENS
A      B      C

NASA [ 3 /2R ] [ P ] [ P ] [ P ] [ ] *
IOA [ 3 /3 ] [ ] [ ] [ ] [ ]
COMPARE [ /N ] [ N ] [ N ] [ N ] [ ]

RECOMMENDATIONS: (If different from NASA)
[ 3 /3 ] [ ] [ ] [ ] [ ]

* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NASA FMEA CONTAINS MULTIPLE FAILURES. THIS FAILURE ALONE HAS NO EFFECT.

AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88, NSTS 22206 WAS DISCUSSED. IT WAS AGREED UPON THAT THE ISSUE RAISED ABOVE WAS DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THE ISSUE REMAINS OPEN.

REPORT DATE 2/26/88 C-1326
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
NASA DATA:
BASELINE [ ]
NEW [ X ]

ASSESSMENT ID: FRCS-11066X
NASA FMEA #: 05-6KF-2257G-1

SUBSYSTEM: FRCS
MDAC ID: 11066
ITEM: DIODE

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

CRITICALITY
FLIGHT
HDW/FUNC

REduNDANCY SCREENS

CIL

ITEM

NASA [ 3 /3 ] [ ] [ ] [ ] [ ] [ ] [ ]*
IOA [ 3 /1R ] [ P ] [ NA] [ P ] [ ]

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

RECOMMENDATIONS: (If different from NASA)

[ / ] [ ] [ ] [ ] [ ] [ ]

(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
LOSE CAPABILITY TO CLOSE THE VALVE WITH THE GPC. MANUAL REDUNDANCY PROVIDED. LOSS OF ALL REDUNDANCY CAUSES INABILITY TO ISOLATE A THRUSTER LEAK.

SUBSYSTEM MANAGER STATED THAT THE GPC IS NOT USED TO ISOLATE A THRUSTER LEAK BECAUSE TIME TO EFFECT IS UP TO 24 HOURS (SOFTWARE HAS TO BE MANUALLY LOADED). IOA WITHDRAWS THEIR ISSUE BASED ON THIS RATIONALE.

REPORT DATE 2/26/88 C-1327
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88  NASA DATA:
ASSESSMENT ID: FRCS-11067X   BASELINE [ ]
NASA FMEA #: 05-6KF-2257G-2   NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 11067
ITEM: DIODE

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:

NO DIFFERENCES.

REPORT DATE 2/26/88 C-1328
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11068X
NASA FMEA #: 05-6KF-2257H-1
SUBSYSTEM: FRCS
MDAC ID: 11068
ITEM: DIODE
LEAD ANALYST: D. HARTMAN

NASA DATA:
BASELINE [ ]
NEW [ X ]

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)
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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-1329
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11069X
NASA FMEA #: 05-6KF-2257H-2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 11069
ITEM: DIODE
LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-1330
### APPENDIX C
### ASSESSMENT WORKSHEET

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**RECOMMENDATIONS:** (If different from NASA)

| A | [ ] |

(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

| ADEQUATE | [ ] |
| INADEQUATE | [ ] |

**REMARKS:**

THIS FAILURE CAUSES THE INABILITY TO OPEN THE ISOLATION VALVE, CAUSING LOSS OF VERNIERS THUS MISSION OPERATIONS.

ISSUE IS TIED TO THE IOA HARDWARE CRITICALITY FOR THE FAILED CLOSED MANIFOLD 5 ISOLATION VALVE.

---

REPORT DATE 2/26/88 C-1331
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11071X
NASA FMEA #: 05-6KF-2258-2
SUBSYSTEM: FRCS
MDAC ID: 11071
ITEM: DIODE
LEAD ANALYST: D. HARTMAN

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IOA [ 3 /3 ] [ ] [ ] [ ] [ ] [ ] [ ]

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

RECOMMENDATIONS: (If different from NASA)

[ / ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]

(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]

INADEQUATE [ ]

REMARKS:

NO DIFFERENCES.

REPORT DATE 2/26/88 C-1332
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11072X
MDAC ID: 11072
ITEM: DIODE
SUBSYSTEM: FRCS
LEAD ANALYST: D. HARTMAN

NASA DATA:
BASELINE [ ]
NEW [ ]

NASA FMEA #: NONE

ASSESSMENT:
CRITICALITY
FLIGHT HDW/FUNC

A B C

NASA [ ] [ ] [ ] [ ] [ ] [ ]*

IOA [ 3 /1R ] [ P ] [ NA] [ P ] [ ]

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

RECOMMENDATIONS: (If different from NASA)
[ 3 /1R ] [ P ] [ NA] [ P ] [ ]
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
DIODES NOT ADDRESSED BY A FMEA. IOA RECOMMENDS THEIR INCLUSION INTO A FMEA.

SUBSYSTEM MANAGER STATED THAT THE DIODES WERE PART OF THE MANIFOLD ISOLATION VALVE ASSEMBLY. FOR COMPLETENESS, IOA RECOMMENDS THIS FAILURE BE INCORPORATED INTO A FMEA.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11073X
NASA FMEA #: NONE
SUBSYSTEM: FRCS
MDAC ID: 11073
ITEM: DIODE
LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]

INADEQUATE [ ]

REMARKS:
DIODES NOT ADDRESSED BY A FMEA. IOA RECOMMENDS THEIR INCLUSION INTO A FMEA.

SUBSYSTEM MANAGER STATED THAT THE DIODES WERE PART OF THE MANIFOLD ISOLATION VALVE ASSEMBLY. FOR COMPLETENESS, IOA RECOMMENDS THIS FAILURE BE INCORPORATED INTO A FMEA.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11074X
NASA FMEA #: NONE
NASA FMEA #: NONE
SUBSYSTEM: FRCS
MDAC ID: 11074
ITEM: DIODE
LEAD ANALYST: D. HARTMAN

ASSESSMENT:

CRITICALITY
FLIGHT
HDW/FUNC

REDUNDANCY SCREENS
A   B   C

CIL ITEM

NASA [ / ] [ ] [ ] [ ] [ ] [ ] [ ] *

IOA [ 3 /1R ] [ P ] [ NA] [ P ] [ ] [

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

RECOMMENDATIONS: (If different from NASA)

[ 3 /1R ] [ P ] [ NA] [ P ] [ ]

(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]

INADEQUATE [ ]

REMARKS:

DIODES NOT ADDRESSED BY A FMEA. IOA RECOMMENDS THEIR INCLUSION INTO A FMEA.

SUBSYSTEM MANAGER STATED THAT THE DIODES WERE PART OF THE MANIFOLD ISOLATION VALVE ASSEMBLY. FOR COMPLETENESS, IOA RECOMMENDS THIS FAILURE BE INCORPORATED INTO A FMEA.

REPORT DATE 2/26/88 C-1335
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11075X
NASA FMEA #: NONE

NASA DATA:
BASELINE [ ]
NEW [ ]

SUBSYSTEM: FRCS
MDAC ID: 11075
ITEM: DIODE

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

| CRITICALLY | REDUNDANCY SCREENS | CIL |
| FLIGHT | HDW/FUNC | A | B | C | ITEM |
| NASA | [ ] | [ ] | [ ] | [ ] | [ ] |
| IOA | [ 3/3 ] | [ ] | [ ] | [ ] | [ ] |
| COMPARE | [ N/N ] | [ ] | [ ] | [ ] | [ ] |

RECOMMENDATIONS: (If different from NASA)

[ 3/3 ] [ ] [ ] [ ] [ ] [ ]

(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
DIODES NOT ADDRESSED BY A FMEA. IOA RECOMMENDS THEIR INCLUSION INTO A FMEA.

SUBSYSTEM MANAGER STATED THAT THE DIODES WERE PART OF THE MANIFOLD ISOLATION VALVE ASSEMBLY. FOR COMPLETENESS, IOA RECOMMENDS THIS FAILURE BE INCORPORATED INTO A FMEA.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11076X
NASA FMEA #: 05-6KF-2280-1
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 11076
ITEM: CIRCUIT BREAKER

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

[ / ] [ ] [ ] [ ] [ ]

(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
IOA AGREES WITH NASA FMEA.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11077X
NASA FMEA #: 05-6KF-2280-2

SUBSYSTEM: FRCS
MDAC ID: 11077
ITEM: CIRCUIT BREAKER

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NASA FMEA CONTAINS MULTIPLE FAILURES. THIS FAILURE ALONE HAS NO EFFECT.

AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88, NSTS 22206 WAS DISCUSSED. IT WAS AGREED UPON THAT THE ISSUE RAISED ABOVE WAS DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THE ISSUE REMAINS OPEN.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11078X
NASA FMEA #: NONE
SUBSYSTEM: FRCS
MDAC ID: 11078
ITEM: MICROSWITCH
LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
SWITCH NOT ADDRESSED BY A FMEA. IOA RECOMMENDS ITS INCLUSION INTO A FMEA.

SUBSYSTEM MANAGER STATED THE MICROSWITCH WAS PART OF THE MANIFOLD 5 ISOLATION VALVE ASSEMBLY. FOR COMPLETENESS, IOA RECOMMENDS THIS FAILURE BE INCORPORATED INTO A FMEA.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11079X
NASA FMEA #: NONE

SUBSYSTEM: FRCS
MDAC ID: 11079
ITEM: MICROSWITCH

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:

SWITCH NOT ADDRESSED BY A FMEA. IOA RECOMMENDS ITS INCLUSION INTO A FMEA.

REPORT DATE 2/26/88 C-1340
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11080X
NASA FMEA #: 05-6KF-2026-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 11080
ITEM: HE OX & FU ISOL VLV A OR B SWITCH

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)
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* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-1341
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
NASA DATA:
ASSESSMENT ID: FRC5-11081X
BASELINE [ ]
NASA FMEA #: 05-6KF-2026-2
NEW [ X ]

SUBSYSTEM: FRC5
MDAC ID: 11081
ITEM: HE OX & FU ISOL VLV A OR B SWITCH

LEAD ANALYST: D. HARTMAN

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| IOA           | [ 2 /1R ]          | [ P ] | [ P ] | [ P ] | [ X ] |
| COMPARE       | [ N / ]            | [ ]   | [ ]   | [ ]   | [ N ] |

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
WITH VALVE CLOSED, A SHORT ACROSS CLOSE CONTACTS PREVENTS FURTHER VALVE MOVEMENT. LOSS OF ALL REDUNDANCY CAUSES INABILITY TO EXPEL PROPELLANTS TO MEET CG LIMITS.

ISSUE IS TIED TO THE IOA HARDWARE CRITICALITY FOR A FAILED CLOSED HELIUM ISOLATION VALVE.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11082X
NASA FMEA #: 05-6KF-2026-2

SUBSYSTEM: FRCS
MDAC ID: 11082
ITEM: HE OX & FU ISOL VLV A OR B SWITCH

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
WITH VALVE CLOSED, A SHORT ACROSS CLOSE CONTACTS PREVENTS FURTHER VALVE MOVEMENT. LOSS OF ALL REDUNDANCY CAUSES INABILITY TO EXPEL PROPPELLANTS TO MEET CG LIMITS.

ISSUE IS TIED TO THE IOA HARDWARE CRITICALITY FOR A FAILED CLOSED HELIUM ISOLATION VALVE.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11083X
NASA FMEA #: 05-6KF-2026-2

SUBSYSTEM: FRCS
MDAC ID: 11083
ITEM: HE OX & FU ISOL VLV A OR B SWITCH
LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)
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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ] INADEQUATE [ ]

REMARKS:
THIS FAILURE HAS NO EFFECT.

ISSUE NOT RESOLVED AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88.

REPORT DATE 2/26/88 C-1344
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11084X
NASA FMEA #: 05-6KF-2026-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 11084
ITEM: HE OX & FU ISOL VLV A OR B SWITCH

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)
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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-1345
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11085X
NASA FMEA #: 05-6KF-2028-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 11085
ITEM: OX & FU TK ISOL VLV 1/2 SWITCH

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88  C-1346
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11086X
NASA FMEA #: 05-6KF-2028-2
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 11086
ITEM: OX & FU TK ISOL VLV 1/2 SWITCH

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
NASA DATA:
ASSESSMENT ID: FRCS-11087X
NASA FMEA #: 05-6KF-2028-2

SUBSYSTEM: FRCS
MDAC ID: 11087
ITEM: OX & FU TK ISOL VLV 1/2 SWITCH

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
IOA AGREES WITH NASA FMEA.

REPORT DATE 2/26/88 C-1348
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11088X
NASA FMEA #: 05-6KF-2028-2

SUBSYSTEM: FRCS
MDAC ID: 11088
ITEM: OX & FU TK ISOL VLV 1/2 SWITCH

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)
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* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-1349
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11089X
NASA FMEA #: 05-6KF-2028-1

SUBSYSTEM: FRCS
MDAC ID: 11089
ITEM: OX & FU TK ISOL VLV 1/2 SWITCH

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-1350
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11090X
NASA FMEA #: 05-6KF-2029-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 11090
ITEM: OX & FU TK ISOL VALV 3/4/5 SWITCH 24

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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| FLIGHT |          |      |     |      |     |
|---------|----------|------|-----|------|
| HDW/FUNC | NASA    | IOA  |COMPARE| [ / ] | [ ] | [ ] |
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RECOMMENDATIONS: (If different from NASA)
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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-1351
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11091X
NASA FMEA #: 05-6KF-2029-2
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 11091
ITEM: OX & FU TK ISOL VLV 3/4/5 SWITCH 24

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-1352
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11092X
NASA FMEA #: 05-6KF-2029-2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 11092
ITEM: OX & FU TK ISOL VLV 3/4/5 SWITCH 24

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)
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* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
IOA AGREES WITH NASA FMEA.

REPORT DATE 2/26/88 C-1353
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11093X
NASA FMEA #: 05-6KF-2029-2

ASSESSMENT ID: FRCS-11093X
NASA FMEA #: 05-6KF-2029-2

SUBSYSTEM: FRCS
MDAC ID: 11093
ITEM: OX & FU TK ISOL VLV 3/4/5 SWITCH 24
LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

* CIL RETENTION RATIONALE: (If applicable)

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-1354
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11094X
NASA FMEA #: 05-6KF-2029-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 11094
ITEM: OX & FU TK ISOL VLV 3/4/5 SWITCH 24
LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)
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REMARKS:
NO DIFFERENCES.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11095X
NASA FMEA #: 05-6KF-2030-1
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCs
MDAC ID: 11095
ITEM: MANIFOLD 1, OX & FU ISOL VLV SWITCH 30

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

CRITICALITY
FLIGHT
HDW/FUNC

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-1356
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11096X
NASA FMEA #: 05-6KF-2030-2
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 11096
ITEM: MANIFOLD 1, OX & FU ISOL VLV SWITCH 30
LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
LOSS OF ALL REDUNDANCY CAUSES INABILITY TO EXPEL PROPELLANTS TO MEET CG LIMITS.

ISSUE IS TIED TO THE IOA HARDWARE CRITICALITY FOR A FAILED CLOSED HELIUM ISOLATION VALVE.

REPORT DATE 2/26/88 C-1357
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11097X
NASA FMEA #: 05-6KF-2030-2
NASA DATA: BASELINE [ ]
NEW [ X ]

SUBSYSTEM: NASA
FRCS
MDAC ID: 11097
ITEM: MANIFOLD 1, OX & FU ISOL VLV SWITCH 30
LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
LOSS OF ALL REDUNDANCY CAUSES INABILITY TO EXPEL PROPELLANTS TO MEET CG LIMITS.

ISSUE IS TIED TO THE IOA HARDWARE CRITICALITY FOR A FAILED CLOSED HELIUM ISOLATION VALVE.

REPORT DATE 2/26/88 C-1358
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
NASA DATA:
ASSESSMENT ID: FRCS-11098X
NASA FMEA #: 05-6KF-2030-2
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 11098
ITEM: MANIFOLD 1, OX & FU ISOL VLV SWITCH 30

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:

THIS FAILURE HAS NO EFFECT. SWITCH IS EASILY CORRECTABLE.

ISSUE NOT RESOLVED AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88.

REPORT DATE 2/26/88 C-1359
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
NASA DATA:
ASSESSMENT ID: FRCS-11099X
NASA FMEA #: 05-6KF-2030-1
SUBSYSTEM: FRCS
MDAC ID: 11099
ITEM: MANIFOLD 1, OX & FU ISOL VLV SWITCH 30
LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-1360
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1100X
NASA FMEA #: 05-6KF-2030-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 11100
ITEM: MANIFOLD 2, OX & FU ISOL VLV SWITCH 31

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11101X
NASA FMEA #: 05-6KF-2030-2

SUBSYSTEM: FRCS
MDAC ID: 11101
ITEM: MANIFOLD 2, OX & FU ISOL VLV SWITCH 31
LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
THIS FAILURE CAUSES LOSS INABILITY TO OPEN THE VALVE. LOSS OF ALL REDUNDANCY CAUSES INABILITY TO EXPEL PROPELLANTS TO MEET CG LIMITS.

ISSUE IS TIED TO THE IOA HARDWARE CRITICALITY FOR THE FAILED CLOSED MANIFOLD 2 ISOLATION VALVE.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11102X
NASA FMEA #: 05-6KF-2030-2

SUBSYSTEM: FRCS
MDAC ID: 11102
ITEM: MANIFOLD 2, OX & FU ISOL VLV SWITCH 31

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:

THIS FAILURE CAUSES LOSS INABILITY TO OPEN THE VALVE. LOSS OF ALL REDUNDANCY CAUSES INABILITY TO EXPEL PROPELLANTS TO MEET CG LIMITS.

ISSUE IS TIED TO THE IOA HARDWARE CRITICALITY FOR THE FAILED CLOSED MANIFOLD 2 ISOLATION VALVE.

REPORT DATE 2/26/88 C-1363
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11103X
NASA FMEA #: 05-6KF-2030-2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 11103
ITEM: MANIFOLD 2, OX & FU ISOL VLV SWITCH 31

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

[ 3 /3 ] [ ] [ ] [ ] [ ]

(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
THIS FAILURE HAS NO EFFECT. SWITCH IS EASILY CORRECTABLE.

ISSUE NOT RESOLVED AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11104X
NASA FMEA #: 05-6KF-2030-1

NASA DATA:
BASELINE [    ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 11104
ITEM: MANIFOLD 2, OX & FU ISOL VLV SWITCH 31

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

| CRITICALITY | REDUNDANCY SCREENS | CIL |
|            |                | ITEM |
| FLIGHT HDW/FUNC | 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:
NO DIFFERENCES.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-1105X
NASA FMEA #: 05-6KF-2030-1
NASA DATA:

| SUBSYSTEM: | FRCS |
| MDAC ID: | 11105 |
| ITEM: | MANIFOLD 3, OX & FU ISOL VLV SWITCH 32 |

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

| CRITICALITY | REDUNDANCY SCREENS | CIL |
| HDW/FUNC | 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:

NO DIFFERENCES.

REPORT DATE 2/26/88 C-1366
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11106X
NASA FMEA #: 05-6KF-2030-2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 11106
ITEM: MANIFOLD 3, OX & FU ISOL VLV SWITCH 32

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)
[ 2 /1R ] [ P ] [ P ] [ P ] [ A ]
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
THIS FAILURE CAUSES INABILITY TO OPEN THE VALVE. LOSS OF ALL REDUNDANCY CAUSES INABILITY TO EXPEL PROPELLANTS TO MEET CG LIMITS.

ISSUE IS TIED TO THE IOA HARDWARE CRITICALITY FOR THE FAILED CLOSED MANIFOLD 3 ISOLATION VALVE.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
NASA DATA:
ASSESSMENT ID: FRCS-11107X
NASA FMEA #: 05-6KF-2030-2
SUBSYSTEM: FRCS
MDAC ID: 11107
ITEM: MANIFOLD 3, OX & FU ISOL VLV SWITCH 32
LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
THIS FAILURE CAUSES INABILITY TO OPEN THE VALVE. LOSS OF ALL REDUNDANCY CAUSES INABILITY TO EXPEL PROPELLANTS TO MEET CG LIMITS.

ISSUE IS TIED TO THE IOA HARDWARE CRITICALITY FOR THE FAILED CLOSED MANIFOLD 3 ISOLATION VALVE.

REPORT DATE 2/26/88 C-1368
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11108X
NASA FMEA #: 05-6KF-2030-2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 11108
ITEM: MANIFOLD 3, OX & FU ISOL VLV SWITCH 32

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)
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(ADD/DELETE):

* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
THIS FAILURE HAS NO EFFECT. SWITCH IS EASILY CORRECTABLE.

ISSUE NOT RESOLVED AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
NASA DATA:
ASSESSMENT ID: FRCS-11109X
NASA FMEA #: 05-6KF-2030-1

SUBSYSTEM: FRCS
MDAC ID: 11109
ITEM: MANIFOLD 3, OX & FU ISOL VLV SWITCH 32

LEAD ANALYST: D. HARTMAN

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

RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-1370
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11110X
NASA FMEA #: 05-6KF-2030-1
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 11110
ITEM: MANIFOLD 4, OX & FU ISOL VLV SWITCH 33

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-1371
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88  NASA DATA:
ASSESSMENT ID: FRCS-11111X  BASELINE [ ]
NASA FMEA #: 05-6KF-2030-2  NEW [ X ]

SUBSYSTEM: FRCS  MDAC ID: 11111
ITEM: MANIFOLD 4, OX & FU ISOL VLV SWITCH 33

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
THIS FAILURE CAUSES INABILITY TO OPEN THE VALVE. LOSS OF ALL REDUNDANCY CAUSES INABILITY TO EXPEL PROPELLANTS TO MEET CG LIMITS.

ISSUE IS TIED TO THE IOA HARDWARE CRITICALITY FOR THE FAILED CLOSED MANIFOLD 4 ISOLATION VALVE.

REPORT DATE 2/26/88  C-1372
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11112X
NASA FMEA #: 05-6KF-2030-2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 11112
ITEM: MANIFOLD 4, OX & FU ISOL VLV SWITCH 33

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
THIS FAILURE CAUSES INABILITY TO OPEN THE VALVE. LOSS OF ALL REDUNDANCY CAUSES INABILITY TO EXPEL PROPELLANTS TO MEET CG LIMITS.

ISSUE IS TIED TO THE IOA HARDWARE CRITICALITY FOR THE FAILED CLOSED MANIFOLD 4 ISOLATION VALVE.

REPORT DATE 2/26/88 C-1373
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11113X
NASA FMEA #: 05-6KF-2030-2
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 11113
ITEM: MANIFOLD 4, OX & FU ISOL VLV SWITCH 33
LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
THIS FAILURE HAS NO EFFECT. SWITCH IS EASILY CORRECTABLE.

ISSUE NOT RESOLVED AT THE MEETING WITH THE SUBSYSTEM MANAGER ON 1/20/88.

REPORT DATE 2/26/88 C-1374
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11114X
NASA FMEA #: 05-6KF-2030-1
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 11114
ITEM: MANIFOLD 4, OX & FU ISOL VLV SWITCH 33

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-1375
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11115X
NASA FMEA #: 05-6KF-2035-1

SUBSYSTEM: FRCS
MDAC ID: 11115
ITEM: RJDF1B F1 MANIFOLD LOGIC SWITCH 7

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
LOSE CAPABILITY TO EXPEL PROPELLANTS TO MEET CG LIMITS.

ISSUE IS TIED TO THE IOA HARDWARE CRITICALITY FOR THE FAILED OFF THRUSTER.

REPORT DATE 2/26/88 C-1376
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11116X
NASA FMEA #: 05-6KF-2035-2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 11116
ITEM: RJDF1B F1 MANIFOLD LOGIC SWITCH 7

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

CRITICALITY
FLIGHT
HDW/FUNC

REDUNDANCY SCREENS
A    B     C

CIL
ITEM

NASA [ 3 /1R ]  [ P ]  [ P ]  [ P ]  [ ] *

IOA [ 3 /3 ]  [ ]  [ ]  [ ]  [ ]

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

RECOMMENDATIONS: (If different from NASA)

[ 3 /3 ]  [ ]  [ ]  [ ]  [ ]  [ ]

(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
THIS FAILURE ALONE HAS NO EFFECT.

ISSUE NOT RESOLVED AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11117X
NASA FMEA #: 05-6KF-2035-2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 11117
ITEM: RJDF1B F1 MANIFOLD LOGIC SWITCH 7

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:

THIS FAILURE ALONE HAS NO EFFECT.

ISSUE NOT RESOLVED AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88.

REPORT DATE 2/26/88 C-1378
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11118X
NASA FMEA #: 05-6KF-2035-2

SUBSYSTEM: FRCS
MDAC ID: 11118
ITEM: RJDF1B F1 MANIFOLD LOGIC SWITCH 7

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:

THIS FAILURE HAS NO EFFECT.

ISSUE NOT RESOLVED AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88.

REPORT DATE 2/26/88 C-1379
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11119X
NASA FMEA #: 05-6KF-2035-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 11119
ITEM: RJDF1B F1 MANIFOLD LOGIC SWITCH 7

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)
[ 2 /1R ] [ P ] [ P ] [ P ] [ A ]

(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
LOSE CAPABILITY TO EXPEL PROPELLANTS TO MEET CG LIMITS.

ISSUE IS TIED TO THE IOA HARDWARE CRITICALITY FOR THE FAILED OFF THRUSTER.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88  NASA DATA:
ASSESSMENT ID: FRCS-11120X  BASELINE [ ]
NASA FMEA #: 05-6KF-2036-1  NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 11120
ITEM: RJDF1B F1 MANIFOLD DRIVER SWITCH 8

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:

LOSS OF ALL REDUNDANT JETS CAUSES INABILITY TO EXPEL PROPELLANTS TO MEET CG LIMITS.

ISSUE IS TIED TO THE IOA HARDWARE CRITICALITY FOR THE FAILED OFF THRUSTERS.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11121X
NASA FMEA #: 05-6KF-2036-2

NASA DATA:
BASELINE [  ]
NEW [  X  ]

SUBSYSTEM: FRCS
MDAC ID: 11121
ITEM: RJDF1B F1 MANIFOLD DRIVER SWITCH 8

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

[ 3 /3 ] [ ] [ ] [ ] [ ] [ ]

(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NASA FMEA CONTAINS MULTIPLE FAILURES. THIS FAILURE ALONE HAS NO EFFECT.

AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88, NSTS 22206 WAS DISCUSSED. IT WAS AGREED UPON THAT THE ISSUE RAISED ABOVE WAS DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THE ISSUE REMAINS OPEN.

REPORT DATE 2/26/88 C-1382
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11122X
NASA FMEA #: 05-6KF-2036-2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 11122
ITEM: RJDF1B F1 MANIFOLD DRIVER SWITCH 8

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:

NASA FMEA CONTAINS MULTIPLE FAILURES. THIS FAILURE ALONE HAS NO EFFECT.

AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88, NSTS 22206 WAS DISCUSSED. IT WAS AGREED UPON THAT THE ISSUE RAISED ABOVE WAS DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THE ISSUE REMAINS OPEN.

REPORT DATE 2/26/88 C-1383
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11123X
NASA FMEA #: 05-6KF-2036-2
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 11123
ITEM: RJDF1B F1 MANIFOLD DRIVER SWITCH 8
LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NASA FMEA CONTAINS MULTIPLE FAILURES. THIS FAILURE ALONE HAS NO EFFECT.

AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88, NSTS 22206 WAS DISCUSSED. IT WAS AGREED UPON THAT THE ISSUE RAISED ABOVE WAS DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THE ISSUE REMAINS OPEN.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11124X
NASA FMEA #: 05-6KF-2036-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 11124
ITEM: RJDF1B F1 MANIFOLD DRIVER SWITCH 8

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
LOSS OF ALL REDUNDANT JETS CAUSES INABILITY TO EXPEL PROPELLANTS TO MEET CG LIMITS.

ISSUE IS TIED TO THE IOA HARDWARE CRITICALITY FOR THE FAILED OFF THRUSTERS.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11125X
NASA FMEA #: 05-6KF-2035-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 11125
ITEM: RJDF1A F2 MANIFOLD LOGIC SWITCH 7
LEAD ANALYST: D. HARTMAN

ASSESSMENT:

CRITICALITY REDUNDANCY SCREENS CIL
FLIGHT HDW/FUNC A B C ITEM

NASA [ 3 /1R ] [ P ] [ P ] [ P ] [ ] *
IOA [ 2 /1R ] [ P ] [ P ] [ P ] [ X ]
COMPARE [ N / ] [ ] [ ] [ ] [ N ]

RECOMMENDATIONS: (If different from NASA)
[ 2 /1R ] [ P ] [ P ] [ P ] [ A ]
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
LOSE CAPABILITY TO EXPEL PROPELLANTS TO MEET CG LIMITS.

ISSUE IS TIED TO THE IOA HARDWARE CRITICALITY FOR THE FAILED OFF THRUSTER.

REPORT DATE 2/26/88 C-1386
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11126X
NASA FMEA #: 05-6KF-2035-2

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11126X
NASA FMEA #: 05-6KF-2035-2

SUBSYSTEM: FRCS
MDAC ID: 11126
ITEM: RJDF1A F2 MANIFOLD LOGIC SWITCH 7

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
THIS FAILURE ALONE HAS NO EFFECT.

ISSUE NOT RESOLVED AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11127X
NASA FMEA #: 05-6KF-2035-2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 11127
ITEM: RJDF1A F2 MANIFOLD LOGIC SWITCH 7

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
THIS FAILURE ALONE HAS NO EFFECT.

ISSUE NOT RESOLVED AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88.

REPORT DATE 2/26/88
C-1388
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11128X
NASA FMEA #: 05-6KF-2035-2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 11128
ITEM: RJDF1A F2 MANIFOLD LOGIC SWITCH 7

LEAD ANALYST: D. HARTMAN

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| IOA [ 3 /1R ]  | [ P ] [ P ] [ P ] [ ] |

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

RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:

THIS FAILURE ALONE HAS NO EFFECT.

ISSUE NOT RESOLVED AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88.

REPORT DATE 2/26/88 C-1389
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11129X
NASA FMEA #: 05-6KF-2035-1

SUBSYSTEM: FRCS
MDAC ID: 11129
ITEM: RJDF1A F2 MANIFOLD LOGIC SWITCH 7

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
LOSE CAPABILITY TO EXPEL PROPELLANTS TO MEET CG LIMITS.

ISSUE IS TIED TO THE IOA HARDWARE CRITICALITY FOR THE FAILED OFF THRUSTER.

REPORT DATE 2/26/88 C-1390
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11130X
NASA FMEA #: 05-6KF-2036-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 11130
ITEM: RJDF1A F2 MANIFOLD DRIVER SWITCH 8

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
LOSE CAPABILITY TO EXPEL PROPELLANTS TO MEET CG LIMITS.

ISSUE IS TIED TO THE IOA HARDWARE CRITICALITY FOR THE FAILED OFF THRUSTERS.

REPORT DATE 2/26/88 C-1391
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11131X
NASA FMEA #: 05-6KF-2036-2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 11131
ITEM: RJDFIA F2 MANIFOLD DRIVER SWITCH 8

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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*CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NASA FMEA CONTAINS MULTIPLE FAILURES. THIS FAILURE ALONE HAS NO EFFECT.

AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88, NSTS 22206 WAS DISCUSSED. IT WAS AGREED UPON THAT THE ISSUE RAISED ABOVE WAS DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THE ISSUE REMAINS OPEN.

REPORT DATE 2/26/88 C-1392
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11132X
NASA FMEA #: 05-6KF-2036-2

SUBSYSTEM: FRCS
MDAC ID: 11132
ITEM: RJDF1A F2 MANIFOLD DRIVER SWITCH 8

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

[ 3 /3 ] [ ] [ ] [ ] [ ] [ ]

(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:

NASA FMEA CONTAINS MULTIPLE FAILURES. THIS FAILURE ALONE HAS NO EFFECT.

AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88, NSTS 22206 WAS DISCUSSED. IT WAS AGREED UPON THAT THE ISSUE RAISED ABOVE WAS DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THE ISSUE REMAINS OPEN.

REPORT DATE 2/26/88 C-1393
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11133X
NASA FMEA #: 05-6KF-2036-2

NASA DATA:  
BASELINE [ ]  
NEW [ x ]  

SUBSYSTEM: FRCS
MDAC ID: 11133
ITEM: RJDF1A F2 MANIFOLD DRIVER SWITCH 8

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)
[ 3 /3 ] [ ] [ ] [ ] [ ] [ ]
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NASA FMEA CONTAINS MULTIPLE FAILURES. THIS FAILURE ALONE HAS NO EFFECT.

AT MEETING WITH SUBSYSTEM MANAGER ON 1/20/88, NSTS 22206 WAS DISCUSSED. IT WAS AGREED UPON THAT THE ISSUE RAISED ABOVE WAS DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THE ISSUE REMAINS OPEN.

REPORT DATE 2/26/88 C-1394
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11134X
NASA FMEA #: 05-6KF-2036-1

SUBSYSTEM: FRCS
MDAC ID: 11134
ITEM: RJDFIA F2 MANIFOLD DRIVER SWITCH 8

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

[ 2 /1R ] [ P ] [ P ] [ P ] [ A ]

(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
LOSE CAPABILITY TO EXPEL PROPELLANTS TO MEET CG LIMITS.

ISSUE IS TIED TO THE IOA HARDWARE CRITICALITY FOR THE FAILED OFF THRUSTERS.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11135X
NASA FMEA #: 05-6KF-2035-1

SUBSYSTEM: MDAC
MDAC ID: 11135
ITEM: RJDF2A F3 MANIFOLD LOGIC SWITCH 5

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
LOSE CAPABILITY TO EXPEL PROPELLANTS TO MEET CG LIMITS.

ISSUE IS TIED TO THE IOA HARDWARE CRITICALITY FOR THE FAILED OFF THRUSTER.

REPORT DATE 2/26/88 C-1396
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11136X
NASA FMEA #: 05-6KF-2035-2
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 11136
ITEM: RJDF2A F3 MANIFOLD LOGIC SWITCH 5

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:

THIS FAILURE ALONE HAS NO EFFECT.

ISSUE NOT RESOLVED AT MEETING WITH THE SUBSYSTEM MANAGER ON 1/20/88.

REPORT DATE 2/26/88 C-1397
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11137X
NASA FMEA #: 05-6KF-2035-2
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 11137
ITEM: RJDF2A F3 MANIFOLD LOGIC SWITCH 5

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
THIS FAILURE ALONE HAS NO EFFECT.

ISSUE NOT RESOLVED AT MEETING WITH THE SUBSYSTEM MANAGER ON 1/20/88.

REPORT DATE 2/26/88 C-1398
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11138X
NASA FMEA #: 05-6KF-2035-2

SUBSYSTEM: FRCS
MDAC ID: 11138
ITEM: RJDF2A F3 MANIFOLD LOGIC SWITCH 5

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)
[3/3] [ ] [ ] [ ] [ ]
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
THIS FAILURE ALONE HAS NO EFFECT.

ISSUE NOT RESOLVED AT MEETING WITH THE SUBSYSTEM MANAGER ON 1/20/88.

REPORT DATE 2/26/88 C-1399
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: FRCS-11139X
NASA FMEA #: 05-6KFO-2035-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: FRCS
MDAC ID: 11139
ITEM: RJDF2A F3 MANIFOLD DRIVER SWITCH 5

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)
[ 2 /1R ] [ P ] [ P ] [ P ] [ A ]
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
LOSE CAPABILITY TO EXPEL PROPELLANTS TO MEET CG LIMITS.
ISSUE IS TIED TO THE IOA HARDWARE CRITICALITY FOR THE FAILED OFF THRUSTER.

REPORT DATE 2/26/88 C-1400