INDEPENDENT ORBITER ASSESSMENT

ASSESSMENT OF THE REACTION CONTROL SYSTEM
Vol. 4 of 5

26 FEBRUARY 1988
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2018
NASA FMEA #: 05-6KA-2007-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 2018
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:
IOA AGREES WITH NASA FMEA.

REPORT DATE 2/26/88  C-2201
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2019
NASA FMEA #: 05-6KA-2008-1
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 2019
ITEM: FUSE, 1A

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-2202
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2020
NASA FMEA #: 05-6KA-2007-1
SUBSYSTEM: ARCS
MDAC ID: 2020
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:
IOA AGREES WITH NASA FMEA.

REPORT DATE 2/26/88 C-2203
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2021
NASA FMEA #: 05-6KA-2008-1
SUBSYSTEM: ARCS
MDAC ID: 2021
ITEM: FUSE, 1A
LEAD ANALYST: D. HARTMAN

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
IOA AGREES WITH NASA FMEA.

REPORT DATE 2/26/88 C-2204
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2022
NASA FMEA #: 05-6KA-2007-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 2022
ITEM: FUSE, 1A

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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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:
IOA AGREES WITH NASA FMEA.

REPORT DATE 2/26/88 C-2205
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2023
NASA FMEA #: 05-6KA-2130-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 2023
ITEM: LATCHING RELAY, RJDA BUS A

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: ARCS-2024
NASA FMEA #: 05-6KA-2130-2

SUBSYSTEM: ARCS
MDAC ID: 2024
ITEM: LATCHING RELAY, RJDA BUS A

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 (MULTIPLE FAILURES) WAS RAISED DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THIS ISSUE REMAINS OPEN.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2025
NASA FMEA #: 05-6KA-2130-1
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 2025
ITEM: LATCHING RELAY, RJDA BUS B

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-2208
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2026
NASA FMEA #: 05-6KA-2130-2

SUBSYSTEM: ARCS
MDAC ID: 2026
ITEM: LATCHING RELAY, RJDA BUS B

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 (MULTIPLE FAILURES) WAS RAISED DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THIS ISSUE REMAINS OPEN.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2027
NASA FMEA #: 05-6KA-2130-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 2027
ITEM: LATCHING RELAY, RJDA BUS C

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-2210
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2028
NASA FMEA #: 05-6KA-2130-2
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 2028
ITEM: LATCHING RELAY, RJDA BUS C

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 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 (MULTIPLE FAILURES) WAS RAISED DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THIS ISSUE REMAINS OPEN.

REPORT DATE 2/26/88 C-2211
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2029
NASA FMEA #: 05-6KA-2093-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 2029
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 THE REMOVAL OF THE "SHORT" FAILURE MODE FROM THIS FMEA.

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

REPORT DATE 2/26/88 C-2212
**APPENDIX C**
**ASSESSMENT WORKSHEET**

**ASSESSMENT DATE:** 1/29/88  
**ASSESSMENT ID:** ARCS-2030  
**NASA FMEA #:** 05-6KA-2093-1

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

**SUBSYSTEM:** ARCS  
**MDAC ID:** 2030  
**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-2213**
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2031
NASA FMEA #: 05-6KA-2098-1
SUBSYSTEM: ARCS
MDAC ID: 2031
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 ON 1/20/88 AT MEETING WITH SUBSYSTEM MANAGER (SHORT FAILURE MODE TO BE REMOVED).
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2032
NASA FMEA #: 05-6KA-2098-1
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 2032
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-2215
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2033
NASA FMEA #: 05-6KA-2098-1
SUBSYSTEM: ARCS
MDAC ID: 2033
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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(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 ON 1/20/88 AT MEETING WITH SUBSYSTEM MANAGER
(SHORT FAILURE MODE TO BE REMOVED).

REPORT DATE 2/26/88 C-2216
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2034
NASA FMEA #: 05-6KA-2098-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 2034
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-2217
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2035
NASA FMEA #: 05-6KA-2098-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 2035
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 ON 1/20/88 AT MEETING WITH SUBSYSTEM MANAGER (SHORT FAILURE MODE TO BE REMOVED).

REPORT DATE 2/26/88 C-2218
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2036
NASA FMEA #: 05-6KA-2098-1
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 2036
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-2219
APPENDIX C  
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88  
NASA DATA:  
ASSESSMENT ID: ARCS-2037  
BASELINE [ ]  
NASA FMEA #: 05-6KA-2098-1  
NEW [ X ]

SUBSYSTEM: ARCS  
MDAC ID: 2037  
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 ON 1/20/88 AT MEETING WITH SUBSYSTEM MANAGER
(SHORT FAILURE MODE TO BE REMOVED).

REPORT DATE 2/26/88  C-2220
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2038
NASA FMEA #: 05-6KA-2098-1
SUBSYSTEM: ARCS
MDAC ID: 2038
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)

[ / ] [ ] [ ] [ ] [ ]

(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-2221
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2039
NASA FMEA #: 05-6KA-2095-1

SUBSYSTEM: ARCS
MDAC ID: 2039
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.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2040
NASA FMEA #: 05-6KA-2095-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 2040
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 ON 1/20/88 AT MEETING WITH SUBSYSTEM MANAGER (SHORT FAILURE MODE TO BE REMOVED).

REPORT DATE 2/26/88 C-2223
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2041
NASA FMEA #: 05-6KA-2095-1
NASA DATA: BASELINE [ ] NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 2041
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 ON 1/20/88 AT MEETING WITH SUBSYSTEM MANAGER (SHORT FAILURE MODE TO BE REMOVED).
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2042
NASA FMEA #: 05-6KA-2095-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 2042
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-2225
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2043
NASA FMEA #: NONE

SUBSYSTEM: ARCS
MDAC ID: 2043
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:
RLR42 TYPE RESISTORS HAVE BEEN CHANGED TO RWR80 TYPE RESISTORS, WHICH CAN SHORT. IOA RECOMMENDS THIS FAILURE BE INCORPORATED INTO A FMEA. NOTE: THE OPEN FAILURE MODE FOR THIS FMEA IS ON 05-6KA-2111-1.

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

REPORT DATE 2/26/88 C-2226
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2044
NASA FMEA #: 05-6KA-2111-I
SUBSYSTEM: ARCS
MDAC ID: 2044
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:
IOA AGREES WITH NASA FMEA.

REPORT DATE 2/26/88 C-2227
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2045
NASA FMEA #: 05-6KA-2094-2

SUBSYSTEM: ARCS
MDAC ID: 2045
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-2228
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2046
NASA FMEA #: 05-6KA-2094-1
SUBSYSTEM: ARCS
MDAC ID: 2046
ITEM: RESISTOR, 1.2K 2W
LEAD ANALYST: D. HARTMAN

NASA DATA:
BASELINE [ ]
NEW [ X ]

NASA FMEA #: 05-6KA-2094-1

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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: ARCS-2047
NASA FMEA #: 05-6KA-2097-1
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 2047
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 ON 1/20/88 AT MEETING WITH SUBSYSTEM MANAGER
(SHORT FAILURE MODE TO BE REMOVED).
APPENDIX C  
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2048
NASA FMEA #: 05-6KA-2097-1
SUBSYSTEM: ARCS
MDAC ID: 2048
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-2231
ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2049
NASA FMEA #: 05-6KA-2097-1

SUBSYSTEM: ARCS
MDAC ID: 2049
ITEM: RESISTOR, 2.2K 1/2W
LEAD ANALYST: D. HARTMAN

ASSESSMENT:

| CRITICALITY | REDUNDANCY SCREENS | CIL |
| FLYT | 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 ON 1/20/88 AT MEETING WITH SUBSYSTEM MANAGER (SHORT FAILURE MODE TO BE REMOVED).

REPORT DATE 2/26/88 C-2232
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2050
NASA FMEA #: 05-6KA-2097-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 2050
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-2233
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2051
NASA FMEA #: 05-6KA-2096-1
SUBSYSTEM: ARCS
MDAC ID: 2051
ITEM: RESISTOR, 1.8K 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 ON 1/20/88 AT MEETING WITH SUBSYSTEM MANAGER (SHORT FAILURE MODE TO BE REMOVED).

REPORT DATE 2/26/88 C-2234
ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2052
NASA FMEA #: 05-6KA-2096-I

SUBSYSTEM: ARCS
MDAC ID: 2052
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: ARCS-2053
NASA FMEA #: 05-6KA-2096-1
NASA DATA: BASELINE [ ] NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 2053
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 ON 1/20/88 AT MEETING WITH SUBSYSTEM MANAGER (SHORT FAILURE MODE TO BE REMOVED).

REPORT DATE 2/26/88 C-2236
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2054
NASA FMEA #: 05-6KA-2096-1
NASA DATA:
BASELINE [ ]
NEW [ x ]

SUBSYSTEM: ARCS
MDAC ID: 2054
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-2237
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2055
NASA FMEA #: 05-6KA-2094-2
SUBSYSTEM: ARCS
MDAC ID: 2055
ITEM: RESISTOR, 1.2K 2W
LEAD ANALYST: D. HARTMAN

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 2055
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.

REPORT DATE 2/26/88 C-2238
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2056
NASA FMEA #: 05-6KA-2094-1

SUBSYSTEM: ARCS
MDAC ID: 2056
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:
IOA AGREES WITH NASA FMEA.

REPORT DATE 2/26/88  C-2239
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2057
NASA FMEA #: 05-6KA-2096-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 2057
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 ON 1/20/88 AT MEETING WITH SUBSYSTEM MANAGER (SHORT FAILURE MODE TO BE REMOVED).

REPORT DATE 2/26/88 C-2240
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2058
NASA FMEA #: 05-6KA-2096-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 2058
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-2241
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2059
NASA FMEA #: 05-6KA-2096-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 2059
ITEM: RESISTOR, 2.2K 1/2W

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)
[ / ] [ ] [ ] [ ] [ ] [ ]

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

REPORT DATE 2/26/88 C-2242
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2060
NASA FMEA #: 05-6KA-2096-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 2060
ITEM: RESISTOR, 2.2K 1/2W

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
ASSESSMENT ID: ARCS-2061
NASA FMEA #: 05-6KA-2094-2
SUBSYSTEM: ARCS
MDAC ID: 2061
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: ARCS-2062
NASA FMEA #: 05-6KA-2094-1

SUBSYSTEM: ARCS
MDAC ID: 2062
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:
IOA AGREES WITH NASA FMEA.

REPORT DATE 2/26/88 C-2245
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2063
NASA FMEA #: 05-6KA-2098-1
SUBSYSTEM: ARCS
MDAC ID: 2063
ITEM: RESISTOR, 1.8K 1/4W
LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

| A | B | C |
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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 ON 1/20/88 AT MEETING WITH SUBSYSTEM MANAGER (SHORT FAILURE MODE TO BE REMOVED).

REPORT DATE 2/26/88 C-2246
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2064
NASA FMEA #: 05-6KA-2098-1

SUBSYSTEM: ARCS
MDAC ID: 2064
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-2247
ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2065
NASA FMEA #: 05-6KA-2098-1
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 2065
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 ON 1/20/88 AT MEETING WITH SUBSYSTEM MANAGER (SHORT FAILURE MODE TO BE REMOVED).

REPORT DATE 2/26/88 C-2248
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2066
NASA FMEA #: 05-6KA-2098-1

SUBSYSTEM: ARCS
MDAC ID: 2066
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-2249
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2067
NASA FMEA #: 05-6KA-2096-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 2067
ITEM: RESISTOR, 1.8K 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 ON 1/20/88 AT MEETING WITH SUBSYSTEM MANAGER (SHORT FAILURE MODE TO BE REMOVED).

REPORT DATE 2/26/88 C-2250
**APPENDIX C**

**ASSESSMENT WORKSHEET**

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

**ASSESSMENT ID:** ARCS-2068

**NASA FMEA #:** 05-6KA-2096-1

**NASA DATA:**

Baseline [ ]

New [ x ]

**SUBSYSTEM:** ARCS

**MDAC ID:** 2068

**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-2251
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2069
NASA FMEA #: 05-6KA-2096-1
NASA DATA: BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 2069
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 ON 1/20/88 AT MEETING WITH SUBSYSTEM MANAGER
(SHORT FAILURE MODE TO BE REMOVED).

REPORT DATE 2/26/88 C-2252
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2070
NASA FMEA #: 05-6KA-2096-1

SUBSYSTEM: ARCS
MDAC ID: 2070
ITEM: RESISTOR, 2.2K 1/2W
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.

REPORT DATE 2/26/88 C-2253
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2071
NASA FMEA #: 05-6KA-2093-1
NASA DATA: BASELINE [ ] NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 2071
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 ON 1/20/88 AT MEETING WITH SUBSYSTEM MANAGER (SHORT FAILURE MODE TO BE REMOVED).

REPORT DATE 2/26/88 C-2254
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2072
NASA FMEA #: 05-6KA-2093-1

SUBSYSTEM: ARCS
MDAC ID: 2072
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.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2073
NASA FMEA #: 05-6KA-2094-2
SUBSYSTEM: ARCS
MDAC ID: 2073
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.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2074
NASA FMEA #: 05-6KA-2094-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 2074
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:
IOA AGREES WITH NASA FMEA.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88  NASA DATA:  
ASSESSMENT ID: ARCS-2075  BASELINE [ ]  
NASA FMEA #: 05-6KA-2098-1  NEW [ X ]  
SUBSYSTEM: ARCS  
MDAC ID: 2075  
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 ON 1/20/88 AT MEETING WITH SUBSYSTEM MANAGER
(SHORT FAILURE MODE TO BE REMOVED).

REPORT DATE 2/26/88  C-2258
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2076
NASA PMEA #: 05-6KA-2098-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 2076
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: ARCS-2077
NASA FMEA #: 05-6KA-2098-1
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 2077
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)
AFEQUATE [ ]
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 ON 1/20/88 AT MEETING WITH SUBSYSTEM MANAGER (SHORT FAILURE MODE TO BE REMOVED).

REPORT DATE 2/26/88 C-2260
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2078
NASA FMEA #: 05-6KA-2098-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 2078
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.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2079
NASA FMEA #: 05-6KA-2096-1

SUBSYSTEM: ARCS
MDAC ID: 2079
ITEM: RESISTOR, 1.8K 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)

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

REPORT DATE 2/26/88 C-2262
ASSESSMENT DATE: 1/29/88  
ASSESSMENT ID: ARCS-2080  
NASA FMEA #: 05-6KA-2096-I  
SUBSYSTEM: ARCS  
MDAC ID: 2080  
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.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2081
NASA FMEA #: 05-6KA-2096-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 2081
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 ON 1/20/88 AT MEETING WITH SUBSYSTEM MANAGER
(SHORT FAILURE MODE TO BE REMOVED).

REPORT DATE 2/26/88 C-2264
### APPENDIX C
#### ASSESSMENT WORKSHEET

**ASSESSMENT DATE:** 1/29/88  
**ASSESSMENT ID:** ARCS-2082  
**NASA FMEA #:** 05-6KA-2096-1  
**SUBSYSTEM:** ARCS  
**MDAC ID:** 2082  
**ITEM:** RESISTOR, 2.2K 1/2W  
**LEAD ANALYST:** D. HARTMAN

#### ASSESSMENT:

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(If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

#### REMARKS:

NO DIFFERENCES.

**REPORT DATE** 2/26/88  
**C-2265**
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2083
NASA FMEA #: 05-6KA-2097-1

SUBSYSTEM: ARCS
MDAC ID: 2083
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 ON 1/20/88 AT MEETING WITH SUBSYSTEM MANAGER
(SHORT FAILURE MODE TO BE REMOVED).

REPORT DATE 2/26/88 C-2266
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2084
NASA FMEA #: 05-6KA-2097-1

SUBSYSTEM: ARCS
MDAC ID: 2084
ITEM: RESISTOR, 1.8K 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-2267
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2085
NASA FMEA #: 05-6KA-2097-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 2085
ITEM: RESISTOR, 2.2K 1/2W
LEAD ANALYST: D. HARTMAN

ASSESSMENT:

CRITICALITY
FLIGHT
HDW/FUNC

REDUNDANCY SCREENS
A    B    C

NASA [ 3 /3 ] [ ] [ ] [ ] [ ] [ ]
IOA [ 3 /3 ] [ ] [ ] [ ] [ ] [ ]
COMPAR [ / ] [ ] [ ] [ ] [ ] [ ]

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

REPORT DATE 2/26/88 C-2268
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:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-2269
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2087
NASA FMEA #: 05-6KA-2095-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 2087
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-2270
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2088
NASA FMEA #: 05-6KA-2095-1
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 2088
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 ON 1/20/88 AT MEETING WITH SUBSYSTEM MANAGER
(SHORT FAILURE MODE TO BE REMOVED).

REPORT DATE 2/26/88 C-2271
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2089
NASA FMEA #: 05-6KA-2093-1
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 2089
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 ON 1/20/88 AT MEETING WITH SUBSYSTEM MANAGER (SHORT FAILURE MODE TO BE REMOVED).

REPORT DATE 2/26/88 C-2272
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2090
NASA FMEA #: 05-6KA-2093-1

SUBSYSTEM: ARCS
MDAC ID: 2090
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:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-2273
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2091
NASA FMEA #: 05-6KA-2098-1
SUBSYSTEM: ARCS
MDAC ID: 2091
ITEM: RESISTOR, 1.8K 1/4W
LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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

REPORT DATE 2/26/88 C-2274
# APPENDIX C
## ASSESSMENT WORKSHEET

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

**ASSESSMENT ID:** ARCS-2092

**NASA FMEA #:** 05-6KA-2098-I

**NASA DATA:**

- **BASELINE:** [ ]
- **NEW:** [ X ]

**SUBSYSTEM:** ARCS

**MDAC ID:** 2092

**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.
ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2093
NASA FMEA #: 05-6KA-2098-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 2093
ITEM: RESISTOR, 2.2K 1/2W

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

REPORT DATE 2/26/88 C-2276
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2094
NASA FMEA #: 05-6KA-2098-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 2094
ITEM: RESISTOR, 2.2K 1/2W

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

CRITICALITY
FLIGHT HDW/FUNC

REDUNDANCY SCREENS
A B C

| NASA | 3 /3 | | | | | |
| IOA  | 3 /3 | | | | | |
| COMPARE | / | | | | | |

CIL ITEM

RECOMMENDATIONS: (If different from NASA)

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

(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-2277
ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2095
NASA FMEA #: NONE

SUBSYSTEM: ARCS
MDAC ID: 2095
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:
RLR42 TYPE RESISTORS HAVE BEEN CHANGED TO RWR80 TYPE RESISTORS, WHICH CAN SHORT. IOA RECOMMENDS THIS FAILURE BE INCORPORATED INTO A FMEA. NOTE: THE OPEN FAILURE MODE FOR THIS FMEA IS ON.

ISSUE RESOLVED ON 1/20/88 AT MEETING WITH SUBSYSTEM MANAGER (SHORT FAILURE MODE TO BE REMOVED).
ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2096
NASA FMEA #: 05-6KA-2111-1

SUBSYSTEM: ARCS
MDAC ID: 2096
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:
IOA AGREES WITH NASA FMEA.
APPENDIX C  
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88  
ASSESSMENT ID: ARCS-2097  
NASA FMEA #: 05-6KA-2098-1

NASA DATA:  
BASELINE [ ]  
NEW [ X ]

SUBSYSTEM:  
ARCS

MDAC ID:  
2097

ITEM:  
RESISTOR, 1.8K 1/4W

LEAD ANALYST:  
D. HARTMAN

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

REPORT DATE 2/26/88  
C-2280
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2098
NASA FMEA #: 05-6KA-2098-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 2098
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-2281
ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2099
NASA FEA #: 05-6KA-2098-1

SUBSYSTEM: ARCS
MDAC ID: 2099
ITEM: RESISTOR, 2.2K 1/2W

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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

REPORT DATE 2/26/88 C-2282
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2100
NASA FMEA #: 05-6KA-2098-1

SUBSYSTEM: ARCS
MDAC ID: 2100
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-2283
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2101
NASA FMEA #: 05-6KA-2096-1
SUBSYSTEM: ARCS
MDAC ID: 2101
ITEM: RESISTOR, 1.8K 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:
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 ON 1/20/88 AT MEETING WITH SUBSYSTEM MANAGER (SHORT FAILURE MODE TO BE REMOVED).

REPORT DATE 2/26/88   C-2284
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
NASA DATA:
BASELINE [ ]
NEW [ X ]

ASSESSMENT ID: ARCS-2102
NASA FMEA #: 05-6KA-2096-1

SUBSYSTEM: ARCS
MDAC ID: 2102
ITEM: RESISTOR, 1.8K 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.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2103
NASA FMEA #: 05-6KA-2096-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 2103
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 ON 1/20/88 AT MEETING WITH SUBSYSTEM MANAGER (SHORT FAILURE MODE TO BE REMOVED).

REPORT DATE 2/26/88  C-2286
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2104
NASA FMEA #: 05-6KA-2096-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 2104
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-2287
ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2105
NASA FMEA #: 05-6KA-2094-2
SUBSYSTEM: ARCS
MDAC ID: 2105
ITEM: RESISTOR, 1.2K 2W
LEAD ANALYST: D. HARTMAN

NASA DATA:
BASELINE [ ]
NEW [ X ]

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.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2106
NASA FMEA #: 05-6KA-2094-1
NASA DATA: BASELINE [ ] NEW [ X ]
SUBSYSTEM: ARCS
MDAC ID: 2106
ITEM: RESISTOR, 1.2K 2W
LEAD ANALYST: D. HARTMAN

ASSESSMENT:

CRITICALITY
FLIGHT
HDW/FUNC

REDUNDANCY SCREENS
A   B   C

CIL ITEM

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-2289
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2107
NASA FMEA #: 05-6KA-2097-1
SUBSYSTEM: ARCS
MDAC ID: 2107
ITEM: RESISTOR, 1.8K 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 ON 1/20/88 AT MEETING WITH SUBSYSTEM MANAGER (SHORT FAILURE MODE TO BE REMOVED).

REPORT DATE 2/26/88 C-2290
APPENDIX C  
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88  
ASSESSMENT ID: ARCS-2108  
NASA FMEA #: 05-6KA-2097-1

NASA DATA:  
BASELINE [ ]  
NEW [ x ]

SUBSYSTEM: ARCS  
MDAC ID: 2108  
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 RATIONAL: (If applicable)  
ADEQUATE [ ]  
INADEQUATE [ ]

REMARKS:  
NO DIFFERENCES.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2109
NASA FMEA #: 05-6KA-2097-1

SUBSYSTEM: ARCS
MDAC ID: 2109
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 ON 1/20/88 AT MEETING WITH SUBSYSTEM MANAGER (SHORT FAILURE MODE TO BE REMOVED).

REPORT DATE 2/26/88 C-2292
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2110
NASA FMEA #: 05-6KA-2097-1

SUBSYSTEM: ARCS
MDAC ID: 2110
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-2293
APPENDIX C  
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88  
ASSESSMENT ID: ARCS-2111  
NASA FMEA #: 05-6KA-2096-1  

NASA DATA:  
BASELINE [ ]  
NEW [ X ]

SUBSYSTEM: MDAC  
MDAC ID: ARCS  
ITEM: 2111  
RESISTOR, 1.8K 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:
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 ON 1/20/88 AT MEETING WITH SUBSYSTEM MANAGER (SHORT FAILURE MODE TO BE REMOVED).

REPORT DATE 2/26/88 C-2294
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2112
NASA FMEA #: 05-6KA-2096-1

SUBSYSTEM: ARCS
MDAC ID: 2112
ITEM: RESISTOR, 1.8K 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-2295
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2113
NASA FMEA #: 05-6KA-2096-1

SUBSYSTEM: ARCS
MDAC ID: 2113
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 ON 1/20/88 AT MEETING WITH SUBSYSTEM MANAGER
(SHORT FAILURE MODE TO BE REMOVED).

REPORT DATE 2/26/88 C-2296
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2114
NASA FMEA #: 05-6KA-2096-1
NASA DATA:
   BASELINE [ ]
   NEW [ x ]

SUBSYSTEM: ARCS
MDAC ID: 2114
ITEM: RESISTOR, 2.2K 1/2W

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-2297
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2115
NASA FMEA #: 05-6KA-2094-2
SUBSYSTEM: ARCS
MDAC ID: 2115
ITEM: RESISTOR, 1.2K 2W
LEAD ANALYST: D. HARTMAN

NASA DATA:
BASELINE [ ]
NEW [ X ]

ASSESSMENT:

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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-2298
# APPENDIX C
## ASSESSMENT WORKSHEET

**ASSESSMENT DATE:** 1/29/88  
**ASSESSMENT ID:** ARCS-2116  
**NASA FMEA #:** 05-6KA-2094-1  
**NASA DATA:**  
- BASELINE [ ]  
- NEW [ X ]  

**SUBSYSTEM:** ARCS  
**MDAC ID:** 2116  
**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:**  
IOA AGREES WITH NASA FMEA.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2117
NASA FMEA #: 05-6KA-2098-1

SUBSYSTEM: ARCS
MDAC ID: 2117
ITEM: RESISTOR, 1.8K 1/4W

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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

REPORT DATE 2/26/88 C-2300
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2118
NASA FMEA #: 05-6KA-2098-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 2118
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-2301
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2119
NASA FMEA #: 05-6KA-2098-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 2119
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 ON 1/20/88 AT MEETING WITH SUBSYSTEM MANAGER (SHORT FAILURE MODE TO BE REMOVED).

REPORT DATE 2/26/88 C-2302
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2120
NASA FMEA #: 05-6KA-2098-1

SUBSYSTEM: ARCS
MDAC ID: 2120
ITEM: RESISTOR, 2.2K 1/2W
LEAD ANALYST: D. HARTMAN

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 2120
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.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2121
NASA FMEA #: 05-6KA-2096-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 2121
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 ON 1/20/88 AT MEETING WITH SUBSYSTEM MANAGER (SHORT FAILURE MODE TO BE REMOVED).

REPORT DATE 2/26/88 C-2304
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2122
NASA FMEA #: 05-6KA-2096-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 2122
ITEM: RESISTOR, 1.8K 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:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-2305
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2123
NASA FMEA #: 05-6KA-2096-1
SUBSYSTEM: ARCS
MDAC ID: 2123
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 ON 1/20/88 AT MEETING WITH SUBSYSTEM MANAGER (SHORT FAILURE MODE TO BE REMOVED).

REPORT DATE 2/26/88 C-2306
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2124
NASA FMEA #: 05-6KA-2096-1

NASA DATA:
BASELINE [ ]
NEW [X ]

SUBSYSTEM: ARCS
MDAC ID: 2124
ITEM: RESISTOR, 2.2K 1/2W

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.

REPORT DATE 2/26/88 C-2307
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2125
NASA FMEA #: 05-6KA-2093-1

SUBSYSTEM: ARCS
MDAC ID: 2125
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 ON 1/20/88 AT MEETING WITH SUBSYSTEM MANAGER (SHORT FAILURE MODE TO BE REMOVED).

REPORT DATE 2/26/88 C-2308
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2126
NASA FMEA #: 05-6KA-2093-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 2126
ITEM: RESISTOR, 5.1K 1/4W

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

CRITICALITY
FLIGHT HDW/FUNC

REDUNDANCY SCREENS
A B C

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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: ARCS-2127
NASA FMEA #: 05-6KA-2094-2
SUBSYSTEM: ARCS
MDAC ID: 2127
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)

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REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-2310
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2128
NASA FMEA #: 05-6KA-2094-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 2128
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: ARCS-2129
NASA FMEA #: 05-6KA-2097-1

NASA DATA:
BASELINE [    ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 2129
ITEM: RESISTOR, 1.8K 1/4W

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

| CRITICALITY | REDUNDANCY SCREENS | CIL |
|             | FLIGHT HDW/FUNC    | ITEM |
|             | 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 ON 1/20/88 AT MEETING WITH SUBSYSTEM MANAGER (SHORT FAILURE MODE TO BE REMOVED).

REPORT DATE 2/26/88   C-2312
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2130
NASA FMEA #: 05-6KA-2097-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 2130
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-2313
ASSESSMENT DATE: 1/29/88
NASA DATA:
baseline [ ]
new [ X ]

NASA FMEA #: 05-6KA-2097-I

SUBSYSTEM: ARCS
MDAC ID: 2131
ITEM: RESISTOR, 2.2K 1/2 W

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

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2132
NASA FMEA #: 05-6KA-2097-1

SUBSYSTEM: ARCS
MDAC ID: 2132
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-2315
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2133
NASA FMEA #: 05-6KA-2098-1
NASA DATA: BASELINE [ ] NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 2133
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 ON 1/20/88 AT MEETING WITH SUBSYSTEM MANAGER (SHORT FAILURE MODE TO BE REMOVED).

REPORT DATE 2/26/88 C-2316
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2134
NASA FMEA #: 05-6KA-2098-1

SUBSYSTEM: ARCS
MDAC ID: 2134
ITEM: RESISTOR, 1.8K 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-2317
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2135
NASA FMEA #: 05-6KA-2098-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 2135
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 ON 1/20/88 AT MEETING WITH SUBSYSTEM MANAGER (SHORT FAILURE MODE TO BE REMOVED).

REPORT DATE 2/26/88 C-2318
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2136
NASA FMEA #: 05-6KA-2098-1

SUBSYSTEM: ARCS
MDAC ID: 2136
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-2319
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2137
NASA FMEA #: 05-6KA-2096-1
SUBSYSTEM: ARCS
MDAC ID: 2137
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 ON 1/20/88 AT MEETING WITH SUBSYSTEM MANAGER (SHORT FAILURE MODE TO BE REMOVED).
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2138
NASA FMEA #: 05-6KA-2096-1

SUBSYSTEM: ARCS
MDAC ID: 2138
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-2321
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2139
NASA FMEA #: 05-6KA-2096-1
SUBSYSTEM: ARCS
MDAC ID: 2139
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 ON 1/20/88 AT MEETING WITH SUBSYSTEM MANAGER (SHORT FAILURE MODE TO BE REMOVED).

REPORT DATE 2/26/88  C-2322
APPENDIX C  
ASSESSMENT WORKSHEET  

ASSESSMENT DATE: 1/29/88  
ASSESSMENT ID: ARCS-2140  
NASA FMEA #: 05-6KA-2096-1  

NASA DATA: 
BASELINE [ ] 
NEW [ X ]

SUBSYSTEM: ARCS  
MDAC ID: 2140  
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.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2141
NASA FMEA #: 05-6KA-2110-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 2141
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 ON 1/20/88 AT MEETING WITH SUBSYSTEM MANAGER
(STOP SHORT FAILURE MODE TO BE REMOVED).
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2142
NASA FMEA #: 05-6KA-2110-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 2142
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: ARCS-2143  
NASA FMEA #: 05-6KA-2110-1  

NASA DATA:  
BASELINE [ ]  
NEW [ X ]

SUBSYSTEM: ARCS  
MDAC ID: 2143  
ITEM: RESISTOR, 2.2K 1/2W  

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

REPORT DATE 2/26/88  
C-2326
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2144
NASA FMEA #: 05-6KA-2110-1

SUBSYSTEM: ARCS
MDAC ID: 2144
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-2327
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2145
NASA FMEA #: 05-6KA-2110-1

NASA DATA:
BASELINE [  ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 2145
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 ON 1/20/88 AT MEETING WITH SUBSYSTEM MANAGER (SHORT FAILURE MODE TO BE REMOVED).

REPORT DATE 2/26/88 C-2328
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2146
NASA FMEA #: 05-6KA-2110-1

SUBSYSTEM: ARCS
MDAC ID: 2146
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-2329
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2147
NASA FMEA #: 05-6KA-2110-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 2147
ITEM: RESISTOR, 2.2K 1/2W

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

| CRITICALLY | REDUNDANCY SCREENS | CIL |
| FLIGHT | HDW/FUNC | A | B | C |
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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 ON 1/20/88 AT MEETING WITH SUBSYSTEM MANAGER
(SHORT FAILURE MODE TO BE REMOVED).

REPORT DATE 2/26/88 C-2330
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2148
NASA FMEA #: 05-6KA-2110-1
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 2148
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.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2149
NASA FMEA #: 05-6KA-2109-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 2149
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-2332
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2150
NASA FMEA #: 05-6KA-2109-1

SUBSYSTEM: ARCS
MDAC ID: 2150
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 ON 1/20/88 AT MEETING WITH SUBSYSTEM MANAGER (SHORT FAILURE MODE TO BE REMOVED).

REPORT DATE 2/26/88 C-2333
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: [ ]
NASM DATA: BASELINE [ ]
NASM FMEA #: NEW [ ]

SUBSYSTEM: ARCS
MDAC ID: 2151
ITEM: RJDA1B L1/L5/R1 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:
RJDA1B L1/L5/R1 MANIFOLD DRIVER SWITCH 4 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs ARCS 12261X-12265X.

REPORT DATE 2/26/88 C-2334
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 
ASSESSMENT ID: ARCS-2152 
NASA FMEA #: 

NASA DATA: 
BASELINE [ ] 
NEW [ ] 

SUBSYSTEM: ARCS 
MDAC ID: 2152 
ITEM: RJDAIB L1/L5/R1 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: 
RJDAIB L1/L5/R1 MANIFOLD DRIVER SWITCH 4 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs ARCS 12261X-12265X.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: NASA DATA: *
ASSESSMENT ID: ARCS-2153 BASELINE [ ]
NASA FMEA #: NEW [ ]

SUBSYSTEM: ARCS
MDAC ID: 2153
ITEM: RJDA1B L1/L5/R1 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)

REMARKS:
RJDA1B L1/L5/R1 MANIFOLD DRIVER SWITCH 4 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs ARCS 12261X-12265X.

REPORT DATE 2/26/88 C-2336
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 
ASSESSMENT ID: ARCS-2154 
NASA FMEA #: 

NASA DATA: 
BASELINE [ ] 
NEW [ ]

SUBSYSTEM: ARCS 
MDAC ID: 2154 
ITEM: RJDA1B L1/L5/R1 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: 
RJDA1B L1/L5/R1 MANIFOLD DRIVER SWITCH 4 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS ARCS 12261X-12265X.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 
ASSESSMENT ID: ARCS-2155 
NASA FMEA #: 
NASA DATA: 
BASELINE [ ] 
NEW [ ] 
SUBSYSTEM: ARCS 
MDAC ID: 2155 
ITEM: RJDA1B L1/L5/R1 MANIFOLD DRIVER OFF SWITCH 
CONTACTS 3, 4 
LEAD ANALYST: 

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* CIL RETENTION RATIONALE: (If applicable) 

ADEQUATE [ ] 
INADEQUATE [ ] 

REMARKS: 
RJDA1B L1/L5/R1 MANIFOLD DRIVER SWITCH 4 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS ARCS 12261X-12265X. 

REPORT DATE 2/26/88 
C-2338
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE:  
ASSESSMENT ID: ARCS-2156  
NASA FMEA #:  

NASA DATA:  
BASELINE [ ]  
NEW [ ]  

SUBSYSTEM: ARCS  
MDAC ID: 2156  
ITEM: RJDA1B L1/L5/R1 MANIFOLD DRIVER OFF SWITCH  
CONTACTS 3, 4  
LEAD ANALYST:  

ASSESSMENT:  

| CRITICALITY | REDUNDANCY SCREENS | CIL ITEM |
| FLIGHT HDW/FUNC | A | B | C | |
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RECOMMENDATIONS: (If different from NASA)  
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*CIL RETENTION RATIONALE: (If applicable)  
ADEQUATE [ ]  
INADEQUATE [ ]  

REMARKS:  
RJDA1B L1/L5/R1 MANIFOLD DRIVER SWITCH 4 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS ARCS 12261X-12265X.
APPENDIX C
ASSESSMENT WORKSHEET

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ASSESSMENT ID: ARCS-2157 BASELINE [ ]
NASA MDID: ARCS NEW [ ]
FMEA #:

SUBSYSTEM: ARCS ASSESSMENT ID:
MDAC ID: 2157 ASSESSMENT:
ITEM: RJDA1B L1/L5/R1 MANIFOLD DRIVER ON SWITCH
CONTACTS 5, 6 ASSESSMENT:

LEAD ANALYST: ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:

RJDA1B L1/L5/R1 MANIFOLD DRIVER SWITCH 4 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs ARCS 12261X-12265X.

REPORT DATE 2/26/88 C-2340
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE:                  NASA DATA:
ASSESSMENT ID:  ARCS-2158         BASELINE [ ]
NASA FMEA #:                      NEW [ ]

SUBSYSTEM:  ARCS
MDAC ID:  2158
ITEM:   RJDA1B L1/L5/R1 MANIFOLD DRIVER ON SWITCH CONTACTS 5, 6

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
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REMARKS:
RJDA1B L1/L5/R1 MANIFOLD DRIVER SWITCH 4 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs ARCS 12261X-12265X.

REPORT DATE 2/26/88  C-2341
APPENDIX C
ASSESSMENT WORKSHEET

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NASA FMEA #: [Blank]
NASA DATA: BASELINE [ ] NEW [ ]
SUBSYSTEM: ARCS
MDAC ID: 2159
ITEM: RJDA1B L1/L5/R1 MANIFOLD DRIVER OFF SWITCH
CONTACTS 7, 8
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RECOMMENDATIONS: (If different from NASA)

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(ADD/DELETE)

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

REMARKS:
RJDA1B L1/L5/R1 MANIFOLD DRIVER SWITCH 4 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS ARCS 12261X-12265X.

REPORT DATE 2/26/88 C-2342
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 
ASSESSMENT ID: ARCS-2160 
NASA FMEA #: 

NASA DATA: 
BASELINE [ ] 
NEW [ ] 

SUBSYSTEM: ARCS 
MDAC ID: 2160 
ITEM: RJDA1B L1/L5/R1 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: 
RJDA1B L1/L5/R1 MANIFOLD DRIVER SWITCH 4 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS ARCS 12261X-12265X.

REPORT DATE 2/26/88 C-2343
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: [ ]
ASSESSMENT ID: ARCS-2161
NASA FMEA #: [ ]

NASA DATA:
BASELINE [ ]
NEW [ ]

SUBSYSTEM: ARCS
MDAC ID: 2161
ITEM:
CONTACTS 9, 10

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
RJDA1B L1/L5/R1 MANIFOLD DRIVER SWITCH 4 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs ARCS 12261X-12265X.

REPORT DATE 2/26/88 C-2344
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: NASA DATA:
ASSESSMENT ID: ARCS-2162 BASELINE [ ]
NASA FMEA #: NEW [ ]

SUBSYSTEM: ARCS
MDAC ID: 2162
ITEM: RJDA1B L1/L5/R1 MANIFOLD DRIVER ON SWITCH
CONTACTS 9, 10

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* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
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REMARKS:
RJDA1B L1/L5/R1 MANIFOLD DRIVER SWITCH 4 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs ARCS 12261X-12265X.

REPORT DATE 2/26/88 C-2345
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 
ASSESSMENT ID: ARCS-2163 
NASA FMEA #: NASA DATA: 
SUBSYSTEM: ARCS 
MDAC ID: 2163 
ITEM: RJDA1B L1/L5/R1 MANIFOLD DRIVER OFF SWITCH 
CONTACTS 11, 12

LEAD ANALYST:

ASSESSMENT:

| CRITICALITY | FLIGHT | REDUNDANCY SCREENS | CIL |
| HDW/FUNC | A | B | C |
| NASA [ ] / [ ] | [ ] [ ] [ ] [ ] | [ ] [ ] |
| 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:
RJDA1B L1/L5/R1 MANIFOLD DRIVER SWITCH 4 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs ARCS 12261X-12265X.

REPORT DATE 2/26/88
C-2346
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: [ ]
ASSESSMENT ID: ARCS-2164
NASA FMEA #: [ ]

NASA DATA:
BASELINE [ ]
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SUBSYSTEM: ARCS
MDAC ID: 2164
ITEM: RJDA1B L1/L5/R1 MANIFOLD DRIVER OFF SWITCH CONTACTS 11, 12

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
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REMARKS:
RJDA1B L1/L5/R1 MANIFOLD DRIVER SWITCH 4 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs ARCS 12261X-12265X.

REPORT DATE 2/26/88 C-2347
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE:
ASSESSMENT ID: ARCS-2165
NASA FMEA #:

NASA DATA:
BASELINE [ ]
NEW [ ]

SUBSYSTEM: ARCS
MDAC ID: 2165
ITEM: RJDA1B L1/L5/R1 MANIFOLD DRIVER ON SWITCH CONTACTS 13, 14

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RECOMMENDATIONS: (If different from NASA)

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

REMARKS:
RJDA1B L1/L5/R1 MANIFOLD DRIVER SWITCH 4 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS ARCS 12261X-12265X.

REPORT DATE 2/26/88 C-2348
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: NASA DATA:
ASSESSMENT ID: ARCS-2166 BASELINE [   ]
NASA FMEA #: NEW [   ]
SUBSYSTEM: ARCS NASA DATA:
MDAC ID: 2166 BASELINE [   ]
ITEM: RJDA1B L1/L5/R1 MANIFOLD DRIVER ON SWITCH
CONTACTS 13, 14 NEW [   ]
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RECOMMENDATIONS: (If different from NASA)
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* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [   ]
INADEQUATE [   ]

REMARKS:
RJDA1B L1/L5/R1 MANIFOLD DRIVER SWITCH 4 RE-ANALYZED BY IOA. SEE
ASSESSMENT IDs ARCS 12261X-12265X.

REPORT DATE 2/26/88 C-2349
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: [ ]
ASSESSMENT ID: ARCS-2167
NASA FMEA #: [ ]

SUBSYSTEM: ARCS
MDAC ID: 2167
ITEM: RJDA1B L1/L5/R1 MANIFOLD DRIVER OFF SWITCH
CONTACTS 15, 16

LEAD ANALYST:

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

REMARKS:
RJDA1B L1/L5/R1 MANIFOLD DRIVER SWITCH 4 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS ARCS 12261X-12265X.

REPORT DATE 2/26/88 C-2350
### APPENDIX C
#### ASSESSMENT WORKSHEET

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**MDAC ID:** 2168
**ITEM:** RJDA1B L1/L5/R1 MANIFOLD DRIVER OFF SWITCH
**CONTACTS 15, 16**

**LEAD ANALYST:**

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

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

ADEQUATE [ ]

INADEQUATE [ ]

**REMARKS:**

RJDA1B L1/L5/R1 MANIFOLD DRIVER SWITCH 4 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs ARCS 12261X-12265X.

---

**REPORT DATE 2/26/88**

C-2351
### APPENDIX C

**ASSESSMENT WORKSHEET**

**ASSESSMENT DATE:**
**ASSESSMENT ID:** ARCS-2169
**NASA FMEA #:**

**NASA DATA:**
**BASELINE [ ]**
**NEW [ ]**

**SUBSYSTEM:** ARCS
**MDAC ID:** 2169
**ITEM:** RJDA1B L1/L5/R1 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:**

RJDA1B L1/L5/R1 MANIFOLD LOGIC SWITCH 3 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs ARCS 12256X-12260X.

**REPORT DATE 2/26/88**

C-2352
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE:   NASA DATA:   NASA FMEA #:
ASSESSMENT ID: ARCS-2170   BASELINE [ ]   NEW [ ]
NASA FMEA #: ARCS-2170

SUBSYSTEM: ARCS
MDAC ID: 2170
ITEM: RJDA1B L1/L5/R1 MANIFOLD LOGIC SWITCH

LEAD ANALYST:

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
RJDA1B L1/L5/R1 MANIFOLD LOGIC SWITCH 3 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS ARCS 12256X-12260X.

REPORT DATE 2/26/88 C-2353
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: NASA DATA:
ASSESSMENT ID: ARCS-2171 BASELINE [ ]
NASA FMEA #: NEW [ ]
SUBSYSTEM: ARCS
MDAC ID: 2171
ITEM: RJDA1B L1/L5/R1 MANIFOLD LOGIC 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:
RJDA1B L1/L5/R1 MANIFOLD LOGIC SWITCH 3 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs ARCS 12256X-12260X.

REPORT DATE 2/26/88 C-2354
APPENDIX C
ASSESSMENT WORKSHEET

**ASSESSMENT DATE:**
**ASSESSMENT ID:** ARCS-2172
**NASA FMEA #:**

**NASA DATA:**
**BASELINE [ ]**
**NEW [ ]**

**SUBSYSTEM:** ARCS
**MDAC ID:** 2172
**ITEM:** RJDA1B L1/L5/R1 MANIFOLD LOGIC ON SWITCH
**CONTACTS 1, 2**

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

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

**REMARKS:**

RJDA1B L1/L5/R1 MANIFOLD LOGIC SWITCH 3 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS ARCS 12256X-12260X.

REPORT DATE 2/26/88 C-2355
ASSESSMENT WORKSHEET

ASSESSMENT DATE:                   NASA DATA:
ASSESSMENT ID:  ARCS-2173          BASELINE [ ]
NASA FMEA #:                      NEW [ ]  
SUBSYSTEM:  ARCS                    
MDAC ID:  2173                     
ITEM:  RJDA1B L1/L5/R1 MANIFOLD LOGIC OFF SWITCH
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:

RJDA1B L1/L5/R1 MANIFOLD LOGIC SWITCH 3 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs ARCS 12256X-12260X.

REPORT DATE 2/26/88  C-2356
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: NASA DATA:
ASSESSMENT ID: ARCS-2174 BASELINE [ ]
NASA FMEA #: ARCS NEW [ ]

SUBSYSTEM: ARCS NASA DATA:
MDAC ID: 2174
ITEM: RJDA1B L1/L5/R1 MANIFOLD LOGIC 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:
RJDA1B L1/L5/R1 MANIFOLD LOGIC SWITCH 3 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS ARCS 12256X-12260X.

REPORT DATE 2/26/88 C-2357
**APPENDIX C**

**ASSESSMENT WORKSHEET**

**ASSESSMENT DATE:**
**ASSESSMENT ID:** ARCS-2175
**NASA FMEA #:**

**NASA DATA:**
**BASELINE [ ]**
**NEW [ ]**

**SUBSYSTEM:** ARCS
**MDAC ID:** 2175
**ITEM:** RJDA1B L1/L5/R1 MANIFOLD LOGIC ON SWITCH 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:**
RJDA1B L1/L5/R1 MANIFOLD LOGIC SWITCH 3 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs ARCS 12256X-12260X.

**REPORT DATE 2/26/88**
**C-2358**
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 
ASSESSMENT ID: ARCS-2176 
NASA FMEA #: 

NASA DATA:  
BASELINE [ ]  
NEW [ ]

SUBSYSTEM: ARCS  
MDAC ID: 2176  
ITEM: RJDA1B L1/L5/R1 MANIFOLD LOGIC ON SWITCH  
CONTACTS 5, 6  

LEAD ANALYST: 

ASSESSMENT: 

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

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS: 
RJDA1B L1/L5/R1 MANIFOLD LOGIC SWITCH 3 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs ARCS 12256X-12260X.

REPORT DATE 2/26/88 C-2359
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: NASA DATA:
ASSESSMENT ID: ARCS-2177 BASELINE [ ]
NASA FMEA #: NEW [ ]

SUBSYSTEM: ARCS NASA DATA:
MDAC ID: 2177 BASELINE [ ]
ITEM: RJDA1B L1/L5/R1 MANIFOLD LOGIC OFF SWITCH NEW [ ]
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:
RJDA1B L1/L5/R1 MANIFOLD LOGIC SWITCH 3 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs ARCS 12256X-12260X.

REPORT DATE 2/26/88 C-2360
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 
ASSESSMENT ID: ARCS-2178
NASA FMEA #: 
NASA DATA: 
BASELINE [ ]
NEW [ ]

SUBSYSTEM: ARCS
MDAC ID: 2178
ITEM: RJDA1B L1/L5/R1 MANIFOLD LOGIC OFF SWITCH
CONTACTS 7, 8

LEAD ANALYST: 

ASSESSMENT: 

| CRITICALITY | 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)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
RJDA1B L1/L5/R1 MANIFOLD LOGIC SWITCH 3 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs ARCS 12256X-12260X.

REPORT DATE 2/26/88 C-2361
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: [DATE]
ASSESSMENT ID: ARCS-2179
NASA FMEA #: [NASA_FMEA_ID]
NASA DATA:
BASELINE [ ]
NEW [ ]

SUBSYSTEM: ARCS
MDAC ID: 2179
ITEM: RJDA1A L2/R2 MANIFOLD DRIVER SWITCH

LEAD ANALYST: [LEAD_ANALYST_NAME]

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:

RJDA1A L2/R2 MANIFOLD DRIVER SWITCH 4 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS ARCS 12271X-12275X.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: [ ] NASA DATA: [ ]
ASSESSMENT ID: ARCS-2180 NASA FMEA #: [ ]
NASA FMEA #: ARCS BASELINE [ ]
SUBSYSTEM: ARCS NEW [ ]
MDAC ID: 2180
ITEM: RJDA1A L2/R2 MANIFOLD DRIVER SWITCH

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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:

RJDA1A L2/R2 MANIFOLD DRIVER SWITCH 4 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs ARCS 12271X-12275X.

REPORT DATE 2/26/88 C-2363
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE:
ASSSESSMENT ID: ARCS-2181
NASA FMEA #:

NASA DATA:
BASELINE [ ]
NEW [ ]

SUBSYSTEM: ARCS
MDAC ID: 2181
ITEM: RJDA1A L2/R2 MANIFOLD DRIVER ON SWITCH CONTACTS 1, 2

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

REMARKS:
RJDA1A L2/R2 MANIFOLD DRIVER SWITCH 4 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs ARCS 12271X-12275X.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: [ ]
ASSESSMENT ID: ARCS-2182
NASA FMEA #: [ ]

SUBSYSTEM: ARCS
MDAC ID: 2182
ITEM: RJDA1A L2/R2 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:
RJDA1A L2/R2 MANIFOLD DRIVER SWITCH 4 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS ARCS 12271X-12275X.

REPORT DATE 2/26/88 C-2365
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: [ ]
ASSESSMENT ID: ARCS-2183
NASA FMEA #: [ ]

NASA DATA:
BASELINE [ ]
NEW [ ]

SUBSYSTEM: ARCS
MDAC ID: 2183
ITEM: RJDA1A L2/R2 MANIFOLD DRIVER OFF SWITCH CONTACTS 3, 4

LEAD ANALYST:
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RECOMMENDATIONS: (If different from NASA)

* CIL RETENTION RATIONALE: (If applicable)

REMARKS:
RJDA1A L2/R2 MANIFOLD DRIVER SWITCH 4 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS ARCS 12271X-12275X.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: NASA DATA:
ASSESSMENT ID: ARCS-2184 BASELINE [ ]
NASA FMEA #: ARCS NEW [ ]

SUBSYSTEM: ARCS NASA DATA:
MDAC ID: 2184 [ ] [ ]
ITEM: RJDA1A L2/R2 MANIFOLD DRIVER OFF SWITCH CONTACTS [ ] [ ] [ ] [ ] NEW [ ]
ITEM: 3, 4 [ ] [ ] [ ] [ ]

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
RJDA1A L2/R2 MANIFOLD DRIVER SWITCH 4 RE-ANALYZED BY IOA. SEE
ASSESSMENT IDS ARCS 12271X-12275X.

REPORT DATE 2/26/88 C-2367
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: [ ]
ASSESSMENT ID: ARCS-2185
NASA FMEA #: [ ]

NASA DATA:
BASELINE [ ]
NEW [ ]

SUBSYSTEM: ARCS
MDAC ID: 2185
ITEM: RJDA1A L2/R2 MANIFOLD DRIVER ON SWITCH CONTACTS 5, 6

LEAD ANALYST: [ ]

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RECOMMENDATIONS: (If different from NASA)

[ / ] [ ] [ ] [ ] [ ]

(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:

RJDA1A L2/R2 MANIFOLD DRIVER SWITCH 4 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS ARCS 12271X-12275X.

REPORT DATE 2/26/88 C-2368
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE:
ASSESSMENT ID: ARCS-2186
NASA FMEA #:

NASA DATA:
BASELINE [ ]
NEW [ ]

SUBSYSTEM: ARCS
MDAC ID: 2186
ITEM: RJDA1A L2/R2 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:
RJDA1A L2/R2 MANIFOLD DRIVER SWITCH 4 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs ARCS 12271X-12275X.

REPORT DATE 2/26/88 C-2369
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: [DATE]
ASSESSMENT ID: ARCS-2187
NASA FMEA #: ARCS-2187

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BASELINE [ ]
NEW [ ]

SUBSYSTEM: ARCS
MDAC ID: 2187
ITEM: RJDA1A L2/R2 MANIFOLD DRIVER OFF SWITCH CONTACTS 7, 8

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

RECOMMENDATIONS: (If different from NASA)
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* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
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REMARKS:
RJDA1A L2/R2 MANIFOLD DRIVER SWITCH 4 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS ARCS 12271X-12275X.

REPORT DATE 2/26/88 C-2370
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: NASA DATA: 
ASSESSMENT ID: ARCS-2188 BASELINE [ ] 
NASA FMEA #: NEW [ ]
SUBSYSTEM: ARCS NASA DATA: 
MDAC ID: 2188 BASELINE [ ]
ITEM: RJDA1A L2/R2 MANIFOLD DRIVER OFF SWITCH CONTACTS 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:
RJDA1A L2/R2 MANIFOLD DRIVER SWITCH 4 RE-ANALYZED BY IOA. SEE
ASSESSMENT IDS ARCS 12271X-12275X.

REPORT DATE 2/26/88 C-2371
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 
ASSESSMENT ID: ARCS-2189 
NASA FMEA #: 

NASA DATA: 
BASELINE [ ] 
NEW [ ]

SUBSYSTEM: ARCS 
MDAC ID: 2189
ITEM: RJDA1A L2/R2 MANIFOLD DRIVER ON SWITCH CONTACTS 9, 10

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
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REMARKS:
RJDA1A L2/R2 MANIFOLD DRIVER SWITCH 4 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS ARCS 12271X-12275X.

REPORT DATE 2/26/88 C-2372
APPENDIX C
ASSESSMENT WORKSHEET

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ASSESSMENT ID: ARCS-2190
NASA PMEA #: [ID]

NASA DATA:
BASELINE [ ]
NEW [ ]

SUBSYSTEM: ARCS
MDAC ID: 2190
ITEM: RJDA1A L2/R2 MANIFOLD DRIVER ON SWITCH CONTACTS 9, 10

LEAD ANALYST: [Name]

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* CIL RETENTION RATIONALE: (If applicable)

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REMARKS:
RJDA1A L2/R2 MANIFOLD DRIVER SWITCH 4 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS ARCS 12271X-12275X.

REPORT DATE 2/26/88 C-2373
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:
RJDAIA L2/R2 MANIFOLD DRIVER SWITCH 4 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS ARCS 12271X-12275X.

REPORT DATE 2/26/88 C-2374
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: [ ]
ASSESSMENT ID: ARCS-2192
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NASA DATA:
BASELINE [ ]
NEW [ ]

SUBSYSTEM: ARCS
MDAC ID: 2192
ITEM: RJDA1A L2/R2 MANIFOLD DRIVER OFF SWITCH CONTACTS 11, 12

LEAD ANALYST:

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)
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* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
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REMARKS:
RJDA1A L2/R2 MANIFOLD DRIVER SWITCH 4 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS ARCS 12271X-12275X.

REPORT DATE 2/26/88 C-2375
APPENDIX C  
ASSESSMENT WORKSHEET

ASSESSMENT DATE:  
ASSESSMENT ID:  ARCS-2193  
NASA FMEA #:  

NASA DATA:  
BASELINE [ ]  
NEW [ ]  

SUBSYSTEM:  ARCS  
MDAC ID:  2193  
ITEM:  RJDA1A L2/R2 MANIFOLD DRIVER ON SWITCH CONTACTS 13, 14  

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:  RJDA1A L2/R2 MANIFOLD DRIVER SWITCH 4 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs ARCS 12271X-12275X.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: [ ] NASA DATA: [ ]
ASSESSMENT ID: ARCS-2194 NASA FMEA #: [ ]
NASA FMEA #: ARCS-2194 BASELINE [ ]
MDAC ID: 2194 NEW [ ]
ITEM: RJDA1A L2/R2 MANIFOLD DRIVER ON SWITCH CONTACTS
13, 14

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
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REMARKS:
RJDA1A L2/R2 MANIFOLD DRIVER SWITCH 4 RE-ANALYZED BY IOA. SEE
ASSESSMENT ID's ARCS 12271X-12275X.

REPORT DATE 2/26/88  C-2377
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 
ASSESSMENT ID: ARCS-2195 
NASA FMEA #: 

NASA DATA: BASELINE [ ] 
            NEW [ ] 

SUBSYSTEM: ARCS 
MDAC ID: 2195 
ITEM: RJDA1A L2/R2 MANIFOLD DRIVER OFF SWITCH CONTACTS 15, 16 

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: 
RJDA1A L2/R2 MANIFOLD DRIVER SWITCH 4 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS ARCS 12271X-12275X.

REPORT DATE 2/26/88 C-2378
APPENDIX C
ASSESSMENT WORKSHEET

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ASSESSMENT ID: ARCS-2196 NEW [ ]
NASA FMEA #: NASA DATA:

SUBSYSTEM: ARCS BASELINE [ ]
MDAC ID: 2196 NEW [ ]
ITEM: RJDA1A L2/R2 MANIFOLD DRIVER OFF SWITCH CONTACTS 15, 16

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RECOMMENDATIONS: (If different from NASA)

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(RECOMMENDATIONS) RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
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REMARKS:
RJDA1A L2/R2 MANIFOLD DRIVER SWITCH 4 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs ARCS 12271X-12275X.

REPORT DATE 2/26/88 C-2379
APPENDIX C
ASSESSMENT WORKSHEET

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NASA DATA:
BASELINE [ ]
NEW [ ]

SUBSYSTEM: ARCS
MDAC ID: 2197
ITEM: RJDA1A L2/R2 MANIFOLD LOGIC SWITCH

LEAD ANALYST: [ ]

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
RJDA1A L2/R2 MANIFOLD LOGIC SWITCH 3 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS ARCS 12266X-12270X.

REPORT DATE 2/26/88
C-2380
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: NASA DATA:
ASSESSMENT ID: ARCS-2198 BASELINE [ ]
NASA FMEA #: NEW [ ]
SUBSYSTEM: ARCS
MDAC ID: 2198
ITEM: RJDA1A L2/R2 MANIFOLD LOGIC SWITCH
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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
RJDA1A L2/R2 MANIFOLD LOGIC SWITCH 3 RE-ANALYZED BY IOA. See ASSESSMENT IDs ARCS 12266X-12270X.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE:  
ASSESSMENT ID: ARCS-2199  
NASA FMEA #:  
NASA DATA: BASELINE [ ] NEW [ ]

SUBSYSTEM: ARCS  
MDAC ID: 2199  
ITEM: RJDA1A L2/R2 MANIFOLD LOGIC ON SWITCH CONTACTS 1, 2

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REMARKS:
RJDA1A L2/R2 MANIFOLD LOGIC SWITCH 3 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS ARCS 12266X-12270X.

REPORT DATE 2/26/88  C-2382
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE:  
ASSESSMENT ID: ARCS-2200  
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NEW [ ]  

SUBSYSTEM: ARCS  
MDAC ID: 2200  
ITEM: RJDA1A L2/R2 MANIFOLD LOGIC ON SWITCH CONTACTS 1, 2  

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* CIL RETENTION RATIONALE: (If applicable)  

ADEQUATE [ ]  
INADEQUATE [ ]  

REMARKS:  
RJDA1A L2/R2 MANIFOLD LOGIC SWITCH 3 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS ARCS 12266X-12270X.
APPENDIX C  
ASSESSMENT WORKSHEET

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**SUBSYSTEM:** ARCS  
**MDAC ID:** 2201  
**ITEM:** RJDA1A L2/R2 MANIFOLD LOGIC OFF SWITCH 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:**

RJDA1A L2/R2 MANIFOLD LOGIC SWITCH 3 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS ARCS 12266X-12270X.

REPORT DATE 2/26/88 C-2384
APPENDIX C
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NASA FMEA #: [ ]
NASA DATA: BASELINE [ ] NEW [ ]

SUBSYSTEM: ARCS
MDAC ID: 2202
ITEM: RJDA1A L2/R2 MANIFOLD LOGIC OFF SWITCH CONTACTS 3, 4

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
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REMARKS:
RJDA1A L2/R2 MANIFOLD LOGIC SWITCH 3 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS ARCS 12266X-12270X.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 
ASSESSMENT ID: ARCS-2203 
NASA FMEA #: 
SUBSYSTEM: ARCS 
MDAC ID: 2203 
ITEM: RJDA1A L2/R2 MANIFOLD LOGIC ON SWITCH CONTACTS 5, 6 
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* CIL RETENTION RATIONALE: (If applicable) 
ADEQUATE [ ]
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REMARKS: 
RJDA1A L2/R2 MANIFOLD LOGIC SWITCH 3 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs ARCS 12266X-12270X.
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REPORT DATE 2/26/88 C-2387
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ASSESSMENT DATE: [DATE]
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BASELINE [ ]
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SUBSYSTEM: ARCS
MDAC ID: 2205
ITEM: RJDA1A L2/R2 MANIFOLD LOGIC OFF SWITCH CONTACTS 7, 8
LEAD ANALYST: [LEAD ANALYST]

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* CIL RETENTION RATIONALE: (If applicable)
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REMARKS:
RJDA1A L2/R2 MANIFOLD LOGIC SWITCH 3 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS ARCS 12266X-12270X.

REPORT DATE 2/26/88 C-2388
APPENDIX C
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ASSESSMENT DATE: 
ASSESSMENT ID: ARCS-2206 
NASA FMEA #: 

NASA DATA: 
BASELINE [ ] 
NEW [ ] 

SUBSYSTEM: ARCS 
MDAC ID: 2206 
ITEM: RJDA1A L2/R2 MANIFOLD LOGIC OFF SWITCH CONTACTS 7, 8 

LEAD ANALYST: 

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* CIL RETENTION RATIONALE: (If applicable) 
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REMARKS: 
RJDA1A L2/R2 MANIFOLD LOGIC SWITCH 3 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS ARCS 12266X-12270X.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE:
ASSESSMENT ID: ARCS-2207
NASA FMEA #:

NASA DATA:
BASELINE [ ]
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SUBSYSTEM: ARCS
MDAC ID: 2207
ITEM: RJDA2B L3/R3/R5 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:
RJDA2B L3/R3/R5 MANIFOLD DRIVER SWITCH 4 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs ARCS 12281X-12285X.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: [ ]
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SUBSYSTEM: ARCS
MDAC ID: 2208
ITEM: RJDA2B L3/R3/R5 MANIFOLD DRIVER SWITCH

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
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REMARKS:
RJDA2B L3/R3/R5 MANIFOLD DRIVER SWITCH 4 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS ARCS 12281X-12285X.

REPORT DATE 2/26/88 C-2391
APPENDIX C
ASSESSMENT WORKSHEET

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SUBSYSTEM:  ARCS  
MDAC ID:  2209  
ITEM:  RJDA2B L3/R3/R5 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 [ ]

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REMARKS:
RJDA2B L3/R3/R5 MANIFOLD DRIVER SWITCH 4 RE-ANALYZED BY IOA.  SEE ASSESSMENT IDs ARCS 12281X-12285X.

REPORT DATE 2/26/88  C-2392
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE:  
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SUBSYSTEM: ARCS  
MDAC ID: 2210  
ITEM: RJDA2B L3/R3/R5 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)  
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REMARKS:  
RJDA2B L3/R3/R5 MANIFOLD DRIVER SWITCH 4 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs ARCS 12281X-12285X.
**ASSESSMENT DATE:**
**ASSESSMENT ID:** ARCS-2211
**NASA FMEA #:**

**SUBSYSTEM:** ARCS
**MDAC ID:** 2211
**ITEM:** RJDA2B L3/
**CONTACTS 3, 4**

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* CIL RETENTION RATIONALE:

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ASSESSMENT IDs ARCS 12281X-

**REPORT DATE** 2/26/88
APPENDIX C
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ASSESSMENT DATE: 
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BASELINE [ ] NEW [ ]

SUBSYSTEM: ARCS 
MDAC ID: 2212 
ITEM: RJDA2B L3/R3/R5 MANIFOLD DRIVER OFF SWITCH CONTACTS 3, 4 

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REMARKS:
RJDA2B L3/R3/R5 MANIFOLD DRIVER SWITCH 4 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs ARCS 12281X-12285X.

REPORT DATE 2/26/88 C-2395
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 
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SUBSYSTEM: ARCS 
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ITEM: RJDA2B L3/R3/R5 MANIFOLD DRIVER ON SWITCH 
CONTACTS 5, 6

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
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REMARKS:
RJDA2B L3/R3/R5 MANIFOLD DRIVER SWITCH 4 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs ARCS 12281X-12285X.

REPORT DATE 2/26/88 C-2396
**APPENDIX C**

**ASSESSMENT WORKSHEET**

**ASSESSMENT DATE:**

**ASSESSMENT ID:** ARCS-2214

**NASA FMEA #:** NASA

**SUBSYSTEM:** ARCS

**MDAC ID:** 2214

**ITEM:** RJDA2B L3/R3/R5 MANIFOLD DRIVER ON SWITCH

**CONTACTS 5, 6**

**LEAD ANALYST:**

**ASSESSMENT:** ARCS-2214

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**NEW [ ]**

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

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

ADEQUATE [ ]

INADEQUATE [ ]

**REMARKS:**

RJDA2B L3/R3/R5 MANIFOLD DRIVER SWITCH 4 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs ARCS 12281X-12285X.
APPENDIX C
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ASSESSMENT DATE: 
ASSESSMENT ID: ARCS-2215
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NASA DATA: 
BASELINE [ ] 
NEW [ ]

SUBSYSTEM: ARCS
MDAC ID: 2215
ITEM: RJDA2B L3/R3/R5 MANIFOLD DRIVER OFF SWITCH CONTACTS 7, 8

LEAD ANALYST: 

ASSESSMENT:

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

(ADD/DELETE)

REMARKS:
RJDA2B L3/R3/R5 MANIFOLD DRIVER SWITCH 4 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs ARCS 12281X-12285X.

REPORT DATE 2/26/88 C-2398
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: [ ] NASA DATA:
ASSESSMENT ID: ARCS-2216 BASELINE [ ]
NASA FMEA #: NEW [ ]
SUBSYSTEM: ARCS
NASA ID: 2216
ITEM: RJDA2B L3/R3/R5 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:
RJDA2B L3/R3/R5 MANIFOLD DRIVER SWITCH 4 RE-ANALYZED BY IOA. SEE
ASSESSMENT IDS ARCS 12281X-12285X.

REPORT DATE 2/26/88 C-2399
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: NASA DATA:
ASSESSMENT ID: ARCS-2217 BASELINE [ ]
NASA FMEA #: ARCS-2217 NEW [ ]
SUBSYSTEM: ARCS
MDAC ID: 2217
ITEM: RJDA2B L3/R3/R5 MANIFOLD DRIVER ON SWITCH
CONTACTS 9, 10
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:
RJDA2B L3/R3/R5 MANIFOLD DRIVER SWITCH 4 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs ARCS 12281X-12285X.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: NASA DATA:
ASSESSMENT ID: ARCS-2218 BASELINE [ ]
NASA FMEA #: NEW [ ]

SUBSYSTEM: ARCS
MDAC ID: 2218
ITEM: RJDA2B L3/R3/R5 MANIFOLD DRIVER ON SWITCH
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:
RJDA2B L3/R3/R5 MANIFOLD DRIVER SWITCH 4 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs ARCS 12281X-12285X.

REPORT DATE 2/26/88    C-2401
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 
ASSESSMENT ID: ARCS-2219
NASA FMEA #: 
NASA DATA: BASELINE [ ]
NEW [ ]

SUBSYSTEM: ARCS
MDAC ID: 2219
ITEM: RJDA2B L3/R3/R5 MANIFOLD DRIVER OFF SWITCH CONTACTS 11, 12

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:
RJDA2B L3/R3/R5 MANIFOLD DRIVER SWITCH 4 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs ARCS 12281X-12285X.

REPORT DATE 2/26/88 C-2402
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: [ ]
ASSESSMENT ID: ARCS-2220
NASA FMEA #: [ ]

SUBSYSTEM: ARCS
MDAC ID: 2220
ITEM: RJDA2B L3/R3/R5 MANIFOLD DRIVER OFF SWITCH
CONTACTS 11, 12

LEAD ANALYST:

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
RJDA2B L3/R3/R5 MANIFOLD DRIVER SWITCH 4 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs ARCS 12281X-12285X.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE:  
ASSESSMENT ID:  ARCS-2221  
NASA FMEA #:  
NASA DATA:  
BASELINE [ ]  
NEW [ ]

SUBSYSTEM:  ARCS  
MDAC ID:  2221  
ITEM:  RJDA2B L3/R3/R5 MANIFOLD DRIVER ON SWITCH CONTACTS 13, 14  
LEAD ANALYST:  
ASSESSMENT:  ARCS-2221

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* CIL RETENTION RATIONALE: (If applicable)  
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REMARKS:  
RJDA2B L3/R3/R5 MANIFOLD DRIVER SWITCH 4 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS ARCS 12281X-12285X.

REPORT DATE 2/26/88  
C-2404
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: [ ]
ASSESSMENT ID: ARCS-2222
NASA FMEA #: [ ]
SUBSYSTEM: ARCS
MDAC ID: 2222
ITEM: RJDA2B L3/R3/R5 MANIFOLD DRIVER ON SWITCH CONTACTS 13, 14
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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
RJDA2B L3/R3/R5 MANIFOLD DRIVER SWITCH 4 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs ARCS 12281X-12285X.

REPORT DATE 2/26/88 C-2405
APPENDIX C  
ASSESSMENT WORKSHEET

ASSESSMENT DATE:  
ASSESSMENT ID:  ARCS-2223  
NASA FMEA #:  
NASA DATA:  
BASELINE [ ]  
NEW [ ]  

SUBSYSTEM:  ARCS  
MDAC ID:  2223  
ITEM:  RJDA2B L3/R3/R5 MANIFOLD DRIVER OFF SWITCH CONTACTS 15, 16  
LEAD ANALYST:  
ASSESSMENT:  ARCS-2223

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RECOMMENDATIONS:  (If different from NASA)

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* CIL RETENTION RATIONALE:  (If applicable)

ADEQUATE [ ]  
INADEQUATE [ ]  

REMARKS:

RJDA2B L3/R3/R5 MANIFOLD DRIVER SWITCH 4 RE-ANALYZED BY IOA.  SEE ASSESSMENT IDs ARCS 12281X-12285X.

REPORT DATE 2/26/88  C-2406
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE:    NASA DATA:
ASSESSMENT ID:    ARCS-2224    BASELINE [ ]
NASA FMEA #:    ARCS-2224    NEW [ ]

SUBSYSTEM:    ARCS
MDAC ID:  2224
ITEM:    RJDA2B L3/R3/R5 MANIFOLD DRIVER OFF SWITCH
CONTACTS 15, 16
LEAD ANALYST:

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
RJDA2B L3/R3/R5 MANIFOLD DRIVER SWITCH 4 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS ARCS 12281X-12285X.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 
ASSESSMENT ID: ARCS-2225 
NASA FMEA #: 

NASA DATA: 
BASELINE [ ] 
NEW [ ] 

SUBSYSTEM: ARCS 
MDAC ID: 2225 
ITEM: RJDA2B L3/R3/R5 MANIFOLD LOGIC SWITCH 

LEAD ANALYST: 

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RECOMMENDATIONS: (If different from NASA) 

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:

RJDA2B L3/R3/R5 MANIFOLD LOGIC SWITCH 3 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS ARCS 12276X-12280X.

REPORT DATE 2/26/88 C-2408
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: NASA DATA:
ASSESSMENT ID:  ARCS-2226  BASELINE [ ]
NASA FMEA #: NEW [ ]
SUBSYSTEM:  ARCS
MDAC ID:  2226
ITEM:  RJDA2B L3/R3/R5 MANIFOLD LOGIC SWITCH

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

REMARKS:
RJDA2B L3/R3/R5 MANIFOLD LOGIC SWITCH 3 RE-ANALYZED by IOA. SEE ASSESSMENT IDs ARCS 12276X-12280X.

REPORT DATE 2/26/88  C-2409
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: NASA DATA: 
ASSESSMENT ID: ARCS-2227 BASELINE [ ]
NASA FMEA #: NEW [ ]
SUBSYSTEM: ARCS
MDAC ID: 2227
ITEM: RJDA2B L3/R3/R5 MANIFOLD LOGIC ON SWITCH
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:
RJDA2B L3/R3/R5 MANIFOLD LOGIC SWITCH 3 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS ARCS 12276X-12280X.

REPORT DATE 2/26/88 C-2410
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: [ ]
ASSESSMENT ID: ARCS-2228
NASA FMEA #: [ ]

NASA DATA:
BASELINE [ ]
NEW [ ]

SUBSYSTEM: ARCS
MDAC ID: 2228
ITEM: RJDA2B L3/R3/R5 MANIFOLD LOGIC 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:
RJDA2B L3/R3/R5 MANIFOLD LOGIC SWITCH 3 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs ARCS 12276X-12280X.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 
ASSESSMENT ID: ARCS-2229
NASA FMEA #: 

NASA DATA: 
BASELINE [ ]
NEW [ ]

SUBSYSTEM: ARCS
MDAC ID: 2229
ITEM: RJDA2B L3/R3/R5 MANIFOLD LOGIC OFF SWITCH
CONTACTS 3, 4

LEAD ANALYST: 

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

RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
RJDA2B L3/R3/R5 MANIFOLD LOGIC SWITCH 3 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS ARCS 12276X-12280X.

REPORT DATE 2/26/88 C-2412
APPENDIX C
ASSESSMENT WORKSHEET

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

SUBSYSTEM: ARCS        NASA DATA: BASELINE [   ]
MDAC ID: 2230         NEW [   ]
ITEM: RJDA2B L3/R3/R5 MANIFOLD LOGIC OFF SWITCH
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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INADEQUATE [   ]

REMARKS:
RJDA2B L3/R3/R5 MANIFOLD LOGIC SWITCH 3 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS ARCS 12276X-12280X.

REPORT DATE 2/26/88   C-2413
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 
ASSESSMENT ID: ARCS-2231 
NASA FMEA #: 
NASA DATA: 
BASELINE [ ] 
NEW [ ] 

SUBSYSTEM: ARCS 
MDAC ID: 2231 
ITEM: RJDA2B L3/R3/R5 MANIFOLD LOGIC 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:
RJDA2B L3/R3/R5 MANIFOLD LOGIC SWITCH 3 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS ARCS 12276X-12280X.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE:
ASSESSMENT ID: ARCS-2232
NASA FMEA #:

SUBSYSTEM: ARCS
MDAC ID: 2232
ITEM: RJDA2B L3/R3/R5 MANIFOLD LOGIC ON SWITCH
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:

RJDA2B L3/R3/R5 MANIFOLD LOGIC SWITCH 3 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs ARCS 12276X-12280X.

REPORT DATE 2/26/88  C-2415
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE:  
ASSESSMENT ID: ARCS-2233  
NASA FMEA #:  
NASA DATA:  
BASELINE [ ]  
NEW [ ]  

SUBSYSTEM: ARCS  
MDAC ID: 2233  
ITEM: RJDA2B L3/R3/R5 MANIFOLD LOGIC 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:
RJDA2B L3/R3/R5 MANIFOLD LOGIC SWITCH 3 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS ARCS 12276X-12280X.

REPORT DATE 2/26/88 C-2416
APPENDIX C  
ASSESSMENT WORKSHEET

ASSESSMENT DATE:  
ASSESSMENT ID:  ARCS-2234  
NASA FMEA #:  

NASA DATA:  
BASELINE [ ]  
NEW [ ]  

SUBSYSTEM:  ARCS  
MDAC ID:  2234  
ITEM:  RJDA2B L3/R3/R5 MANIFOLD LOGIC 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:

RJDA2B L3/R3/R5 MANIFOLD LOGIC SWITCH 3 RE-ANALYZED BY IOA.  SEE ASSESSMENT IDs ARCS 12276X-12280X.
# APPENDIX C
## ASSESSMENT WORKSHEET

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**ITEM:** RJDA2A L4/R4 MANIFOLD DRIVER SWITCH

**LEAD ANALYST:**

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

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

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

**ADEQUATE [ ]**

**INADEQUATE [ ]**

**REMARKS:**

RJDA2A L4/R4 MANIFOLD DRIVER SWITCH 6 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS ARCS 12291X-12295X.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE:             NASA DATA:
ASSESSMENT ID:    ARCS-2236  BASELINE [ ]
NASA FMEA #:             NEW [ ]
SUBSYSTEM:    ARCS
MDAC ID:        2236
ITEM:          RJDA2A L4/R4 MANIFOLD DRIVER SWITCH

LEAD ANALYST:

ASSESSMENT:

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

RECOMMENDATIONS:  (If different from NASA)

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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
RJDA2A L4/R4 MANIFOLD DRIVER SWITCH 6 RE-ANALYZED BY IOA.  SEE ASSESSMENT IDs ARCS 12291X-12295X.

REPORT DATE 2/26/88  C-2419
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 
ASSESSMENT ID: ARCS-2237  
NASA DATA:  
BASELINE [ ]  
NEW [ ]  

SUBSYSTEM: ARCS  
MDAC ID: 2237  
ITEM: RJDA2A L4/R4 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:  
RJDA2A L4/R4 MANIFOLD DRIVER SWITCH 6 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs ARCS 12291X-12295X.

REPORT DATE 2/26/88  C-2420
APPENDIX C  ASSESSMENT WORKSHEET

ASSESSMENT DATE:
ASSESSMENT ID: ARCS-2238
NASA FMEA #: NASA

FMEA #:
SUBSYSTEM: ARCS
MDAC ID: 2238
ITEM: RJDA2A L4/R4 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 [ ]
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REMARKS:

RJDA2A L4/R4 MANIFOLD DRIVER SWITCH 6 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS ARCS 12291X-12295X.

REPORT DATE 2/26/88  C-2421
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: [ ]
ASSESSMENT ID: ARCS-2239
NASA FMEA #: [ ]
NASA DATA:
BASELINE [ ]
NEW [ ]

SUBSYSTEM: ARCS
MDAC ID: 2239
ITEM: RJDA2A L4/R4 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:
RJDA2A L4/R4 MANIFOLD DRIVER SWITCH 6 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs ARCS 12291X-12295X.

REPORT DATE 2/26/88 C-2422
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: [ ]
ASSESSMENT ID: ARCS-2240
NASA FMEA #: [ ]
NASA DATA: [ ]
BASELINE [ ]
NEW [ ]

SUBSYSTEM: ARCS
MDAC ID: 2240
ITEM: RJDA2A L4/R4 MANIFOLD DRIVER OFF SWITCH 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:
RJDA2A L4/R4 MANIFOLD DRIVER SWITCH 6 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS ARCS 12291X-12295X.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: [ ]
ASSESSMENT ID: ARCS-2241
NASA FMEA #: [ ]
NASA DATA: BASELINE [ ] NEW [ ]

SUBSYSTEM: ARCS
MDAC ID: 2241
ITEM: RJDA2A L4/R4 MANIFOLD DRIVER ON SWITCH 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:
RJDA2A L4/R4 MANIFOLD DRIVER SWITCH 6 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS ARCS 12291X-12295X.

REPORT DATE 2/26/88 C-2424
APPENDIX C
ASSESSMENT WORKSHEET

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ASSESSMENT ID: ARCS-2242
NASA FMEA #: NASA DATA:
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MDAC ID: 2242 NEW [ ]
ITEM: RJDA2A L4/R4 MANIFOLD DRIVER ON SWITCH CONTACTS
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LEAD ANALYST:

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* CIL RETENTION RATIONALE:  (If applicable)

ADEQUATE [ ]
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REMARKS:

RJDA2A L4/R4 MANIFOLD DRIVER SWITCH 6 RE-ANALYZED BY IOA.  SEE ASSESSMENT IDS ARCS 12291X-12295X.

REPORT DATE 2/26/88  C-2425
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE:  
ASSESSMENT ID: ARCS-2243  
NASA FMEA #:  
NASA DATA:  
BASELINE [ ]  
NEW [ ]

SUBSYSTEM: ARCS  
MDAC ID: 2243  
ITEM: RJDA2A L4/R4 MANIFOLD DRIVER OFF SWITCH CONTACTS 7, 8  

LEAD ANALYST:  

ASSESSMENT:

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| Flight | HDW/FUNC | A | B | C | ITEM |
| NASA | [ / ] | [ ] | [ ] | [ ] | [ ] | *[ ] |
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| COMPARE | [ N /N ] | [ ] | [ ] | [ ] | [ ] | [ ] |

RECOMMENDATIONS: (If different from NASA)

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CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]  
INADEQUATE [ ]

REMARKS:

RJDA2A L4/R4 MANIFOLD DRIVER SWITCH 6 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs ARCS 12291X-12295X.

REPORT DATE 2/26/88  
C-2426
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE:          NASA DATA:
ASSESSMENT ID:  ARCS-2244  BASELINE [ ]
NASA FMEA #:              NEW [ ]

SUBSYSTEM:  ARCS
MDAC ID:  2244
ITEM:  RJDA2A L4/R4 MANIFOLD DRIVER OFF SWITCH CONTACTS 7, 8

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* CIL RETENTION RATIONALE: (If applicable)

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REMARKS:
RJDA2A L4/R4 MANIFOLD DRIVER SWITCH 6 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS ARCS 12291X-12295X.

REPORT DATE 2/26/88  C-2427
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 
ASSESSMENT ID: ARCS-2245 
NASA FMEA #: 
NASA DATA: BASELINE [ ] NEW [ ]

SUBSYSTEM: ARCS 
MDAC ID: 2245 
ITEM: RJDA2A L4/R4 MANIFOLD DRIVER ON SWITCH CONTACTS 9, 10

LEAD ANALYST: 

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ] INADEQUATE [ ]

REMARKS:
RJDA2A L4/R4 MANIFOLD DRIVER SWITCH 6 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS ARCS 12291X-12295X.
### APPENDIX C
### ASSESSMENT WORKSHEET

**ASSESSMENT DATE:**

**ASSESSMENT ID:** ARCS-2246

**NASA FMEA #:** NASA

**SUBSYSTEM:** ARCS

**MDAC ID:** 2246

**ITEM:** RJDA2A L4/R4 MANIFOLD DRIVER ON SWITCH CONTACTS 9, 10

**LEAD ANALYST:**

**ASSESSMENT:**

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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)

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**REMARKS:**

RJDA2A L4/R4 MANIFOLD DRIVER SWITCH 6 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs ARCS 12291X-12295X.

**REPORT DATE 2/26/88**

C-2429
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 
ASSESSMENT ID: ARCS-2247
NASA FMEA #: 
NASA DATA: 
BASELINE [ ]
NEW [ ]

SUBSYSTEM: ARCS
MDAC ID: 2247
ITEM: RJDA2A L4/R4 MANIFOLD DRIVER OFF SWITCH CONTACTS 11, 12

LEAD ANALYST: 
ASSESSMENT:

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| FLIGHT |
| HDW/FUNC |
| NASA [ ] |
| [ / ] |

| REDUNDANCY SCREENS |
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| [ ] |
| [ ] |
| [ ] |

| B |
| [ ] |
| [ ] |
| [ ] |

| C |
| [ ] |
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| CIL |
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REMINDERS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
RJDA2A L4/R4 MANIFOLD DRIVER SWITCH 6 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS ARCS 12291X-12295X.

REPORT DATE 2/26/88 C-2430
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: [Date]
ASSESSMENT ID: ARCS-2248
NASA FMEA #: [ID]

NASA DATA:
BASELINE [ ]
NEW [ ]

SUBSYSTEM: ARCS
MDAC ID: 2248
ITEM: RJDA2A L4/R4 MANIFOLD DRIVER OFF SWITCH CONTACTS
11, 12

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

REMARKS:
RJDA2A L4/R4 MANIFOLD DRIVER SWITCH 6 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS ARCS 12291X-12295X.

REPORT DATE 2/26/88 C-2431
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: [ ]
ASSESSMENT ID: ARCS-2249
NASA FMEA #: [ ]

NASA DATA:
BASELINE [ ]
NEW [ ]

SUBSYSTEM: ARCS
MDAC ID: 2249
ITEM: RJDA2A L4/R4 MANIFOLD DRIVER ON SWITCH CONTACTS 13, 14

LEAD ANALYST:

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* CIL RETENTION RATIONALE: (If applicable)
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REMARKS:
RJDA2A L4/R4 MANIFOLD DRIVER SWITCH 6 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS ARCS 12291X-12295X.

REPORT DATE 2/26/88 C-2432
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: ___________________________ NASA DATA: ___________________________
ASSESSMENT ID: ARCS-2250 BASELINE [ ]
NASA FMEA #: ARCS-2250 NEW [ ]
SUBSYSTEM: ARCS
MDAC ID: 2250
ITEM: RJDA2A L4/R4 MANIFOLD DRIVER ON SWITCH CONTACTS 13, 14
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:
RJDA2A L4/R4 MANIFOLD DRIVER SWITCH 6 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs ARCS 12291X-12295X.

REPORT DATE 2/26/88 C-2433
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: NASA DATA:
ASSESSMENT ID: ARCS-2251 BASELINE [ ]
NASA FMEA #: NEW [ ]
SUBSYSTEM: ARCS MDAC ID: 2251
ITEM: RJDA2A L4/R4 MANIFOLD DRIVER OFF SWITCH CONTACTS 15, 16
LEAD ANALYST: ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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

REMARKS:
RJDA2A L4/R4 MANIFOLD DRIVER SWITCH 6 RE-ANALYZED BY IOA. SEE
ASSESSMENT IDs ARCS 12291X-12295X.

REPORT DATE 2/26/88 C-2434
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: [Blank]
ASSESSMENT ID: ARCS-2252
NASA FMEA #: [Blank]

SUBSYSTEM: ARCS
MDAC ID: 2252
ITEM: RJDA2A L4/R4 MANIFOLD DRIVER OFF SWITCH CONTACTS 15, 16

LEAD ANALYST: [Blank]

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:

RJDA2A L4/R4 MANIFOLD DRIVER SWITCH 6 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs ARCS 12291X-12295X.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE:  
ASSESSMENT ID: ARCS-2253  
NASA FMEA #:  
NASA DATA:  
BASELINE [ ]  
NEW [ ]

SUBSYSTEM: ARCS  
MDAC ID: 2253  
ITEM: RJDA2A L4/R4 MANIFOLD LOGIC SWITCH  
LEAD ANALYST:  
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* CIL RETENTION RATIONALE: (If applicable)  
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REMARKS:  
RJDA2A L4/R4 MANIFOLD LOGIC SWITCH 5 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS ARCS 12286X-12290X.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: [          ]
ASSESSMENT ID: ARCS-2254
NASA FMEA #: [          ]
NASA DATA: [ BASELINE [ ] NEW [ ] ]

SUBSYSTEM: ARCS
MDAC ID: 2254
ITEM: RJDA2A L4/R4 MANIFOLD LOGIC SWITCH
LEAD ANALYST: [          ]

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
RJDA2A L4/R4 MANIFOLD LOGIC SWITCH 5 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS ARCS 12286X-12290X.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: ________________________________
ASSESSMENT ID: ________________
NASA FMEA #: ________________

NASA DATA:
BASELINE [ ]
NEW [ ]

SUBSYSTEM: ARCS
MDAC ID: 2255
ITEM: RJDA2A L4/R4 MANIFOLD LOGIC ON SWITCH CONTACTS 1, 2

LEAD ANALYST: ________________________________

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| REDUNDANCY SCREENS |
| A | B | C |

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| IOA  | [ 3 /2R ] | [ P ] | [ P ] | [ P ] | [ ] |
| COMPARE | [ N /N ] | [ N ] | [ N ] | [ N ] | [ ] |

CIL ITEM

RECOMMENDATIONS: (If different from NASA)

[ / ] [ ] [ ] [ ] [ ]

(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
RJDA2A L4/R4 MANIFOLD LOGIC SWITCH 5 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS ARCS 12286X-12290X.

REPORT DATE 2/26/88 C-2438
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: NASA DATA:  
ASSESSMENT ID: ARCS-2256 BASeline [ ]  
NASA FMEA #:  
NEW [ ]  

SUBSYSTEM: ARCS  
MDAC ID: 2256  
ITEM: RJDA2A L4/R4 MANIFOLD LOGIC ON SWITCH CONTACTS 1, 2  

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* CIL RETENTION RATIONALE: (If applicable)  

ADEQUATE [ ]  

INADEQUATE [ ]  

REMARKS:  

RJDA2A L4/R4 MANIFOLD LOGIC SWITCH 5 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS ARCS 12286X-12290X.

REPORT DATE 2/26/88 C-2439
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE:  
ASSESSMENT ID: ARCS-2257  
NASA FMEA #:  

NASA DATA:  
BASELINE [ ]  
NEW [ ]  

SUBSYSTEM: ARCS  
MDAC ID: 2257  
ITEM: RJDA2A L4/R4 MANIFOLD LOGIC OFF SWITCH CONTACTS 3, 4  

LEAD ANALYST:  

ASSESSMENT:  

CRITICALITY  REDUNDANCY SCREENS  CIL ITEM  
FLIGHT HDW/FUNC A B C ITEM  

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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:  
RJDA2A L4/R4 MANIFOLD LOGIC SWITCH 5 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS ARCS 12286X-12290X.

REPORT DATE 2/26/88  C-2440
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: [ ]
ASSESSMENT ID: ARCS-2258
NASA FMEA #: [ ]
NASA DATA: BASELINE [ ]
NEW [ ]

SUBSYSTEM: ARCS
MDAC ID: 2258
ITEM: RJDA2A L4/R4 MANIFOLD LOGIC OFF SWITCH CONTACTS 3, 4

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:
RJDA2A L4/R4 MANIFOLD LOGIC SWITCH 5 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS ARCS 12286X-12290X.

REPORT DATE 2/26/88 C-2441
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE:  
ASSESSMENT ID:  ARCS-2259  
NASA FMEA #:  

NASA DATA:  
BASELINE [ ]  
NEW [ ]  

SUBSYSTEM:  ARCS  
MDAC ID:  2259  
ITEM:  RJDA2A L4/R4 MANIFOLD LOGIC ON SWITCH CONTACTS 5, 6  

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* CIL RETENTION RATIONALE: (If applicable)  
ADEQUATE [ ]  
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REMARKS:  
RJDA2A L4/R4 MANIFOLD LOGIC SWITCH 5 RE-ANALYZED BY IOA. SEE ASSESSMENT IDs ARCS 12286X-12290X.

REPORT DATE 2/26/88  
C-2442
APPENDIX C  
ASSESSMENT WORKSHEET

ASSESSMENT DATE:  
ASSESSMENT ID:  ARCS-2260  
NASA FMEA #:  

NASA DATA: 
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NEW [  ]

SUBSYSTEM:  ARCS  
MDAC ID:  2260  
ITEM:  RJDA2A L4/R4 MANIFOLD LOGIC ON SWITCH 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:

RJDA2A L4/R4 MANIFOLD LOGIC SWITCH 5 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS ARCS 12286X-12290X.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 
ASSESSMENT ID: ARCS-2261 
NASA FMEA #: 
NASA DATA: 
BASELINE [ ] NEW [ ]

SUBSYSTEM: ARCS 
MDAC ID: 2261 
ITEM: RJDA2A L4/R4 MANIFOLD LOGIC 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)

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INADEQUATE [ ]

REMARKS:

RJDA2A L4/R4 MANIFOLD LOGIC SWITCH 5 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS ARCS 12286X-12290X.

REPORT DATE 2/26/88 C-2444
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE:
ASSESSMENT ID: ARCS-2262
NASA FMEA #: NASA DATA:
SUBSYSTEM: ARCS
MDAC ID: 2262 NASA [ ] [ ] [ ] [ ]
ITEM: RJDA2A L4/R4 MANIFOLD LOGIC OFF SWITCH CONTACTS * NASA [ ] [ ] [ ] [ ] NEW [ ] [ ] [ ] [ ]
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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:
RJDA2A L4/R4 MANIFOLD LOGIC SWITCH 5 RE-ANALYZED BY IOA. SEE ASSESSMENT IDS ARCS 12286X-12290X.

REPORT DATE 2/26/88 C-2445
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2263
NASA FMEA #: NONE
NASA DATA:
BASELINE [ ]
NEW [ ]

SUBSYSTEM: ARCS
MDAC ID: 2263
ITEM: RJDA1B MANIFOLD L1/R1/L5 TRICKLE TEST

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:
The three RJDF TRICKLE TESTS IMPLEMENT A SOFTWARE ROUTINE TO VERIFY LOGIC OUTPUTS FROM VARYING A & 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: ARCS-2264
NASA FMEA #: NONE

NASA DATA:
BASELINE [ ]
NEW [ ]

SUBSYSTEM: ARCS
MDAC ID: 2264
ITEM: RJDA1A MANIFOLD L2/R2 TRICKLE TEST

D. LEAD ANALYST: HARTMAN

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COMPARE [ ]

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 & B PULSE COMMAND INPUTS. ASSOCIATED FAILURES HAVE BEEN CONSIDERED IN THE HARDWARE/EPD&C ANALYSIS AND ASSESSMENT.

REPORT DATE 2/26/88  C-2447
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2265
NASA FMEA #: NONE

SUBSYSTEM: ARCS
MDAC ID: 2265
ITEM: RJDA2B MANIFOLD L3/R3/R5 TRICKLE TEST

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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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 & 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: ARCS-2266
NASA FMEA #: NONE

SUBSYSTEM: ARCS
MDAC ID: 2266
ITEM: RJDA2A MANIFOLD L4/R4 TRICKLE TEST

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:
THE THREE RJDF TRICKLE TESTS IMPLEMENT A SOFTWARE ROUTINE TO VERIFY LOGIC OUTPUTS FROM VARYING A & B PULSE COMMAND INPUTS. ASSOCIATED FAILURES HAVE BEEN CONSIDERED IN THE HARDWARE/EPD&C ANALYSIS AND ASSESSMENT.

REPORT DATE 2/26/88 C-2449
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2267
NASA FMEA #: NONE
SUBSYSTEM: ARCS
MDAC ID: 2267
ITEM: RCS ACTIVITY LIGHTS
LEAD ANALYST: D. HARTMAN

NASA DATA:
BASELINE [ ]
NEW [ ]

ASSESSMENT:

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

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

REMARKS:
LIGHTS ACTIVATE WHEN DAP PITCH, YAW, AND ROLL COMMANDS ARE INITIATED. THIS FAILURE IS UNDER DISPLAYS AND CONTROLS.

REPORT DATE 2/26/88 C-2450
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2268
NASA FMEA #: 03-2A-203350-3

SUBSYSTEM: ARCS
MDAC ID: 2268
ITEM: L/R OX OR FU MANIFOLD 1 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.

REPORT DATE 2/26/88 C-2451
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88  
ASSESSMENT ID: ARCS-2269  
NASA FMEA #: 03-2A-203350-3  
NASA DATA: 
BASELINE [ ]  
NEW [ X ]

SUBSYSTEM: ARCS  
MDAC ID: 2269  
ITEM: L/R OX OR FU MANIFOLD 1 PRESS SENSOR  
LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:

IOA AGREES WITH NASA FMEA.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2270
NASA FMEA #: 03-2A-203350-3
NASA DATA:
BASELINE [ ]
NEW [ X ]
SUBSYSTEM: ARCS
MDAC ID: 2270
ITEM: L/R OX OR FU MANIFOLD 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-2453
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2271
NASA FMEA #: 03-2A-203350-3

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 2271
ITEM: L/R OX OR FU MANIFOLD 2 PRESS SENSOR

LEAD ANALYST: D. HARTMAN

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| 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-2454
**APPENDIX C**  
**ASSESSMENT WORKSHEET**

**ASSESSMENT DATE:** 1/29/88  
**ASSESSMENT ID:** ARCS-2272  
**NASA FMEA #:** 03-2A-203350-3  

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

**SUBSYSTEM:** ARCS  
**MDAC ID:** 2272  
**ITEM:** L/R OX OR FU MANIFOLD 3 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.

REPORT DATE 2/26/88  
C-2455
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2273
NASA FMEA #: 03-2A-203350-3

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 2273
ITEM: L/R OX OR FU MANIFOLD 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-2456
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2274
NASA FMEA #: 03-2A-203350-3

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 2274
ITEM: L/R OX OR FU MANIFOLD 4 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.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88  NASA DATA: BASELINE [ ] NEW [ X ]
ASSESSMENT ID: ARCS-2275
NASA FMEA #: 03-2A-203350-3

SUBSYSTEM: ARCS
MDAC ID: 2275
ITEM: L/R OX OR FU MANIFOLD 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-2458
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2276
NASA FMEA #: 03-2A-203365-2

SUBSYSTEM: ARCS
MDAC ID: 2276
ITEM: L/R OX MANIFOLD 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:
NO DIFFERENCES.
**APPENDIX C**

**ASSESSMENT WORKSHEET**

**ASSESSMENT DATE:** 1/29/88  
**ASSESSMENT ID:** ARCS-2277  
**NASA FMEA #:** 03-2A-203365-2

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

**SUBSYSTEM:** ARCS  
**MDAC ID:** 2277  
**ITEM:** L/R OX MANIFOLD 1 TEMP 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:**  
NO DIFFERENCES.

**REPORT DATE 2/26/88**  
**C-2460**
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2278
NASA FMEA #: 03-2A-203365-2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 2278
ITEM: L/R OX MANIFOLD 5 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:
NO DIFFERENCES.
### APPENDIX C
### ASSESSMENT WORKSHEET

**ASSESSMENT DATE:** 1/29/88  
**ASSESSMENT ID:** ARCS-2279  
**NASA FMEA #:** 03-2A-203365-2  
**SUBSYSTEM:** ARCS  
**MDAC ID:** 2279  
**ITEM:** L/R OX MANIFOLD 5 TEMP 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:**  
NO DIFFERENCES.

REPORT DATE 2/26/88  
C-2462
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2280
NASA FMEA #: 03-2A-221314-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 2280
ITEM: L/R CHAMBER PRESSURE (Pc) SENSOR, THRUSTERS L1A, L3A, R1A, R3A

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

[ ] [ ] [ ] [ ] [ ]

* CIL RETENTION RATIONALE: (If applicable)

Adequate [ ]
Inadequate [ ]

REMARKS:
IOA AGREES WITH NASA FMEA.

REPORT DATE 2/26/88 C-2463
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2281
NASA FMEA #: 03-2A-221314-2
NASA DATA: BASELINE [ ] NEW [ X ]
SUBSYSTEM: ARCS
MDAC ID: 2281
ITEM: L/R CHAMBER PRESSURE (Pc) SENSOR, THRUSTERS L1A, L3A, R1A, R3A
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: ARCS-2282
NASA FMEA #: 03-2A-221314-1

ASSESSMENT ID: ARCS
MDAC ID: 2282
ITEM: L/R CHAMBER PRESSURE (Pc) SENSOR, THRUSTERS L1A, L3A, R1A, R3A
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. (IOA FAILURE SAME AS ARCS-2280).
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2283
NASA FMEA #: 03-2A-221314-1

SUBSYSTEM: ARCS
MDAC ID: 2283
ITEM: L/R CHAMBER PRESSURE (Pc) SENSOR, THRUSTERS L1L, L2L, L3L, L4L, R1R, R2R, R3R, R4R
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-2466
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2284
NASA FMEA #: 03-2A-221314-2

SUBSYSTEM: ARCS
MDAC ID: 2284
ITEM: L/R CHAMBER PRESSURE (P_c) SENSOR, THRUSTERS L1L, L2L, L3L, L4L, R1R, R2R, R3R, R4R

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:** ARCS-2285  
**NASA FMEA #:** 03-2A-221314-1  

**SUBSYSTEM:** ARCS  
**MDAC ID:** 2285  
**ITEM:** L/R CHAMBER PRESSURE (Pc) SENSOR, THRUSTERS L1L, L2L, L3L, L4L, R1R, R2R, R3R, R4R  

**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. (IOA FAILURE SAME AS ARCS-2283).

**REPORT DATE** 2/26/88  
**C-2468**
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2286
NASA FMEA #: ARCS-2286
NASA DATA:
BASELINE [ ]
NEW [ ]

SUBSYSTEM: ARCS
MDAC ID: 2286
ITEM: L/R CHAMBER PRESSURE (Pc) SENSOR, THRUSTERS L5L, L5D, R5R, R5D
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:
REDUNDANCY MANAGEMENT MAY FAIL JETS. THIS MAY AFFECT MISSION OPERATIONS. NOTE: EXISTING NASA FMEA LISTED CONTAINS ONLY PRIMARY CHAMBER PRESSURE SENSORS. IOA RECOMMENDS INCLUSION OF VERNIER CHAMBER PRESSURE SENSORS INTO A FMEA.

SUBSYSTEM MANAGER STATED THAT THE CHAMBER PRESSURE SENSOR WAS PART OF THE VERNIER THRUSTER ASSEMBLY. FOR COMPLETENESS, IOA RECOMMENDS THIS FAILURE BE INCORPORATED INTO A FMEA.
ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2287
NASA FMEA #: NONE
NASA DATA:
BASELINE [ ] NEW [ ]

SUBSYSTEM: ARCS
MDAC ID: 2287
ITEM: L/R CHAMBER PRESSURE (Pc) SENSOR, THRUSTERS L5L, L5D, R5R, R5D

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:

REDUNDANCY MANAGEMENT MAY FAIL JETS. THIS MAY AFFECT MISSION OPERATIONS. NOTE: EXISTING NASA FMEA LISTED CONTAINS ONLY PRIMARY CHAMBER PRESSURE SENSORS. IOA RECOMMENDS INCLUSION OF VERNIER CHAMBER PRESSURE SENSORS INTO A FMEA.

SUBSYSTEM MANAGER STATED THAT THE CHAMBER PRESSURE SENSOR WAS PART OF THE VERNIER THRUSTER ASSEMBLY. FOR COMPLETENESS, IOA RECOMMENDS THIS FAILURE BE INCORPORATED INTO A FMEA.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2288
NASA FMEA #: NONE

SUBSYSTEM: ARCS
MDAC ID: 2288
ITEM: L/R CHAMBER PRESSURE (Pc) SENSOR, THRUSTERS L5L, L5D, R5R, R5D

LEAD ANALYST: D. HARTMAN

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

REMARKS:
REDUNDANCY MANAGEMENT MAY FAIL JETS. THIS MAY AFFECT MISSION OPERATIONS. NOTE: EXISTING NASA FMEA LISTED CONTAINS ONLY PRIMARY CHAMBER PRESSURE SENSORS. IOA RECOMMENDS INCLUSION OF VERNIER CHAMBER PRESSURE SENSORS INTO A FMEA.

SUBSYSTEM MANAGER STATED THAT THE CHAMBER PRESSURE SENSOR WAS PART OF THE VERNIER THRUSTER ASSEMBLY. FOR COMPLETENESS, IOA RECOMMENDS THIS FAILURE BE INCORPORATED INTO A FMEA.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2289
NASA FMEA #: 03-2A-221314-1
SUBSYSTEM: ARCS
MDAC ID: 2289
ITEM: L/R CHAMBER PRESSURE (Pc) SENSOR, THRUSTERS L1U, L2U, L4U, L2D, L3D, L4D, R1U, R2U, R4U, R2D, R3D, R4D
LEAD ANALYST: D. HARTMAN

ASSESSMENT:

CRITICALITY REDUNDANCY SCREENS CIL
FLIGHT HDW/FUNC A B C IEM

NASA [ 3 /1R ] [ P ] [ P ] [ P ] [ ] *
IOA [ 3 /3 ] [ ] [ ] [ ] [ ]
COMPARE [ /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.

REPORT DATE 2/26/88 C-2472
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2290
NASA FMEA #: 03-2A-221314-2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 2290
ITEM: L/R CHAMBER PRESSURE (Pc) SENSOR, THRUSTERS L1U, L2U, L4U, L2D, L3D, L4D, R1U, R2U, R4U, R2D, R3D, R4D

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-2473
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2291
NASA FMEA #: 03-2A-221314-1

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2291
NASA FMEA #: 03-2A-221314-1

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2291
NASA FMEA #: 03-2A-221314-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 2291
ITEM: L/R CHAMBER PRESSURE (Pc) SENSOR, THRUSTERS L1U, L2U, L4U, L2D, L3D, L4D, R1U, R2U, R4U, R2D, R3D, R4D

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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INADEQUATE [ ]

REMARKS:
NO DIFFERENCES. (IOA FAILURE SAME AS ARCS-2289).
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2292
NASA FMEA #: 03-2A-221315-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 2292
ITEM: L/R OX OR FU INJECTOR TEMP SENSOR THRUSTER L1A, L3A, R1A, R3A

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-2475
### APPENDIX C
#### ASSESSMENT WORKSHEET

**ASSESSMENT DATE:** 1/29/88  
**ASSESSMENT ID:** ARCS-2293  
**NASA FMEA #:** 03-2A-221315-2  
**NASA DATA:**  
- **BASELINE [ ]**  
- **NEW [ X ]**  

**SUBSYSTEM:** ARCS  
**MDAC ID:** 2293  
**ITEM:** L/R OX OR FU INJECTOR TEMP SENSOR THRUSTER L1A, L3A, R1A, R3A  
**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-2476**
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2294
NASA FMEA #: 03-2A-221315-1
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 2294
ITEM: L/R OX OR FU INJECTOR TEMP SENSOR, THRUSTERS

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-2477
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2295
NASA FMEA #: 03-2A-221315-2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 2295

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-2478
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2296
NASA FMEA #: NONE
NASA DATA:
BASELINE [ ]
NEW [ ]

SUBSYSTEM: ARCS
MDAC ID: 2296
ITEM: L/R OX OR FU INJECTOR TEMP SENSOR, THRUSTERS L5L, L5D, R5R, R5D
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:
REDUNDANCY MANAGEMENT MAY FAIL JETS. THIS MAY EFFECT MISSION OPERATIONS. NOTE: EXISTING NASA FMEA CONTAINS ONLY THE PRIMARY TEMPERATURE SENSORS. IOA RECOMMENDS THE INCLUSION OF VERNIER SENSOR INTO A FMEA.

SUBSYSTEM MANAGER STATED THAT THE TEMPERATURE SENSORS WERE PART OF THE VERNIER THRUSTER ASSEMBLY. FOR COMPLETENESS, IOA RECOMMENDS THIS FAILURE BE INCORPORATED INTO A FMEA.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2297
NASA FMEA #: NONE

NASA DATA:
BASELINE [ ]
NEW [ ]

SUBSYSTEM: ARCS
MDAC ID: 2297
ITEM: L/R OX OR FU INJECTOR TEMP SENSOR, THRUSTERS L5L, L5D, R5R, R5D

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
REDUNDANCY MANAGEMENT MAY FAIL JETS. THIS MAY EFFECT MISSION OPERATIONS. NOTE: EXISTING NASA FMEA CONTAINS ONLY THE PRIMARY TEMPERATURE SENSORS. IOA RECOMMENDS THE INCLUSION OF VERNIER SENSOR INTO A FMEA.

SUBSYSTEM MANAGER STATED THAT THE TEMPERATURE SENSORS WERE PART OF THE VERNIER THRUSTER ASSEMBLY. FOR COMPLETENESS, IOA RECOMMENDS THIS FAILURE BE INCORPORATED INTO A FMEA.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2298
NASA FMEA #: 03-2A-221315-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 2298
ITEM: L/R OX OR FU INJECTOR TEMP SENSOR, THRUSTERS
        L1U, L2U, L4U, L2D, L3D, L4D, R1U, R2U, R4U, R2D, R3D, R4D

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-2481
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88  
ASSESSMENT ID: ARCS-2299  
NASA FMEA #: 03-2A-221315-2

NASA DATA:  
BASELINE [ ]  
NEW [ X ]

SUBSYSTEM: ARCS  
MDAC ID: 2299  
ITEM: L/R OX OR FU INJECTOR TEMP SENSOR, THRUSTERS L1U, L2U, L4U, L2D, L3D, L4D, R1U, R2U, R4U, R2D, R3D, R4D

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-2482
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2300
NASA FMEA #: 05-6KA-2216-1
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 2300
ITEM: DRIVER, HYBRID

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: ARCS-2301
NASA FMEA #: 05-6KA-2216-2

SUBSYSTEM: ARCS
MDAC ID: 2301
ITEM: DRIVER, HYBRID

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:
IOA AGREES WITH NASA FMEA.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2302
NASA FMEA #: 05-6KA-2216-1
SUBSYSTEM: ARCS
MDAC ID: 2302
ITEM: DRIVER, HYBRID
LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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(REMIBILITY CIL RATIONALE: (If applicable)

[ ]

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
IOA AGREES WITH NASA FMEA.

REPORT DATE 2/26/88 C-2485
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2303
NASA FMEA #: 05-6KA-2216-2
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 2303
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:

IOA AGREES WITH NASA FMEA.

REPORT DATE 2/26/88 C-2486
ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2304
NASA FMEA #: 05-6KA-2216-1

SUBSYSTEM: ARCS
MDAC ID: 2304
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:

IOA AGREES WITH NASA FMEA.

REPORT DATE 2/26/88 C-2487
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2305
NASA FMEA #: 05-6KA-2216-2
NASA DATA:
BASELINE [ ]
NEW [ x ]

SUBSYSTEM: ARCS
MDAC ID: 2305
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-2488
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2306
NASA FMEA #: 05-6KA-2216-1

SUBSYSTEM: ARCS
MDAC ID: 2306
ITEM: DRIVER, HYBRID

D. LEAD ANALYST: HARTMAN

ASSESSMENT:

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

NASA DATA: BASELINE [ ]
NEW [X]

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: ARCS-2307
NASA FMEA #: 05-6KA-2216-2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 2307
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:
IOA AGREES WITH NASA FMEA.

REPORT DATE 2/26/88 C-2490
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2308
NASA FMEA #: 05-6KA-2222-1

SUBSYSTEM: ARCS
MDAC ID: 2308
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: ARCS-2309
NASA FMEA #: 05-6KA-2222-2
NASA DATA: BASELINE [ ] NEW [ X ]
SUBSYSTEM: ARCS
MDAC ID: 2309
ITEM: DRIVER, HYBRID
LEAD ANALYST: D. HARTMAN

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IOA [ 3 /1R ] [ P ] [ F ] [ P ] [ X ]

COMPARE [ /N ] [ 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-2492
### APPENDIX C
### ASSESSMENT WORKSHEET

**ASSESSMENT DATE:** 1/29/88  
**ASSESSMENT ID:** ARCS-2310  
**NASA FMEA #:** 05-6KA-2011-1  
**NASA DATA:**  
- BASELINE [ ]  
- NEW [ X ]

**SUBSYSTEM:** ARCS  
**MDAC ID:** 2310  
**ITEM:** FUSE, 1A  
**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:**

IOA AGREES WITH NASA FMEA.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2311
NASA FMEA #: 05-6KA-2011-1
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 2311
ITEM: FUSE, IA

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-2494
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2312
FMEA #: 05-6KA-2011-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 2312
ITEM: FUSE, 1A

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-2495
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2313
NASA FMEA #: 05-6KA-2011-1
SUBSYSTEM: ARCS
MDAC ID: 2313
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 [ ] |

REMARKS:

IOA AGREES WITH NASA FMEA. NOTE: NASA FMEA PART NUMBER LISTED AS 36V73A14F31 SHOULD BE 36V73A14F30.

REPORT DATE 2/26/88   C-2496
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2314
NASA FMEA #: 05-6KA-2010-1

SUBSYSTEM: ARCS
MDAC ID: 2314
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.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2315
NASA FMEA #: ARCS-2315

SUBSYSTEM: ARCS
MDAC ID: 2315
ITEM: FUSE, 5A
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:
FUSE INCORRECTLY IDENTIFIED BY IOA. SEE ARCS-2314.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2316
NASA FMEA #: 03-2A-221316-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 2316
ITEM: HEATER 30W, THRUSTER, PRIMARY, +X AXIS

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

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

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2317
NASA FMEA #: 03-2A-221316-1
SUBSYSTEM: ARCS
MDAC ID: 2317
ITEM: HEATER 20W, THRUSTER, PRIMARY, Y AXIS
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:
IOA AGREES WITH NASA FMEA.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2318
NASA FMEA #: 03-2A-221316-1

NASA DATA: BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
DAC ID: 2318
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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(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
[OA AGREES WITH NASA FMEA.]

REPORT DATE 2/26/88 C-2501
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2319
NASA FMEA #: 03-2A-221316-2
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 2319
ITEM: HEATER 30W, THRUSTER, PRIMARY, +X AXIS

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: ARCS-2320
NASA FMEA #: 03-2A-221316-2

SUBSYSTEM: ARCS
IDAC ID: 2320
ITEM: HEATER 20W, THRUSTER, PRIMARY, Y 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: ARCS-2321
NASA FMEA #: 03-2A-221316-2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 2321
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)

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REMARKS:
IOA AGREES WITH NASA FMEA.

REPORT DATE 2/26/88   C-2504
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2322
NASA FMEA #: 03-2A-221317-1

SUBSYSTEM: ARCS
MDAC ID: 2322
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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* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-2505
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2323
NASA FMEA #: 03-2A-221317-2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 2323
ITEM: HEATER 10W, THRUSTER, VERNIER, ALL AXES

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

| CRITICALITY | REDUNDANCY SCREENS | CIL |
| HDW/FUNC: | A | B | C |
| NASA: [ 3 /3 ] | [ ] | [ ] | [ ] | [ ] | [ X ] * |
| IOA: [ 2 /2 ] | [ ] | [ ] | [ ] | [ ] | [ 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.

REPORT DATE 2/26/88 C-2506
APPENDIX C  
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88  
ASSESSMENT ID: ARCS-2324  
NASA FMEA #: 05-6KA-2099-1  
SUBSYSTEM: ARCS  
MDAC ID: 2324  
ITEM: RESISTOR, 5.1K 1/4W  
LEAD ANALYST: D. HARTMAN

NASA DATA:  
BASELINE [ ]  
NEW [ X ]

SUBSYSTEM:  
MDAC ID:  
ITEM:  
LEAD ANALYST: 

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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-2507
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2325
NASA FMEA #: 05-6KA-2099-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 2325
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 ON 1/20/88 AT MEETING WITH SUBSYSTEM MANAGER (SHORT FAILURE MODE TO BE REMOVED).

REPORT DATE 2/26/88 C-2508
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2326
NASA FMEA #: 05-6KA-2099-1
SUBSYSTEM: ARCS
MDAC ID: 2326
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-2509
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2327
NASA FMEA #: 05-6KA-2099-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 2327
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 ON 1/20/88 AT MEETING WITH SUBSYSTEM MANAGER (SHORT FAILURE MODE TO BE REMOVED).

REPORT DATE 2/26/88 C-2510
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2328
NASA FMEA #: 05-6KA-2099-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 2328
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-2511
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2329
NASA FMEA #: 05-6KA-2099-1
NASA DATA: BASELINE [ ] NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 2329
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 ON 1/20/88 AT MEETING WITH SUBSYSTEM MANAGER
(SHORT FAILURE MODE TO BE REMOVED).

REPORT DATE 2/26/88 C-2512
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2330
NASA FMEA #: 05-6KA-2099-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 2330
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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(ADD/DELETE)

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

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-2513
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2331
NASA FMEA #: 05-6KA-2099-1

SUBSYSTEM: ARCS
MDAC ID: 2331
ITEM: RESISTOR, 5.1K 1/4W

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

| CRITICALITY | REDUNDANCY SCREENS | CIL |
| 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 ON 1/20/88 AT MEETING WITH SUBSYSTEM MANAGER (SHORT FAILURE MODE TO BE REMOVED).

REPORT DATE 2/26/88  C-2514
APPENDIX C  
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88  
ASSESSMENT ID: ARCS-2332  
NASA FMEA #: 05-6KA-2099-1  

SUBSYSTEM: ARCS  
MDAC ID: 2332  
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:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-2515
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2333
NASA FMEA #: 05-6KA-2099-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 2333
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 ON 1/20/88 AT MEETING WITH SUBSYSTEM MANAGER (SHORT FAILURE MODE TO BE REMOVED).

REPORT DATE 2/26/88 C-2516
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2334
NASA FMEA #: NONE

NASA DATA:
BASELINE [ ]
NEW [ ]

SUBSYSTEM: ARCS
MDAC ID: 2334
ITEM: THERMOSTAT, PRIMARY THRUSTERS, +X AXIS

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

| CRITICALITY | REDUNDANCY SCREENS | CIL |
| FLIGHT | A | B | C | ITEM |
| HDW/FUNC | | | |
| NASA | [ ] | [ ] | [ ] | [ ] | [ ] | (* | |
| IOA | [ 3 /1R ] | [ P ] | [ P ] | [ P ] | [ X ] |
| COMPARE | [ N /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:
PROPELLANT IN JET MAY FREEZE. IF JET IS REQUIRED, ORBITER ORIENT ITSELF TOWARD SOLAR HEATING. THIS MAY AFFECT MISSION OPERATIONS. IOA RECOMMENDS THE PRIMARY THRUSTER THERMOSTATS BE INCORPORATED INTO A FMEA.

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

REPORT DATE 2/26/88   C-2517
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2335
NASA FMEA #: NONE

NASA DATA:
BASELINE [ ]
NEW [ ]

SUBSYSTEM: ARCS
MDAC ID: 2335
ITEM: THERMOSTAT, PRIMARY THRUSTERS, +X AXIS

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:
NO EFFECT. I/OA RECOMMENDS THE PRIMARY THRUSTER THERMOSTATS BE INCORPORATED INTO A FMEA.

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

REPORT DATE 2/26/88  C-2518
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2336
NASA FMEA #: NONE

NASA DATA:
BASELINE [ ]
NEW [ ]

SUBSYSTEM: ARCS
MDAC ID: 2336
ITEM: THERMOSTAT, PRIMARY THRUSTERS, Y AXIS

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

| CRITICALLY | REDUNDANCY SCREENS | CIL |
| FLIGHT | HDW/FUNC | A | B | C |
| NASA | / | [ ] | [ ] | [ ] | [ ] | * |
| IOA | 3 /| [ P ] | [ P ] | [ P ] | [ X ] |
| 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:
PROPELLANT IN JET MAY FREEZE. IF JET IS REQUIRED, ORBITER ORIENT ITSELF TOWARD SOLAR HEATING. THIS MAY AFFECT MISSION OPERATIONS. IOA RECOMMENDS THE PRIMARY THRUSTER THERMOSTATS BE INCORPORATED INTO A FMEA.

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

REPORT DATE 2/26/88 C-2519
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2337
NASA FMEA #: NONE
NASA DATA: BASELINE [ ] NEW [ ]

SUBSYSTEM: ARCS
MDAC ID: 2337
ITEM: THERMOSTAT, PRIMARY THRUSTERS, Y AXIS
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:
NO EFFECT. IOA RECOMMENDS THE PRIMARY THRUSTER THERMOSTATS BE INCORPORATED INTO A FMEA.

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

REPORT DATE 2/26/88 C-2520
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2338
NASA FMEA #: NONE
SUBSYSTEM: ARCS
MDAC ID: 2338
ITEM: THERMOSTAT, PRIMARY THRUSTERS, Z AXIS
LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

[ 3 /2R ] [ P ] [ F ] [ P ] [ A ]

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
PROPELLANT IN JET MAY FREEZE. IF JET IS REQUIRED, ORBITER ORIENT ITSELF TOWARD SOLAR HEATING. THIS MAY AFFECT MISSION OPERATIONS. IOA RECOMMENDS THE PRIMARY THRUSTER THERMOSTATS BE INCORPORATED INTO A FMEA.

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

REPORT DATE 2/26/88 C-2521
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2339
NASA FMEA #: NONE

NASA DATA:
BASELINE [ ]
NEW [ ]

SUBSYSTEM: ARCS
MDAC ID: 2339
ITEM: THERMOSTAT, PRIMARY THRUSTERS, Z AXIS

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:
NO EFFECT. IOA RECOMMENDS THE PRIMARY THRUSTER THERMOSSTATS BE INCORPORATED INTO A FMEA.

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

REPORT DATE 2/26/88 C-2522
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2340
NASA FMEA #: NONE
SUBSYSTEM: ARCS
MDAC ID: 2340
ITEM: THERMOSTAT, VERNIER THRUSTERS, ALL AXES
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:
PROPELLANT IN JET MAY FREEZE. NO REDUNDANCY PROVIDED. THIS MAY EFFECT MISSION OPERATIONS. IOA RECOMMENDS THIS FAILURE BE INCORPORATED INTO A FMEA.

SUBSYSTEM MANAGER STATED THAT THE THERMOSTATS WERE PART OF THE VERNIER THRUSTER ASSEMBLY. FOR COMPLETENESS, IOA RECOMMENDS THIS FAILURE BE INCORPORATED INTO A FMEA.

REPORT DATE 2/26/88 C-2523
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-2341
NASA FMEA #: NONE
SUBSYSTEM: ARCS
MDAC ID: 2341
ITEM: THERMOSTAT, VERNIER THRUSTERS, ALL AXES
LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO EFFECT. IOA RECOMMENDS THIS FAILURE BE INCORPORATED INTO A FMEA.

SUBSYSTEM MANAGER STATED THAT THE THERMOSTATS WERE PART OF THE VERNIER THRUSTER ASSEMBLY. FOR COMPLETENESS, IOA RECOMMENDS THIS FAILURE BE INCORPORATED INTO A FMEA.

REPORT DATE 2/26/88  C-2524
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE:  
ASSESSMENT ID: ARCS-2342  
NASA FMEA #:  

NASA DATA:  
BASELINE [ ]  
NEW [ ]  

SUBSYSTEM: ARCS  
MDAC ID: 2342  
ITEM: MANIFOLD 1, JETS HEATER CONTROL 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:  
AFT MANIFOLD 1 JET HEATER CONTROL SWITCH 9 RE-ANALYZED BY IOA.  
SEE ASSESSMENT IDS ARCS 12296X-12300X.

REPORT DATE 2/26/88  
C-2525
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: [ ]
ASSESSMENT ID: ARCS-2343
NASA FMEA #: [ ]
NASA DATA:
BASELINE [ ]
NEW [ ]

SUBSYSTEM: ARCS
MDAC ID: 2343
ITEM: MANIFOLD 1, JETS HEATER CONTROL SWITCH

LEAD ANALYST:

ASSESSMENT:

CRITICALITY
FLIGHT
HDW/FUNC

REdundancy Screens
A B C

CIL
ITEM

NASA [ / / ] [ ] [ ] [ ] [ ] [ ] * 

IOA [ 2/2 ] [ ] [ ] [ ] [ ] [ X ]

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

RECOMMENDATIONS: (If different from NASA)

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

(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
AFT MANIFOLD 1 JET HEATER CONTROL SWITCH 9 RE-ANALYZED BY IOA.
SEE ASSESSMENT IDS ARCS 12296X-12300X.

REPORT DATE 2/26/88 C-2526
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSEMENT DATE: 
ASSESSEMENT ID: ARCS-2344 
NASA FMEA #: 
NASA DATA: BASELINE [ ] NEW [ ]

SUBSYSTEM: ARCS
MDAC ID: 2344
ITEM: MANIFOLD 1, JETS HEATER CONTROL SWITCH OPEN
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:
AFT MANIFOLD 1 JET HEATER CONTROL SWITCH 9 RE-ANALYZED BY IOA.
SEE ASSESSMENT IDS ARCS 12296X-12300X.

REPORT DATE 2/26/88 C-2527
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE:   NASA DATA:
ASSESSMENT ID: ARCS-2345   BASELINE [ ]
NASA FMEA #: ARCS-2345   NEW [ ]

SUBSYSTEM: ARCS
MDAC ID: 2345
ITEM: MANIFOLD 1, JETS HEATER CONTROL SWITCH OPEN
CONTACTS 1, 2

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:
AFT MANIFOLD 1 JET HEATER CONTROL SWITCH 9 RE-ANALYZED BY IOA.
SEE ASSESSMENT IDs ARCS 12296X-12300X.

REPORT DATE 2/26/88   C-2528
ASSESSMENT DATE: NASA DATA: 
ASSESSMENT ID: ARCS-2346 BASELINE [ ] 
NASA FMEA #: NEW [ ] 

SUBSYSTEM: ARCS 
MDAC ID: 2346 
ITEM: MANIFOLD 1, JETS HEATER CONTROL SWITCH OPEN 
CONTACTS 3, 4 

LEAD ANALYST: 

ASSESSMENT: 

| CRITICALLY | REDUNDANCY SCREENS | CIL |
| FLIGHT 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 [4680H] 

INADEQUATE [ ] 

REMARKS: 
AFT MANIFOLD 1 JET HEATER CONTROL SWITCH 9 RE-ANALYZED BY IOA. 
SEE ASSESSMENT IDS ARCS 12296X-12300X.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 
ASSESSMENT ID: ARCS-2347
NASA FMEA #: 
NASA DATA: 
BASELINE [ ]
NEW [ ]
SUBSYSTEM: ARCS
MDAC ID: 2347
ITEM: MANIFOLD 1, JETS HEATER CONTROL SWITCH OPEN CONTACTS 3, 4
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:
AFT MANIFOLD 1 JET HEATER CONTROL3024HSWITCH-ANALYZED BY IOA.
SEE ASSESSMENT IDS ARCS 12296X-12300X.

REPORT DATE 2/26/88 C-2530
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: [NASA DATA:]
ASSESSMENT ID: ARCS-2348
NASA FMEA #: [ ]
BASELINE [ ]
NEW [ ]

SUBSYSTEM: ARCS
MDAC ID: 2348
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:
AFT MANIFOLD 2 JET HEATER CONTROL SWITCH 10 RE-ANALYZED BY IOA.
SEE ASSESSMENT IDS ARCS 12301X-12305X.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: [ ]
ASSESSMENT ID: ARCS-2349
NASA FMEA #: [ ]
NASA DATA: BASELINE [ ]
NEW [ ]

SUBSYSTEM: ARCS
MDAC ID: 2349
ITEM: MANIFOLD 2, JETS HEATER CONTROL SWITCH

LEAD ANALYST: [ ]
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| FLIGHT | HDW/FUNC | A | B | C | ITEM |
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RECOMMENDATIONS: (If different from NASA)
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(ADD/DELETE)

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

REMARKS:
AFT MANIFOLD 2 JET HEATER CONTROL SWITCH 10 RE-ANALYZED BY IOA.
SEE ASSESSMENT IDs ARCS 12301X-12305X.

REPORT DATE 2/26/88 C-2532
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 
ASSESSMENT ID: ARCS-2350 
NASA FMEA #: 
NASA DATA: 
ASSESSMENT ID: ARCS-2350 
BASELINE [ ] 
NEW [ ] 
SUBSYSTEM: ARCS 
MDAC ID: 2350 
ITEM: MANIFOLD 2, JETS HEATER CONTROL SWITCH OPEN 
CONTACTS 1, 2 
LEAD ANALYST: 
ASSESSMENT: 

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RECOMMENDATIONS: (If different from NASA) 

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* CIL RETENTION RATIONALE: (If applicable) 

ADEQUATE [ ] 
INADEQUATE [ ]

REMARKS: 
AFT MANIFOLD 2 JET HEATER CONTROL SWITCH 10 RE-ANALYZED BY IOA. 
SEE ASSESSMENT IDs ARCS 12301X-12305X.

REPORT DATE 2/26/88  C-2533
### APPENDIX C
### ASSESSMENT WORKSHEET

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**ASSESSMENT ID:** ARCS-2351

**NASA FMEA #:**

**NASA DATA:**

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**SUBSYSTEM:** ARCS

**MDAC ID:** 2351

**ITEM:** MANIFOLD 2, JETS HEATER CONTROL SWITCH OPEN

**CONTACTS 1, 2**

**LEAD ANALYST:**

**ASSESSMENT:**

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

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]

INADEQUATE [ ]

**REMARKS:**

AFT MANIFOLD 2 JET HEATER CONTROL SWITCH 10 RE-ANALYZED BY IOA.

SEE ASSESSMENT IDS ARCS 12301X-12305X.

**REPORT DATE 2/26/88**

C-2534
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 
ASSESSMENT ID: ARCS-2352 
NASA FMEA #: 

NASA DATA: 
BASELINE [ ] 
NEW [ ] 

SUBSYSTEM: ARCS 
MDAC ID: 2352 
ITEM: MANIFOLD 2, JETS HEATER CONTROL SWITCH OPEN 
CONTACTS 3, 4 

LEAD ANALYST: 
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* CIL RETENTION RATIONALE: (If applicable) 
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REMARKS: 
AFT MANIFOLD 2 JET HEATER CONTROL SWITCH 10 RE-ANALYZED BY IOA. 
SEE ASSESSMENT IDS ARCS 12301X-12305X. 

REPORT DATE 2/26/88 C-2535
APPENDIX C
ASSESSMENT WORKSHEET

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BASELINE [ ]
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SUBSYSTEM: ARCS
MDAC ID: 2353
ITEM: MANIFOLD 2, JETS HEATER CONTROL SWITCH OPEN
CONTACTS 3, 4

LEAD ANALYST:

ASSESSMENT:

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FLIGHT
HDW/FUNC

REDUNDANCY SCREENS
A   B   C

CIL
ITEM

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
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REMARKS:

APT MANIFOLD 2 JET HEATER CONTROL SWITCH 10 RE-ANALYZED BY IOA.
SEE ASSESSMENT IDS ARCS 12301X-12305X.

REPORT DATE 2/26/88   C-2536
APPENDIX C
ASSESSMENT WORKSHEET

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ITEM: MANIFOLD 3, JETS HEATER CONTROL SWITCH

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

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REMARKS:
AFT MANIFOLD 3 JET HEATER CONTROL SWITCH 11 RE-ANALYZED BY IOA.
SEE ASSESSMENT IDS ARCS 12306X-12310X.
APPENDIX C
ASSESSMENT WORKSHEET

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SUBSYSTEM: ARCS
MDAC ID: 2355
ITEM: MANIFOLD 3, JETS HEATER CONTROL SWITCH

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RECOMMENDATIONS: (If different from NASA)
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* CIL RETENTION RATIONALE: (If applicable)
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REMARKS:
AFT MANIFOLD 3 JET HEATER CONTROL SWITCH 11 RE-ANALYZED BY IOA.
SEE ASSESSMENT IDs ARCS 12306X-12310X.

REPORT DATE 2/26/88 C-2538
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 
ASSESSMENT ID: ARCS-2356 
NASA FMEA #: 

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BASELINE [ ] 
NEW [ ] 

SUBSYSTEM: ARCS 
MDAC ID: 2356 
ITEM: MANIFOLD 3, JETS HEATER CONTROL SWITCH OPEN 
CONTACTS 1, 2 

LEAD ANALYST: 

ASSESSMENT: 

| CRITICALLY | REDUNDANCY SCREENS | CIL |
| FLIGHT | HDW/FUNC | A | B | C | ITEM |
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RECOMMENDATIONS: (If different from NASA) 
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* CIL RETENTION RATIONALE: (If applicable) 
ADEQUATE [ ] 
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REMARKS: 
AFT MANIFOLD 3 JET HEATER CONTROL SWITCH 11 RE-ANALYZED BY IOA. 
SEE ASSESSMENT IDS ARCS 12306X-12310X.

REPORT DATE 2/26/88 C-2539
APPENDIX C
ASSESSMENT WORKSHEET

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SUBSYSTEM: ARCS
MDAC ID: 2357
ITEM: MANIFOLD 3, JETS HEATER CONTROL SWITCH OPEN
CONTACTS 1, 2

LEAD ANALYST:

ASSESSMENT:

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| FLIGHT | HDW/FUNC | A | B | 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:
AFT MANIFOLD 3 JET HEATER CONTROL SWITCH 11 RE-ANALYZED BY IOA.
SEE ASSESSMENT IDs ARCS 12306X-12310X.

REPORT DATE 2/26/88 C-2540
APPENDIX C
ASSESSMENT WORKSHEET

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NEW [ ]

SUBSYSTEM: ARCS
MDAC ID: 2358
ITEM: MANIFOLD 3, JETS HEATER CONTROL SWITCH OPEN
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:
AFT MANIFOLD 3 JET HEATER CONTROL SWITCH 11 RE-ANALYZED BY IOA.
SEE ASSESSMENT IDs ARCS 12306X-12310X.

REPORT DATE 2/26/88 C-2541
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 
ASSESSMENT ID: ARCS-2359
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NEW [ ]

SUBSYSTEM: ARCS
MDAC ID: 2359
ITEM: MANIFOLD 3, JETS HEATER CONTROL SWITCH OPEN
CONTACTS 3, 4

LEAD ANALYST:

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* CIL RETENTION RATIONALE: If applicable)
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REMARKS:
AFT MANIFOLD 3 JET HEATER CONTROL SWITCH 11 RE-ANALYZED BY IOA.
SEE ASSESSMENT IDS ARCS 12306X-12310X.

REPORT DATE 2/26/88 C-2542
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 
ASSESSMENT ID: ARCS-2360 
NASA FMEA #: 

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BASELINE [ ] 
NEW [ ]

SUBSYSTEM: ARCS
MDAC ID: 2360
ITEM: MANIFOLD 4, JETS HEATER CONTROL SWITCH

LEAD ANALYST: 

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
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REMARKS:
AFT MANFOLD 4 JET HEATER CONTROL SWITCH 12 RE-ANALYZED BY IOA.
SEE ASSESSMENT IDS ARCS 12311X-12315X.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: [ ]
ASSESSMENT ID: ARCS-2361
NASA FMEA #: [ ]

NASA DATA: BASELINE [ ]
NEW [ ]

SUBSYSTEM: ARCS
MDAC ID: 2361
ITEM: MANIFOLD 4, JETS HEATER CONTROL SWITCH

LEAD ANALYST: [ ]

ASSESSMENT:

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| FLIGHT HDW/FUNC | A | B | C | ITEM |
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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
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REMARKS:
AFT MANIFOLD 4 JET HEATER CONTROL SWITCH 12 RE-ANALYZED BY IOA.
SEE ASSESSMENT IDS ARCS 12311X-12315X.

REPORT DATE 2/26/88 C-2544
APPENDIX C
ASSESSMENT WORKSHEET

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NEW [ ]

SUBSYSTEM: ARCS
MDAC ID: 2362
ITEM: MANIFOLD 4, JETS HEATER CONTROL SWITCH OPEN
CONTACTS 1, 2

LEAD ANALYST: [Blank]

ASSESSMENT:

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| FLIGHT HDW/FUNC | A | B | C | ITEM |
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RECOMMENDATIONS: (If different from NASA)

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

REMARKS:
AFT MANIFOLD 4 JET HEATER CONTROL SWITCH 12 RE-ANALYZED BY IOA.
SEE ASSESSMENT IDs ARCS 12311X-12315X.

REPORT DATE 2/26/88 C-2545
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 
ASSESSMENT ID: ARCS-2363
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NASA DATA: 
BASELINE [ ] 
NEW [ ]

SUBSYSTEM: ARCS
MDAC ID: 2363
ITEM: MANIFOLD 4, JETS HEATER CONTROL 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:
AFT MANIFOLD 4 JET HEATER CONTROL SWITCH 12 RE-ANALYZED BY IOA.
SEE ASSESSMENT IDs ARCS 12311X-12315X.

REPORT DATE 2/26/88 C-2546
APPENDIX C
ASSESSMENT WORKSHEET

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* CIL RETENTION RATIONALE: (If applicable)

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REMARKS:

AFT MANIFOLD 4 JET HEATER CONTROL SWITCH 12 RE-ANALYZED BY IOA.
SEE ASSESSMENT IDS ARCS 12311X-12315X.

REPORT DATE 2/26/88 C-2547
APPENDIX C
ASSESSMENT WORKSHEET

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RECOMMENDATIONS: (If different from NASA)  
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ADEQUATE [ ]  
INADEQUATE [ ]  
REMARKS:  
AFT MANIFOLD 4 JET HEATER CONTROL SWITCH 12 RE-ANALYZED BY IOA.  
SEE ASSESSMENT IDs ARCS 12311X-12315X.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE:
ASSESSMENT ID: ARCS-2366
NASA FMEA #:

NASA DATA:
BASELINE [ ]
NEW [ ]

SUBSYSTEM: ARCS
MDAC ID: 2366
ITEM: MANIFOLD 5, JETS HEATER CONTROL 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:
AFT MANIFOLD 5 JET HEATER CONTROL SWITCH 13 RE-ANALYZED BY IOA.
SEE ASSESSMENT IDS ARCS 12316X-12320X.

REPORT DATE 2/26/88
C-2549
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: [ ]
ASSESSMENT ID: ARCS-2367
NASA FMEA #: [ ]

NASA DATA:
BASELINE [ ]
NEW [ ]

SUBSYSTEM: ARCS
MDAC ID: 2367
ITEM: MANIFOLD 5, 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:
AFT MANIFOLD 5 JET HEATER CONTROL SWITCH 13 RE-ANALYZED BY IOA.
SEE ASSESSMENT IDs ARCS 12316X-12320X.

REPORT DATE 2/26/88 C-2550
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 
ASSESSMENT ID: ARCS-2368 
NASA FMEA #: 

NASA DATA: 
BASELINE [ ] 
NEW [ ] 

SUBSYSTEM: ARCS 
MDAC ID: 2368 
ITEM: MANIFOLD 5, JETS HEATER CONTROL SWITCH OPEN 
CONTACTS 1, 2 

LEAD ANALYST: 

ASSESSMENT: 

| CRITICALLY | REDUNDANCY SCREENS | CIL ITEM |
|WAY | FLIGHT | A | B | C | |
|HDW/FUNC | | | | | |
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|IOA | [ 2/2 ] | [ ] | [ ] | [ ] | [ ] | [ X ] |
|COMPARE | [ N/N ] | [ ] | [ ] | [ ] | [ ] | [ N ] |

RECOMMENDATIONS: (If different from NASA) 

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

* CIL RETENTION RATIONALE: (If applicable) 

ADEQUATE [ ] 
INADEQUATE [ ] 

REMARKS: 
AFT MANIFOLD 5 JET HEATER CONTROL SWITCH 13 RE-ANALYZED BY IOA. 
SEE ASSESSMENT IDs ARCS 12316X-12320X.

REPORT DATE 2/26/88 C-2551
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: [ ]
ASSESSMENT ID: ARCS-2369
NASA FMEA #: [ ]
NASA DATA: BASELINE [ ]
NEW [ ]
SUBSYSTEM: ARCS
MDAC ID: 2369
ITEM: MANIFOLD 5, JETS HEATER CONTROL SWITCH OPEN
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:
AFT MANIFOLD 5 JET HEATER CONTROL SWITCH 13 RE-ANALYZED BY IOA.
SEE ASSESSMENT IDS ARCS 12316X-12320X.

REPORT DATE 2/26/88 C-2552
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: [ ]
ASSESSMENT ID: ARCS-2370
NASA FMEA #: [ ]

NASA DATA:
BASELINE [ ]
NEW [ ]

SUBSYSTEM: ARCS
MDAC ID: 2370
ITEM: MANIFOLD 5, JETS HEATER CONTROL SWITCH OPEN
CONTACTS 3, 4

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:
AFT MANIFOLD 5 JET HEATER CONTROL SWITCH 13 RE-ANALYZED BY IOA.
SEE ASSESSMENT IDS ARCS 12316X-12320X.

REPORT DATE 2/26/88 C-2553
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 
ASSESSMENT ID: ARCS-2371 
NASA FMEA #: 

NASA DATA:
BASELINE [ ]
NEW [ ]

SUBSYSTEM: ARCS
MDAC ID: 2371
ITEM: MANIFOLD 5, JETS HEATER CONTROL SWITCH OPEN
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:

AFT MANIFOLD 5 JET HEATER CONTROL SWITCH 13 RE-ANALYZED BY IOA.
SEE ASSESSMENT IDS ARCS 12316X-12320X.

REPORT DATE 2/26/88 C-2554
# APPENDIX C
## ASSESSMENT WORKSHEET

**ASSESSMENT DATE:** 1/29/88  
**NASA DATA:**  
BASELINE [ ]  
NEW [ X ]

**ASSESSMENT ID:** ARCS-12001X  
**NASA FMEA #:** 05-6KA-2006-1

**SUBSYSTEM:** ARCS  
**MDAC ID:** 12001  
**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.

**REPORT DATE** 2/26/88  
**C-2555**
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12002X
NASA FMEA #: 05-6KA-2006-1
SUBSYSTEM: ARCS
MDAC ID: 12002
ITEM: FUSE, 1A
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.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12003X
NASA FMEA #: 05-6KA-2032-1

NASA DATA: 
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12003
ITEM: MANIFOLD #5, L/R OX & FU ISOL VLV 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-2557
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12004X
NASA FMEA #: 05-6KA-2032-2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12004
ITEM: MANIFOLD #5, L/R OX & FU ISOL VLV SWITCH

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

CRITICALITY
FLIGHT
HDW/FUNC

REDUNDANCY SCREENS
A  B  C

CIL
ITEM

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

RECOMMENDATIONS: (If different from NASA)
[ 3 /1R ] [ P ] [ P ] [ P ] [ D ]
(ADD/DELETE)

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

REMARKS:
NASA FMEA CONSIDERS MULTIPLE FAILURES. INABILITY TO CLOSE THE VALVE PREVENTS ISOLATION OF A THRUSTER LEAK.

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

REPORT DATE 2/26/88.
C-2558
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12005X
NASA FMEA #: 05-6KA-2032-2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12005
ITEM: MANIFOLD #5, L/R OX & FU ISOL VLV SWITCH

LEAD ANALYST: D. HARTMAN

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COMPARISON:

[ ] [ ] [ N ] [ ] [ N ]

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NASA FMEA CONSIDERS MULTIPLE FAILURES. INABILITY TO CLOSE THE VALVE PREVENTS ISOLATION OF A THRUSTER LEAK.

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

REPORT DATE 2/26/88 C-2559
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12006X
NASA FMEA #: 05-6KA-2032-2

SUBSYSTEM: ARCS
MDAC ID: 12006
ITEM: MANIFOLD #5, L/R OX & FU ISOL VLV SWITCH

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

REMARKS:
NASA FMEA CONSIDERS MULTIPLE FAILURES. INABILITY TO CLOSE THE VALVE PREVENTS ISOLATION OF A THRUSTER LEAK.

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

REPORT DATE 2/26/88 C-2560
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12007X
NASA FMEA #: 05-6KA-2032-1
NASA DATA: 
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12007
ITEM: MANIFOLD #5, L/R OX & FU ISOL VLV 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:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-2561
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12008X
NASA FMEA #: 05-6KA-2090-1
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12008
ITEM: RESISTOR, 1.2K 2W
LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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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 CONSIDERS 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 (MULTIPLE FAILURES) WAS RAISED DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THIS ISSUE REMAINS OPEN.

REPORT DATE 2/26/88 C-2562
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12009X
NASA FMEA #: 05-6KA-2090-2
NASA DATA:
BASELINE [ ]
NEW [ X ]
SUBSYSTEM: ARCS
MDAC ID: 12009
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.

REPORT DATE 2/26/88 C-2563
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12010X
NASA FMEA #: 05-6KA-2092-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12010
ITEM: RESISTOR, 5.1K 1/4W

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-2564
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12011X
NASA FMEA #: 05-6KA-2092-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12011
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-2565
### APPENDIX C
### ASSESSMENT WORKSHEET

**ASSESSMENT DATE:** 1/29/88  
**ASSESSMENT ID:** ARCS-12012X  
**NASA FMEA #:** 05-6KA-2091-1

**SUBSYSTEM:** ARCS  
**MDAC ID:** 12012  
**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:**

AGREE WITH IOA ANALYSIS.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
NASA DATA:
BASELINE [ ]
NEW [ X ]

ASSESSMENT ID: ARCS-12013X
SUBSYSTEM: ARCS
MDAC ID: 12013
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:
AGREE WITH IOA ANALYSIS.

REPORT DATE 2/26/88 C-2567
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12014X
NASA FMEA #: 05-6KA-2091-1
SUBSYSTEM: ARCS
MDAC ID: 12014
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:
AGREE WITH IOA ANALYSIS.

REPORT DATE 2/26/88 C-2568
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12015X
NASA FMEA #: 05-6KA-2091-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12015
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:
AGREE WITH IOA ANALYSIS.

REPORT DATE 2/26/88 C-2569
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12016X
NASA FMEA #: 05-6KA-2156-1

SUBSYSTEM: ARCS
MDAC ID: 12016
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)

REMARKS:

NASA FMEA CONSIDERS 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 (MULTIPLE FAILURES) WAS RAISED DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THIS ISSUE REMAINS OPEN.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88  
ASSESSMENT ID: ARCS-12017X  
NASA FMEA #: 05-6KA-2156-2

NASA DATA:  
BASELINE [ ]  
NEW [ X ]

SUBSYSTEM: ARCS  
MDAC ID: 12017  
ITEM: EVENT INDICATOR

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:
AGREE WITH IOA ANALYSIS.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12018X
NASA FMEA #: 05-6KA-2177-1

SUBSYSTEM: ARCS
MDAC ID: 12018
ITEM: CONTROLLER, REMOTE POWER

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

CRITICALITY

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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-2572
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12019X
NASA FMEA #: 05-6KA-2177-2
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12019
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 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 (MULTIPLE FAILURES) WAS RAISED DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THIS ISSUE REMAINS OPEN.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12020X
NASA FMEA #: 05-6KA-2178-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12020
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:
LOSE CAPABILITY TO OPEN THE ISOLATION VALVE. THIS PREVENTS VERNIER OPERATION THUS 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-2574
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12021X
NASA FMEA #: 05-6KA-2178-2

SUBSYSTEM: ARCS
MDAC ID: 12021
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 (MULTIPLE FAILURES) WAS RAISED DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THIS ISSUE REMAINS OPEN.

REPORT DATE 2/26/88 C-2575
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12022X
NASA FMEA #: 05-6KA-2210A-1
SUBSYSTEM: ARCS
MDAC ID: 12022
ITEM: DRIVER, HYBRID
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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(ADD/DELETE)

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

REMARKS:
NASA FMEA CONSIDERS 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 (MULTIPLE FAILURES) WAS RAISED DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THIS ISSUE REMAINS OPEN.

REPORT DATE 2/26/88 C-2576
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12023X
NASA FMEA #: 05-6KA-2210A-2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12023
ITEM: DRIVER, HYBRID

LEAD ANALYST: D. HARTMAN

LEAD ANALYST: D. HARTMAN

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:
IOA AGREES WITH NASA FMEA.

REPORT DATE 2/26/88 C-2577
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12024X
NASA FMEA #: 05-6KA-2210-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12024
ITEM: DRIVER, HYBRID

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

| CRITICALITY | REDUNDANCY SCREENS | CIL |
| FLIGHT | A | B | C | ITEM |
| HDW/FUNC | | | |
| 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 CONSIDERS 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 (MULTIPLE FAILURES) WAS RAISED DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THIS ISSUE REMAINS OPEN.

REPORT DATE 2/26/88 C-2578
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12025X
NASA FMEA #: 05-6KA-2210-2

SUBSYSTEM: ARCS
MDAC ID: 12025
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:

THIS FAILURE CAUSES INABILITY TO OPEN THE ISOLATION VALVE WHICH CAUSES 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-2579
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12026X
NASA FMEA #: 05-6KA-2213-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12026
ITEM: DRIVER, HYBRID
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-2580
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12027X
NASA FMEA #: 05-6KA-2213-2

SUBSYSTEM: ARCS
MDAC ID: 12027
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 /3 ] | [ ] | [ ] | [ ] | [ ] |
| 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 (MULTIPLE FAILURES) WAS RAISED DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THIS ISSUE REMAINS OPEN.

REPORT DATE 2/26/88 C-2581
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12028X
NASA FMEA #: 05-6KA-2212-1

SUBSYSTEM: ARCS
MDAC ID: 12028
ITEM: DRIVER, HYBRID
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-2582
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12029X
NASA FMEA #: 05-6KA-2212-2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12029
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 (MULTIPLE FAILURES) WAS RAISED DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THIS ISSUE REMAINS OPEN.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12030X
NASA FMEA #: 05-6KA-2211-1

NASA DATA: BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12030
ITEM: DRIVER, HYBRID

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

| CRITICALITY |
| FLIGHT |
| HDW/FUNC |
| A | B | C |
| NASA [ 3 /2R ] | [ P ] | [ P ] | [ P ] | [ ] | * |
| IOA [ 2 /2 ] | [ ] | [ ] | [ ] | [ ] | [ X ] |
| COMPARE [ N /N ] | [ N ] | [ N ] | [ N ] | [ N ] | [ N ] |

RECOMMENDATIONS: (If different from NASA)

[ 2 /2 ] [ ] [ ] [ ] [ ] [ A ] (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
LOSE CAPABILITY TO OPEN THE ISOLATION VALVE. THIS PREVENTS VERNIER OPERATION THUS LOSS OF 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: ARCS-12031X
NASA FMEA #: 05-6KA-2211-2
SUBSYSTEM: ARCS
MDAC ID: 12031
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 (MULTIPLE FAILURES) WAS RAISED DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THIS ISSUE REMAINS OPEN.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12032X
NASA FMEA #: 05-6KA-2213A-1
SUBSYSTEM: ARCS
MDAC ID: 12032
ITEM: DRIVER, HYBRID
LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

[ 2 /2 ] [ ] [ ] [ ] [ ] [ X ]

* CIL RETENTION RATIONALE: (If applicable)

AD Equate [ ]

IN Adequate [ ]

REMARKS:
LOSE CAPABILITY TO OPEN THE ISOLATION VALVE. THIS PREVENTS VERNIER OPERATION THUS 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-2586
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12033X
NASA FMEA #: 05-6KA-2213A-2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12033
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 (MULTIPLE FAILURES) WAS RAISED DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THIS ISSUE REMAINS OPEN.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12034X
NASA FMEA #: 05-6KA-2224-1
SUBSYSTEM: ARCS
MDAC ID: 12034
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:
LOSE CAPABILITY TO OPEN THE ISOLATION VALVE. THIS PREVENTS VERNIER OPERATION THUS LOSS OF MISSION OBJECTIVES.

ISSUE IS TIED TO THE IOA HARDWARE CRITICALITY FOR THE FAILED CLOSED MANIFOLD 5 ISOLATION VALVE.

REPORT DATE 2/26/88 C-2588
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12035X
NASA FMEA #: 05-6KA-2224-2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12035
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 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 (MULTIPLE FAILURES) WAS RAISED DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THIS ISSUE REMAINS OPEN.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12036X
NASA FMEA #: 05-6KA-2257-1

SUBSYSTEM: ARCS
MDAC ID: 12036
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 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 (MULTIPLE FAILURES) WAS RAISED DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THIS ISSUE REMAINS OPEN.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12037X
NASA FMEA #: 05-6KA-2257-2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12037
ITEM: DIODE

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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| ICA        | [ 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:
THIS FAILURE CAUSES THE INABILITY TO OPEN THE VALVE. REDUNDANCY PROVIDED. LOSS OF ALL REDUNDANCY CAUSES LOSS OF MISSION OPERATIONS.

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

REPORT DATE 2/26/88 C-2591
APPENDIX C  
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88  
ASSESSMENT ID: ARCS-12038X  
NASA FMEA #: 05-6KA-2257A-1  
NASA DATA:  
BASELINE [ ]  
NEW [ X ]  
SUBSYSTEM: ARCS  
MDAC ID: 12038  
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:  
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 (MULTIPLE FAILURES) WAS RAISED DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THIS ISSUE REMAINS OPEN.

REPORT DATE 2/26/88  
C-2592
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12039X
NASA FMEA #: 05-6KA-2257A-2

NASA DATA:
BASELINE [  ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12039
ITEM: DIODE

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-2593
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12040X
NASA FMEA #: 05-6KA-2257D-1
SUBSYSTEM: ARCS
MDAC ID: 12040
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-2594
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12041X
NASA FMEA #: 05-6KA-2257D-2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12041
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.
ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12042X
NASA FMEA #: 05-6KA-2257E-1
SUBSYSTEM: ARCS
MDAC ID: 12042
ITEM: DIODE
LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

[ / ] [ ] [ ] [ ] [ ]

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
LOSE GPC COMMAND TO CLOSE THE VALVE 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.
APPENDIX C
ASSESSMENT WORKSHEET

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

**ASSESSMENT ID:** ARCS-12043X

**NASA FMEA #:** 05-6KA-2257E-2

**SUBSYSTEM:** ARCS

**MDAC ID:** 12043

**ITEM:** DIODE

**LEAD ANALYST:** D. HARTMAN

**ASSESSMENT:**

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- NASA [3/3]
- IOA [3/3]

**COMPARE**

- [ / ]

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

- [ / ]

**REMARKS:**

- NO DIFFERENCES.

---

* CIL RETENTION RATIONALE: (If applicable)

- ADEQUATE [ ]
- INADEQUATE [ ]

---

**REPORT DATE** 2/26/88

C-2597
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12044X
NASA FMEA #: 05-6KA-2257C-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12044
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)

(ADD/DELETE)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
IOA AGREES WITH NASA FMEA.

REPORT DATE 2/26/88 C-2598
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12045X
NASA FMEA #: 05-6KA-2257C-2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12045
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-2599
APPENDIX C  
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88  
ASSESSMENT ID: ARCS-12046X  
NASA FMEA #: 05-6KA-2257B-1  

NASA DATA:  
BASELINE [ ]  
NEW [ X ]  

SUBSYSTEM: ARCS  
MDAC ID: 12046  
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: ARCS-12047X
NASA FMEA #: &a1800H05-6KA-2257B-2
SUBSYSTEM: ARCS
MDAC ID: 12047
ITEM: DIODE
LEAD ANALYST: D. HARTMAN
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| IOA [ 3 /3 ] | [ ] | [ ] | [ ] | [ ] |
| COMPARE [ /N ] | [ N ] | [ N ] | [ 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-2601
**APPENDIX C**

**ASSESSMENT WORKSHEET**

**ASSESSMENT DATE:** 1/29/88  
**ASSESSMENT ID:** ARCS-12048X  
**NASA FMEA #:** 05-6KA-2257B-1  

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**SUBSYSTEM:** ARCS  
**MDAC ID:** 12048  
**ITEM:** DIODE  

**LEAD ANALYST:** D. HARTMAN  

**ASSESSMENT:**

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

**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-2602
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12049X
NASA FMEA #: 05-6KA-2257B-2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12049
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:
IOA AGREES WITH NASA FMEA.

REPORT DATE 2/26/88 C-2603
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88  
ASSESSMENT ID: ARCS-12050X  
NASA FMEA #: 05-6KA-2257C-1

NASA DATA:
BASELINE [ ]  
NEW [ X ]

SUBSYSTEM: ARCS  
MDAC ID: 12050  
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.

REPORT DATE 2/26/88  
C-2604
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12051X
NASA FMEA #: 05-6KA-2257C-2

SUBSYSTEM: ARCS
MDAC ID: 12051
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-2605
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12052X
NASA FMEA #: 05-6KA-2258-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12052
ITEM: DIODE

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:
LOSE CAPABILITY TO OPEN THE VALVE. THIS PREVENTS VERNIER OPERATION THUS LOSS OF MISSION OBJECTIVES

ISSUE IS TIED TO THE IOA HARDWARE CRITICALITY FOR THE FAILED CLOSED MANIFOLD 5 ISOLATION VALVE.

REPORT DATE 2/26/88 C-2606
**APPENDIX C**  
**ASSESSMENT WORKSHEET**

**ASSESSMENT DATE:** 1/29/88  
**ASSESSMENT ID:** ARCS-12053X  
**NASA FMEA #:** 05-6KA-2258-2  

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

**SUBSYSTEM:** ARCS  
**MDAC ID:** 12053  
**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: ARCS-12054X
NASA FMEA #: 05-6KA-2279-1

SUBSYSTEM: ARCS
MDAC ID: 12054
ITEM: DIODE

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

CRITICALITY REDUNDANCY SCREENS CIL
FLIGHT HDW/FUNC A B C ITEM

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 STATUS. REDUNDANCY PROVIDED. LOSS OF ALL REDUNDANCY MAY LEAD TO FALSELY FAILING THE VALVE CLOSED, POSSIBLY EFFECTING MISSION OPERATIONS.

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

REPORT DATE 2/26/88 C-2608
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12055X
NASA FMEA #: 05-6KA-2279-2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12055
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: ARCS-12056X
NASA FMEA #: 05-6KA-2279-1

SUBSYSTEM: ARCS
MDAC ID: 12056
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)

REMARKS:

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.

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

REPORT DATE 2/26/88
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12057X
NASA FMEA #: 05-6KA-2279-2

SUBSYSTEM: ARCS
MDAC ID: 12057
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-2611
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12058X
NASA FMEA #: 05-6KA-2257D-1

NASA DATA:
BASELINE [   ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12058
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: ARCS-12059X
NASA FMEA #: 05-6KA-2257D-2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12059
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:** ARCS-12060X  
**NASA FMEA #:** 05-6KA-2257E-1

### NASA DATA:
- **BASELINE** [ ]
- **NEW** [ X ]

**SUBSYSTEM:** ARCS  
**MDAC ID:** 12060  
**ITEM:** DIODE

**LEAD ANALYST:** D. HARTMAN

**ASSESSMENT:**

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- **IOA**  
  - [ 3 /1R ]  
  - [ P ]  
  - [ NA ]  
  - [ P ]

**COMPARE**  
- [ /N ]  
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**RECOMMENDATIONS:** (If different from NASA)
- [ / ]  
- [ ]  
- [ ]  
- [ ]

(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

**ADEQUATE** [ ]

**INADEQUATE** [ ]

**REMKS:**
- LOSE GPC COMMAND TO CLOSE THE VALVE 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.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12061X
NASA FMEA #: 05-6KA-2257E-2
SUBSYSTEM: ARCS
MDAC ID: 12061
ITEM: DIODE
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
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12062X
NASA FMEA #: 05-6KA-2257F-1
NASA ID: ARCS-12062
MDAC ID: 12062
ITEM: DIODE
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.

REPORT DATE 2/26/88: C-2616
### APPENDIX C
#### ASSESSMENT WORKSHEET

**ASSESSMENT DATE:** 1/29/88  
**ASSESSMENT ID:** ARCS-12063X  
**NASA FMEA #:** 05-6KA-2257F-2

**SUBSYSTEM:** ARCS  
**MDAC ID:** 12063  
**ITEM:** DIODE  
**LEAD ANALYST:** D. HARTMAN

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

**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 (MULTIPLE FAILURES) WAS RAISED DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THIS ISSUE REMAINS OPEN.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12064X
NASA FMEA #: 05-6KA-2257G-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12064
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 GPC COMMAND TO CLOSE THE VALVE 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.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12065X
NASA FMEA #: 05-6KA-2257G-2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12065
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-2619
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12066X
NASA FMEA #: 05-6KA-2257H-1

SUBSYSTEM: ARCS
MDAC ID: 12066
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-2620
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12067X
NASA FMEA #: 05-6KA-2257H-2
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12067
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-2621
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12068X
NASA FMEA #: NONE

SUBSYSTEM: ARCS
MDAC ID: 12068
ITEM: DIODE
LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)
[ 3 /1R ] [ P ] [ NA] [ P ]

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

REMARKS:
ONE DIODE FAILING OPEN HAS NO EFFECT. SECOND DIODE FAILING OPEN (THE REDUNDANCY) CAUSES INABILITY TO CLOSE THE VALVE TO ISOLATE A THRUSTER LEAK.

SUBSYSTEM MANAGER STATED THAT THE DIODE 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: ARCS-12069X
NASA FMEA #: NONE
SUBSYSTEM: ARCS
MDAC ID: 12069
ITEM: DIODE
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:
DIODE FAILING SHORT HAS NO EFFECT.

SUBSYSTEM MANAGER STATED THAT THE DIODE WAS PART OF THE MANIFOLD 5 ISOLATION VALVE ASSEMBLY. FOR COMPLETENESS, IOA RECOMMENDS THIS FAILURE BE INCORPORATED INTO A FMEA.

REPORT DATE 2/26/88  C-2623
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12070X
NASA FMEA #: NONE

SUBSYSTEM: ARCS
MDAC ID: 12070
ITEM: DIODE
LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)
[3/1R] [P] [NA] [P] [ ]

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

REMARKS:
ONE DIODE FAILING OPEN HAS NO EFFECT. SECOND DIODE FAILING OPEN (THE REDUNDANCY) CAUSES INABILITY TO CLOSE THE VALVE TO ISOLATE A THRUSTER LEAK.

SUBSYSTEM MANAGER STATED THAT THE DIODE 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: ARCS-12071X
NASA FMEA #: NONE
SUBSYSTEM: ARCS
MDAC ID: 12071
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:
DIODE FAILING SHORT HAS NO EFFECT.

SUBSYSTEM MANAGER STATED THAT THE DIODE 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: ARCS-12072X
NASA FMEA #: 05-6KA-2280-1

SUBSYSTEM: ARCS
MDAC ID: 12072
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:
LOSE CAPABILITY TO OPEN THE VALVE. THIS PREVENTS VERNIER OPERATION THUS LOSS OF MISSION OBJECTIVES

ISSUE IS TIED TO THE IOA HARDWARE CRITICALITY FOR THE FAILED CLOSED MANIFOLD 5 ISOLATION VALVE.

REPORT DATE 2/26/88 C-2626
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12073X
NASA FMEA #: 05-6KA-2280-2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12073
ITEM: CIRCUIT BREAKER

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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| IOA  | [ 3 /3 ]   | [ ]   | [ ]   | [ ]   |         |
| 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 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 (MULTIPLE FAILURES) WAS RAISED DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THIS ISSUE REMAINS OPEN.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12074X
NASA FMEA #: NONE
NASA DATA:
BASELINE [ ]
NEW [ ]

SUBSYSTEM: ARCS
MDAC ID: 12074
ITEM: SWITCH, SOLENOID TALKBACK
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 FAILED MICROSWITCH CAUSES LOSS OF ACCURATE INDICATION OF THE VALVE POSITION. THIS MAY LEAD TO FALSELY FAILING THE VALVE CLOSED, POSSIBLY EFFECTING MISSION OPERATIONS.

SUBSYSTEM MANAGER STATED THAT THE MICROSWITCH WAS PART OF THE MANIFOLD 5 ISOLATION VALVE ASSEMBLY. FOR COMPLETENESS, IOA RECOMMENDS THIS FAILURE BE INCORPORATED INTO A FMEA.

REPORT DATE 2/26/88 C-2628
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12075X
NASA FMEA #: NONE
NASA FMEA #: ARCS-12075X
NASA FMEA #: NONE
SUBSYSTEM: ARCS
MDAC ID: 12075
ITEM: SWITCH, SOLENOID 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 FAILED MICROSWITCH CAUSES LOSS OF ACCURATE INDICATION OF THE VALVE POSITION. THIS MAY LEAD TO FALSELY FAILING THE VALVE CLOSED, POSSIBLY EFFECTING MISSION OPERATIONS.

SUBSYSTEM MANAGER STATED THAT 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: ARCS-12076X
NASA FMEA #: 05-6KA-2026-1

ASSESSMENT ID: ARCS-12076X
NASA FMEA #: 05-6KA-2026-1

SUBSYSTEM: ARCS
MDAC ID: 12076
ITEM: L/R 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-2630
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12077X
NASA FMEA #: 05-6KA-2026-2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12077
ITEM: L/R HE OX & FU ISOL VLV A OR B SWITCH

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

CRITICALITY FLIGHT HDW/FUNC  REDUNDANCY SCREENS  CIL ITEM

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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-2631
ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12078X
NASA FMEA #: 05-6KA-2026-2

SUBSYSTEM: ARCS
MDAC ID: 12078
ITEM: L/R 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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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12079X
NASA FMEA #: 05-6KA-2026-2

SUBSYSTEM: ARCS
MDAC ID: 12079
ITEM: L/R HE OX & FU ISOL VLV A OR B SWITCH
LEAD ANALYST: D. HARTMAN

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:
IOA AGREES WITH NASA FMEA.

REPORT DATE 2/26/88 C-2633
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12080X
NASA FMEA #: 05-6KA-2026-2

SUBSYSTEM: ARCS
MDAC ID: 12080
ITEM: L/R 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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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-2634
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12081X
NASA FMEA #: 05-6KA-2028-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12081
ITEM: L/R 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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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12082X
NASA FMEA #: 05-6KA-2028-2
SUBSYSTEM: ARCS
MDAC ID: 12082
ITEM: L/R 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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* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
SWITCH FAILED SHORT ACROSS OPEN CONTACTS CAUSES INABILITY TO CLOSE THE VALVE. THIS PREVENTS CROSSFEED CAPABILITY THUS LOSS OF MISSION. INABILITY TO CROSSFEED DURING AN RTLS/TAL ABORT MAY CAUSE INCOMPLETE OMS ABORT DUMP.

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

REPORT DATE 2/26/88 C-2636
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12083X
NASA FMEA #: 05-6KA-2028-2

SUBSYSTEM: ARCS
MDAC ID: 12083
ITEM: L/R 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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* CIL RETENTION RATIONALE: (If applicable)
ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
SWITCH FAILED SHORT ACROSS OPEN CONTACTS CAUSES INABILITY TO CLOSE THE VALVE. THIS PREVENTS CROSSFEED CAPABILITY THUS LOSS OF MISSION. INABILITY TO CROSSFEED DURING AN RTLS/TAL ABORT MAY CAUSE INCOMPLETE OMS ABORT DUMP.

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

REPORT DATE 2/26/88 C-2637
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12084X
NASA FMEA #: 05-6KA-2028-2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12084
ITEM: L/R OX & FU TK ISOL VLV 1/2 SWITCH

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:
SWITCH FAILED SHORT ACROSS OPEN CONTACTS CAUSES INABILITY TO CLOSE THE VALVE. THIS PREVENTS CROSSFEED CAPABILITY THUS LOSS OF MISSION. INABILITY TO CROSSFEED DURING AN RTLS/TAL ABORT MAY CAUSE INCOMPLETE OMS ABORT DUMP.

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

REPORT DATE 2/26/88 C-2638
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:
NO DIFFERENCES.

REPORT DATE 2/26/88
C-2639
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
NASA FMEA #: 05-6KA-2253-1
NASA DATA:
BASELINE [ ]
NEW [ X ]

ASSESSMENT ID: ARCS-12086X
SUBSYSTEM: ARCS
MDAC ID: 12086
ITEM: DIODE - LIMIT SWITCH (OPEN CIRCUIT)
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 (MULTIPLE FAILURES) WAS RAISED DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THIS ISSUE REMAINS OPEN.

REPORT DATE 2/26/88   C-2640
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12087X
NASA FMEA #: 05-6KA-2253-2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12087
ITEM: DIODE - LIMIT SWITCH (OPEN CIRCUIT)

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: ARCS-12088X
NASA FMEA #: 05-6KA-2253-1
SUBSYSTEM: ARCS
MDAC ID: 12088
ITEM: DIODE - LIMIT SWITCH (CLOSED CIRCUIT)
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 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 (MULTIPLE FAILURES) WAS RAISED DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THIS ISSUE REMAINS OPEN.

REPORT DATE 2/26/88 C-2642
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12089X
NASA FMEA #: 05-6KA-2253-2

SUBSYSTEM: ARCS
ITEM: DIODE - LIMIT SWITCH (CLOSED CIRCUIT)
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-2643
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12090X
NASA FMEA #: 05-6KA-2253A-1

SUBSYSTEM: ARCS
MDAC ID: 12090
ITEM: DIODE - GPC CLOSE

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 GPC COMMAND TO CLOSE THE VALVE. REDUNDANCY PROVIDED WITH MANUAL COMMAND. LOSS OF ALL REDUNDANCY PREVENTS ISOLATION OF 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-2644
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88  
ASSESSMENT ID: ARCS-12091X  
NASA FMEA #: 05-6KA-2253A-2

NASA DATA: 
BASELINE [ ]  
NEW [ X ]

SUBSYSTEM: ARCS  
MDAC ID: 12091  
ITEM: DIODE - GPC CLOSE

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-2645
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12092X
NASA FMEA #: 05-6KA-2253B-1

NASA DATA:
BASELINE [ ]
NEW [X ]

SUBSYSTEM: ARCS
MDAC ID: 12092
ITEM: DIODE - GPC OPEN

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-2646
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12093X
NASA FMEA #: 05-6KA-2253B-2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12093
ITEM: DIODE - GPC OPEN

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-2647
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12094X
NASA FMEA #: 05-6KA-2253C-1

SUBSYSTEM: ARCS
MDAC ID: 12094
ITEM: DIODE - MANUAL OPEN

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

(ADD/DELETE)

REMARKS:

NO DIFFERENCES.

REPORT DATE 2/26/88 C-2648
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12095X
NASA FMEA #: 05-6KA-2253C-2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12095
ITEM: DIODE - MANUAL OPEN

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: ARCS-12096X
NASA FMEA #: 05-6KA-2253D-1
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12096
ITEM: DIODE - MANUAL CLOSE

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-2650
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12097X
NASA FMEA #: 05-6KA-2253D-2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12097
ITEM: DIODE - MANUAL CLOSE

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-2651
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12098X
NASA FMEA #: 05-6KA-2253E-1
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12098
ITEM: DIODE - MANUAL OPEN/CLOSE INHIBIT

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

ADHERE [ ]
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 (MULTIPLE FAILURES) WAS RAISED DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THIS ISSUE REMAINS OPEN.

REPORT DATE 2/26/88 C-2652
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12099X
NASA FMEA #: 05-6KA-2253E-2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12099
ITEM: DIODE - MANUAL OPEN/CLOSE INHIBIT

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. THIS FAILURE CAUSES INABILITY TO CLOSE THE VALVE THUS PREVENTING CROSSFEED OPERATIONS. INABILITY TO CROSSFEED DURING RTLS/TAL ABORT MAY CAUSE INCOMPLETE OMS ABORT DUMP.

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

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12100X
NASA FMEA #: 05-6KA-2253F-1
SUBSYSTEM: ARCS
MDAC ID: 12100
ITEM: DIODE - MANUAL CLOSE/OPEN INHIBIT
LEAD ANALYST: D. HARTMAN

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12100
ITEM: DIODE - MANUAL CLOSE/OPEN INHIBIT
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 (MULTIPLE FAILURES) WAS RAISED DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THIS ISSUE REMAINS OPEN.

REPORT DATE 2/26/88 C-2654
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12101X
NASA FMEA #: 05-6KA-2253F-2

SUBSYSTEM: ARCS
MDAC ID: 12101
ITEM: DIODE - MANUAL CLOSE/OPEN INHIBIT

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. 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 (MULTIPLE FAILURES) WAS RAISED DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THIS ISSUE REMAINS OPEN.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12102X
NASA FMEA #: 05-6KA-2029-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12102
ITEM: L/R OX & FU TK ISOL VLV 3/4/5 A OR B SWITCH

LEAD ANALYST: D. HARTMAN

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* CIL RETENTION RATIONALE: (If applicable)

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-2656
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12103X
NASA FMEA #: 05-6KA-2029-2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12103
ITEM: L/R OX & FU TK ISOL VLV 3/4/5 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:
SWITCH FAILED SHORT ACROSS OPEN CONTACTS CAUSES INABILITY TO CLOSE THE VALVE. THIS PREVENTS CROSSFEED CAPABILITY THUS LOSS OF MISSION. INABILITY TO CROSSFEED DURING AN RTLS/TAL ABORT MAY CAUSE INCOMPLETE OMS ABORT DUMP.

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

REPORT DATE 2/26/88 C-2657
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12104X
NASA FMEA #: 05-6KA-2029-2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12104
ITEM: L/R OX & FU TK ISOL VLV 3/4/5 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:
SWITCH FAILED SHORT ACROSS OPEN CONTACTS CAUSES INABILITY TO CLOSE THE VALVE. THIS PREVENTS CROSSFEED CAPABILITY THUS LOSS OF MISSION. INABILITY TO CROSSFEED DURING AN RTLS/TAL ABORT MAY CAUSE INCOMPLETE OMS ABORT DUMP.

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

REPORT DATE 2/26/88 C-2658
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12105X
NASA FMEA #: 05-6KA-2029-2

SUBSYSTEM: ARCS
MDAC ID: 12105
ITEM: L/R OX & FU TK ISOL VLV 3/4/5 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:
SWITCH FAILED SHORT ACROSS OPEN CONTACTS CAUSES INABILITY TO CLOSE THE VALVE. THIS PREVENTS CROSSFEED CAPABILITY THUS LOSS OF MISSION. INABILITY TO CROSSFEED DURING AN RTLS/TAL ABORT MAY CAUSE INCOMPLETE OMS ABORT DUMP.

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

REPORT DATE 2/26/88 C-2659
**APPENDIX C**

**ASSESSMENT WORKSHEET**

**ASSESSMENT DATE:** 1/29/88  
**ASSESSMENT ID:** ARCS-12106X  
**NASA FMEA #:** 05-6KA-2029-1  
**NASA DATA:**  
  - BASELINE [ ]  
  - NEW [ X ]

**SUBSYSTEM:** ARCS  
**MDAC ID:** 12106  
**ITEM:** L/R OX & FU TK ISOL VLV 3/4/5 A OR B SWITCH  
**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: ARCS-12107X
NASA FMEA #: 05-6KA-2254-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12107
ITEM: DIODE - LIMIT SWITCH (OPEN CIRCUIT)

LEAD ANALYST: D. HARTMAN

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

COMPARE [ N /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 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 (MULTIPLE FAILURES) WAS RAISED DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THIS ISSUE REMAINS OPEN.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12108X
NASA FMEA #: 05-6KA-2254-2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12108
ITEM: DIODE - LIMIT SWITCH (OPEN CIRCUIT)

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: ARCS-12109X
NASA FMEA #: 05-6KA-2254-1
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12109
ITEM: DIODE - LIMIT SWITCH (CLOSE CIRCUIT)

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 (MULTIPLE FAILURES) WAS RAISED DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THIS ISSUE REMAINS OPEN.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12110X
NASA FMEA #: 05-6KA-2254-2
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12110
ITEM: DIODE - LIMIT SWITCH (CLOSE CIRCUIT)

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-2664
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12111X
NASA FMEA #: 05-6KA-2254A-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12111
ITEM: DIODE - GPC CLOSE

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
LOSE GPC COMMAND TO CLOSE THE VALVE. REDUNDANCY PROVIDED WITH
MANUAL COMMAND. LOSS OF ALL REDUNDANCY PREVENTS ISOLATION OF 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-2665
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12112X
NASA FMEA #: 05-6KA-2254A-2

SUBSYSTEM: ARCS
MDAC ID: 12112
ITEM: DIODE - GPC CLOSE

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: ARCS-12113X  
NASA FMEA #: 05-6KA-2254B-1

NASA DATA: 
BASELINE [ ]  
NEW [ X ]

SUBSYSTEM: ARCS  
MDAC ID: 12113  
ITEM: DIODE - GPC OPEN

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-2667
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12114X
NASA FMEA #: 05-6KA-2254B-2
SUBSYSTEM: ARCS
MDAC ID: 12114
ITEM: DIODE - GPC OPEN
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.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12115X
NASA FMEA #: 05-6KA-2254C-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12115
ITEM: DIODE - MANUAL OPEN

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

CRITICALITY REDUNDANCY SCREENS CIL ITEM
FLIGHT HDW/FUNC A B C ITEM

NASA [ 3 /1R ] [ P ] [ P ] [ P ] [ ] *
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:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-2669
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12116X
NASA FMEA #: 05-6KA-2254C-2

SUBSYSTEM: ARCS
MDAC ID: 12116
ITEM: DIODE - MANUAL OPEN

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-2670
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12117X
NASA FMEA #: 05-6KA-2254D-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12117
ITEM: DIODE - MANUAL CLOSE

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: ARCS-12118X
NASA FMEA #: 05-6KA-2254D-2

SUBSYSTEM: ARCS
MDAC ID: 12118
ITEM: DIODE - MANUAL CLOSE

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-2672
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12119X
NASA FMEA #: 05-6KA-2254E-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12119
ITEM: DIODE - MANUAL OPEN/CLOSE INHIBIT

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. 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 (MULTIPLE FAILURES) WAS RAISED DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THIS ISSUE REMAINS OPEN.
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12120X
NASA FMEA #: 05-6KA-2254E-2

SUBSYSTEM: ARCS
MDAC ID: 12120
ITEM: DIODE - MANUAL OPEN/CLOSE INHIBIT

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

[ 2/2 ] [ ] [ ] [ ] [ X ]

(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ] INADEQUATE [ ]

REMARKS:
NASA FMEA CONSIDERS MULTIPLE FAILURES. THIS FAILURE CAUSES THE INABILITY TO CLOSE THE VALVE THUS PREVENTING CROSSFEED OPERATIONS. INABILITY TO CROSSFEED DURING AN RTLS/TAL ABORT MAY CAUSE AN INCOMPLETE OMS ABORT DUMP.

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

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12121X
NASA FMEA #: 05-6KA-2254F-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12121
ITEM: DIODE - MANUAL CLOSE/OPEN INHIBIT

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

CRITICALITY REDUNDANCY SCREENS CIL
FLIGHT HDW/FUNC A B C ITEM
NASA [ 3 /1R ] [ P ] [ F ] [ P ] [ X ] *
IOA [ 3 /3 ] [ ] [ ] [ ] [ ]
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 (MULTIPLE FAILURES) WAS RAISED DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THIS ISSUE REMAINS OPEN.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88  
ASSESSMENT ID: ARCS-12122X  
NASA FMEA #: 05-6KA-2254F-2  
NASA DATA:  
BASELINE [ ]  
NEW [ X ]

SUBSYSTEM: ARCS  
MDAC ID: 12122  
ITEM: DIODE - MANUAL CLOSE/OPEN INHIBIT  
LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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  (ADD/DELETE)

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

REMARKS:
NASA FMEA CONSIDERS MULTIPLE FAILURES. THIS FAILURE CAUSES THE VALVE TO CLOSE. REDUNDANCY PROVIDED. LOSS OF ALL REDUNDANCY CAUSES INABILITY TO EXPEL PROPELLANTS TO MEET LANDING WEIGHT CONSTRAINTS.

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

REPORT DATE 2/26/88  
C-2676
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12123X
NASA FMEA #: 05-6KA-2268-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12123
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 WITH SUBSYSTEM MANAGER ON 1/20/88.

REPORT DATE 2/26/88 C-2677
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12124X
NASA FMEA #: 05-6KA-2268-2
SUBSYSTEM: ARCS
MDAC ID: 12124
ITEM: DIODE
LEAD ANALYST: D. HARTMAN

NASA DATA:
BASELINE [ ]
NEW [ X ]

CRITICALITY
FLIGHT
HDW/FUNC
NASA [ 3 /1R ] [ P ] [ P ] [ P ] [ ] *
IOA [ 3 /3 ] [ ] [ ] [ ] [ X ]
COMPARE [ /N ] [ 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 (MULTIPLE FAILURES) WAS RAISED DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THIS ISSUE REMAINS OPEN.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12125X
NASA FMEA #: 05-6KA-2039-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12125
ITEM:
L/R OX & FU CROSSFEED VLV 1/2 SWITCH 32, 34

LEAD ANALYST: D. HARTMAN

SUBSYSTEM: ARCS
MDAC ID: 12125
ITEM:
L/R OX & FU CROSSFEED VLV 1/2 SWITCH 32, 34

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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IOA [ 3 /1R ]
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[ NA ]
[ P ]
[ ]

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

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

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

REMARKS:
NO DIFFERENCES.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88  
ASSESSMENT ID: ARCS-12126X  
NASA FMEA #: 05-6KA-2039-2  

NASA DATA:  
BASELINE [ ]  
NEW [ X ]

SUBSYSTEM: ARCS  
MDAC ID: 12126  
ITEM: L/R OX & FU CROSSFEED VLV 1/2 SWITCH 32, 34  

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

[ 2 /2 ] [ ] [ ] [ ] [ X ]  
(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:

NASA FMEA CONTAINS MULTIPLE FAILURES. THIS FAILURE WILL CLOSE  
THE VALVE AND CAUSE INABILITY TO RE-OPEN IT. THIS PREVENTS  
CROSSFEED CAPABILITY THUS LOSS OF MISSION. INABILITY TO  
CROSSFEED MAY CAUSE INCOMPLETE OMS ABORT DUMP DURING RTLS/TAL -  
1/1 ABORT.

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

REPORT DATE 2/26/88  C-2680
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12127X
NASA FMEA #: 05-6KA-2039-2
SUBSYSTEM: ARCS
MDAC ID: 12127
ITEM: L/R OX & FU CROSSFEED VLV 1/2 SWITCH 32, 34
LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

[ 2 /2 ] [ ] [ ] [ ] [ X ] *(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NASA FMEA CONTAINS MULTIPLE FAILURES. THIS FAILURE WILL CLOSE THE VALVE AND CAUSE INABILITY TO RE-OPEN IT. THIS PREVENTS CROSSFEED CAPABILITY THUS LOSS OF MISSION. INABILITY TO CROSSFEED MAY CAUSE INCOMPLETE OMS ABORT DUMP DURING RTLS/TAL - 1/1 ABORT.

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

REPORT DATE 2/26/88 C-2681
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12128X
NASA FMEA #: 05-6KA-2039-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12128
ITEM: L/R OX & FU CROSSFEED VLV 1/2 SWITCH 32, 34

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-2682
**APPENDIX C**

**ASSESSMENT WORKSHEET**

**ASSESSMENT DATE:** 1/29/88  
**NASA DATA:**  
**ASSESSMENT ID:** ARCS-12129X  
**NASA FMEA #:** 05-6KA-2039-1  
**SUBSYSTEM:** ARCS  
**MDAC ID:** 12129  
**ITEM:** L/R OX & FU CROSSFEED VLV 1/2 SWITCH 32, 34  
**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-2683**
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12130X
NASA FMEA #: 05-6KA-2261-1

NASA DATA: BASELINE [ ] NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12130
ITEM: DIODE - LIMIT SWITCH (OPEN CIRCUIT)

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 (MULTIPLE FAILURES) WAS RAISED DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THIS ISSUE REMAINS OPEN.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12131X
NASA FMEA #: 05-6KA-2261-2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12131
ITEM: DIODE - LIMIT SWITCH (OPEN CIRCUIT)

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
ASSESSMENT ID: ARCS-12132X
NASA FMEA #: 05-6KA-2261-1

SUBSYSTEM: ARCS
MDAC ID: 12132
ITEM: DIODE - LIMIT SWITCH (CLOSED CIRCUIT)

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. 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 (MULTIPLE FAILURES) WAS RAISED DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THIS ISSUE REMAINS OPEN.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12133X
NASA FMEA #: 05-6KA-2261-2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12133
ITEM: DIODE - LIMIT SWITCH (CLOSED CIRCUIT)

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-2687
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12134X
NASA FMEA #: 05-6KA-2261A-1
SUBSYSTEM: ARCS
MDAC ID: 12134
ITEM: DIODE - GPC CLOSE
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-2688
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12135X
NASA FMEA #: 05-6KA-2261A-2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12135
ITEM: DIODE - GPC CLOSE

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: ARCS-12136X
NASA FMEA #: 05-6KA-2261B-1
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12136
ITEM: DIODE - GPC OPEN

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-2690
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12137X
NASA FMEA #: 05-6KA-2261B-2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12137
ITEM: DIODE - GPC OPEN

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-2691
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12138X
NASA FMEA #: 05-6KA-2261C-1
NASA DATA: BASELINE [ ]
[ ] NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12138
ITEM: DIODE - MANUAL OPEN

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-2692
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12139X
NASA FMEA #: 05-6KA-2261C-2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12139
ITEM: DIODE - MANUAL OPEN

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-2693
**APPENDIX C**  
**ASSESSMENT WORKSHEET**

**ASSESSMENT DATE:** 1/29/88  
**ASSESSMENT ID:** ARCS-12140X  
**NASA FMEA #:** 05-6KA-2261D-1  

**SUBSYSTEM:** ARCS  
**MDAC ID:** 12140  
**ITEM:** DIODE - MANUAL CLOSE  

**LEAD ANALYST:** D. HARTMAN  

**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:**

NO DIFFERENCES.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12141X
NASA FMEA #: 05-6KA-2261D-2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12141
ITEM: DIODE - MANUAL CLOSE

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-2695
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12142X
NASA FMEA #: 05-6KA-2261E-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12142
ITEM: DIODE - MANUAL OPEN/CLOSE INHIBIT

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

CRITICALITY REDUNDANCY SCREENS CIL
FLIGHT HDW/FUNC A B C ITEM

NASA [ 3 /1R ] [ P ] [ F ] [ P ] [ X ] *
IOA [ 3 /3 ] [ ] [ ] [ ] [ ]
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 (MULTIPLE FAILURES) WAS RAISED DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THIS ISSUE REMAINS OPEN.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12143X
NASA FMEA #: 05-6KA-2261E-2

SUBSYSTEM: ARCS
MDAC ID: 12143
ITEM: DIODE - MANUAL OPEN/CLOSE INHIBIT

LEAD ANALYST: HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NASA FMEA CONSIDERS MULTIPLE FAILURES. THIS FAILURE CAUSES THE INABILITY 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 (MULTIPLE FAILURES) WAS RAISED DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THIS ISSUE REMAINS OPEN.
APPENDIX C
ASSESSMENT ORKSHET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12144X
NASA FMEA #: 05-6KA-2261F-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12144
ITEM: DIODE - MANUAL CLOSE/OPEN INHIBIT

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. 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 (MULTIPLE FAILURES) WAS RAISED DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THIS ISSUE REMAINS OPEN.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12145X
NASA FMEA #: 05-6KA-2261F-2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12145
ITEM: DIODE - MANUAL CLOSE/OPEN INHIBIT

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

CRITICALITY
FLIGHT
HDW/FUNC

REDUNDANCY SCREENS
A    B    C

CIL
ITEM

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

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

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 (MULTIPLE FAILURES) WAS RAISED DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THIS ISSUE REMAINS OPEN.

REPORT DATE 2/26/88 C-2699
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12146X
NASA FMEA #: 05-6KA-2039-1

SUBSYSTEM: ARCS
MDAC ID: 12146
ITEM: L/R OX & FU CROSSFEED VLV 3/4/5 SWITCH 33, 35

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-2700
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12147X
NASA FMEA #: 05-6KA-2039-2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12147
ITEM: L/R OX & FU CROSSFEED VLV 3/4/5 SWITCH 33, 35

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 CONTAINS MULTIPLE FAILURES. THIS FAILURE WILL CLOSE THE VALVE AND CAUSE INABILITY TO RE-OPEN IT. THIS PREVENTS CROSSFEED CAPABILITY THUS LOSS OF MISSION. INABILITY TO CROSSFEED MAY CAUSE INCOMPLETE OMS ABORT DUMP DURING RTLS/TAL - 1/1 ABORT.

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

REPORT DATE 2/26/88 C-2701
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12148X
NASA FMEA #: 05-6KA-2039-2

SUBSYSTEM: ARCS
MDAC ID: 12148
ITEM: L/R OX & FU CROSSFEED VLV 3/4/5 SWITCH 33, 35

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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* CIL RETENTION RATIONALE: (If applicable)

REMARKS:
NASA FMEA CONTAINS MULTIPLE FAILURES. THIS FAILURE WILL CLOSE THE VALVE AND CAUSE INABILITY TO RE-OPEN IT. THIS PREVENTS CROSSFEED CAPABILITY THUS LOSS OF MISSION. INABILITY TO CROSSFEED MAY CAUSE INCOMPLETE OMS ABORT DUMP DURING RTLS/TAL - 1/1 ABORT.

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

REPORT DATE 2/26/88 C-2702
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12149X
NASA FMEA #: 05-6KA-2039-1

SUBSYSTEM: ARCS
MDAC ID: 12149
ITEM: L/R OX & FU CROSSFEED VLV 3/4/5 SWITCH 33, 35

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-2703
### APPENDIX C
#### ASSESSMENT WORKSHEET

**ASSESSMENT DATE:** 1/29/88  
**ASSESSMENT ID:** ARCS-12150X  
**NASA FMEA #:** 05-6KA-2039-1  
**SUBSYSTEM:** ARCS  
**MDAC ID:** 12150  
**ITEM:** L/R OX & FU CROSSFEED VLV 3/4/5 SWITCH 33, 35  
**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.

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**REPORT DATE 2/26/88**  
**C-2704**
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12151X
NASA FMEA #: 05-6KA-2261-1

SUBSYSTEM: ARCS
MDAC ID: 12151
ITEM: DIODE - LIMIT SWITCH (OPEN CIRCUIT)

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 (MULTIPLE FAILURES) WAS RAISED DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THIS ISSUE REMAINS OPEN.

REPORT DATE 2/26/88 C-2705
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88  
ASSESSMENT ID: ARCS-12152X  
NASA PMEA #: 05-6KA-2261-2  
NASA DATA:  
BASELINE [ ]  
NEW [ X ]  

SUBSYSTEM: ARCS  
MDAC ID: 12152  
ITEM: DIODE - LIMIT SWITCH (OPEN CIRCUIT)  

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:** ARCS-12153X  
**NASA FMEA #:** 05-6KA-2261-1

**SUBSYSTEM:** ARCS  
**MDAC ID:** 12153  
**ITEM:** DIODE - LIMIT SWITCH (CLOSED CIRCUIT)

**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:**  
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 (MULTIPLE FAILURES) WAS RAISED DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THIS ISSUE REMAINS OPEN.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12154X
NASA FMEA #: 05-6KA-2261-2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12154
ITEM: DIODE - LIMIT SWITCH (CLOSED CIRCUIT)

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-2708
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12155X
NASA FMEA #: 05-6KA-2261A-1

SUBSYSTEM: ARCS
MDAC ID: 12155
ITEM: DIODE - GPC CLOSE

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-2709
ASSESSMENT DATE: 1/29/88  
ASSESSMENT ID: ARCS-12156X  
NASA FMEA #: 05-6KA-2261A-2  
SUBSYSTEM: ARCS  
MDAC ID: 12156  
ITEM: DIODE - GPC CLOSE  
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-2710
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
NASA DATA:
BASELINE [ ]
NEW [ X ]

ASSESSMENT ID: ARCS-12157X
NASA FMEA #: 05-6KA-2261B-1

SUBSYSTEM: ARCS
MDAC ID: 12157
ITEM: DIODE - GPC OPEN

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-2711
ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12158X
NASA FMEA #: 05-6KA-2261B-2

SUBSYSTEM: ARCS
MDAC ID: 12158
ITEM: DIODE - GPC OPEN
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-2712
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12159X
NASA FMEA #: 05-6KA-2261C-1

SUBSYSTEM: ARCS
MDAC ID: 12159
ITEM: DIODE - MANUAL OPEN

LEAD ANALYST: D. HARTMAN

NASA DATA:
BASELINE [ ]
NEW [ x ]

SUBSYSTEM: ARCS
MDAC ID: 12159
ITEM: DIODE - MANUAL OPEN

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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| 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: ARCS-12160X
NASA FMEA #: 05-6KA-2261C-2

SUBSYSTEM: ARCS
MDAC ID: 12160
ITEM: DIODE - MANUAL OPEN

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-2714
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12161X
NASA FMEA #: 05-6KA-2261D-1

SUBSYSTEM: ARCS
MDAC ID: 12161
ITEM: DIODE - MANUAL CLOSE

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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(REMOTE)

* CIL RETENTION RATIONALE: (If applicable)

Adequate [ ]

Inadequate [ ]

REMARKS:

NO DIFFERENCES.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12162X
NASA FMEA #: 05-6KA-2261D-2

SUBSYSTEM: ARCS
MDAC ID: 12162
ITEM: DIODE - MANUAL CLOSE
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-2716
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12163X
NASA FMEA #: 05-6KA-2261E-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12163
ITEM: DIODE - MANUAL OPEN/CLOSE INHIBIT

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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NASA [ 3 /1R ] [ P ] [ F ] [ P ] [ X ] *
IOA [ 3 /3 ] [ ] [ ] [ ] [ ]
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 (MULTIPLE FAILURES) WAS RAISED DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THIS ISSUE REMAINS OPEN.

REPORT DATE 2/26/88
C-2717
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12164X
NASA FMEA #: 05-6KA-2261E-2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12164
ITEM: DIODE - MANUAL OPEN/CLOSE INHIBIT

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

CRITICALITY
FLIGHT
HDW/FUNC

REDUNDANCY SCREENS
A   B   C

CIL
ITEM

NASA [ 3 /IR ] [ P ] [ F ] [ P ] [ X ] *
IOA [ 3 /IR ] [ P ] [ F ] [ P ] [ X ]
COMPARE [ / ] [ ] [ ] [ ] [ ]

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:

NASA FMEA CONSIDERS MULTIPLE FAILURES. THIS FAILURE CAUSES THE INABILITY TO CLOSE THE VALVE TO ISOLATE A THUSTER LEAK.

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

ASSESSMENT DATE: 1/29/88  NASA DATA:
ASSESSMENT ID: ARCS-12165X  BASELINE [ ]
NASA FMEA #: 05-6KA-2261F-1  NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12165
ITEM: DIODE - MANUAL CLOSE/OPEN INHIBIT

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 /3 ] | [ ] | [ ] | [ ] | [ ] |

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 (MULTIPLE FAILURES) WAS RAISED DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THIS ISSUE REMAINS OPEN.

REPORT DATE 2/26/88 C-2719
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12166X
NASA FMEA #: 05-6KA-2261F-2
NASA DATA:
BASELINE [ ]
NEW [ X ]
SUBSYSTEM: ARCS
MDAC ID: 12166
ITEM: DIODE - MANUAL CLOSE/OPEN INHIBIT
LEAD ANALYST: D. HARTMAN

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IOA [ 3 /3 ] [ ] [ ] [ ] [ ]
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 (MULTIPLE FAILURES) WAS RAISED DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THIS ISSUE REMAINS OPEN.

REPORT DATE 2/26/88 C-2720
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12167X
NASA FMEA #: 05-6KA-2040-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12167
ITEM: MASTER RCS CROSSFEED SWITCH 36

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: ARCS-12168X
NASA FMEA #: 05-6KA-2040-2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12168
ITEM: MASTER RCS CROSSFEED SWITCH 36

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:
REPORT REFERENCES 26/88
C-2722
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12169X
NASA FMEA #: 05-6KA-2040-2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12169
ITEM: MASTER RCS CROSSFEED SWITCH 36

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-2723
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12170X
NASA FMEA #: 05-6KA-2040-2

SUBSYSTEM: ARCS
MDAC ID: 12170
ITEM: MASTER RCS CROSSFEED SWITCH 36

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-2724
APPENDIX C  
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88  
ASSESSMENT ID: ARCS-12171X  
NASA FMEA #: 05-6KA-2040-1

NASA DATA:  
BASELINE [ ]  
NEW [ x ]

SUBSYSTEM: ARCS  
MDAC ID: 12171  
ITEM: MASTER RCS CROSSFEED SWITCH 36

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-2725
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12172X
NASA FMEA #: 05-6KA-2030-1

NASA DATA:
BASELINE [ ]
NEW [ x ]

SUBSYSTEM: ARCS
MDAC ID: 12172
ITEM: MANIFOLD 1, L/R OX & FU ISOL VLV SWITCHES 22, 27

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-2726
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12173X
NASA FMEA #: 05-6KA-2030-2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12173
ITEM: MANIFOLD 1, L/R OX & FU ISOL VLV SWITCHES 22, 27

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-2727
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12174X
NASA FMEA #: 05-6KA-2030-2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12174
ITEM: MANIFOLD 1, L/R OX & FU ISOL VLV SWITCHES 22, 27

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-2728
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12175X
NASA FMEA #: 05-6XKA-2030-2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12175
ITEM: MANIFOLD 1, L/R OX & FU ISOL VLV SWITCHES 22, 27

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-2729
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12176X
NASA FMEA #: 05-6KA-2030-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12176
ITEM: MANIFOLD 1, L/R OX & FU ISOL VLV SWITCHES 22, 27

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: ARCS-12177X
NASA FMEA #: 05-6KA-2030-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12177
ITEM: MANIFOLD 2, L/R OX & FU ISOL VLV SWITCHES 23, 28

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-2731
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12178X
NASA FMEA #: 05-6KA-2030-2

SUBSYSTEM: ARCS
MDAC ID: 12178
ITEM: MANIFOLD 2, L/R OX & FU ISOL VLV SWITCHES 23, 28
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-2732
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12179X
NASA FMEA #: 05-6KA-2030-2

SUBSYSTEM: ARCS
MDAC ID: 12179
ITEM: MANIFOLD 2, L/R OX & FU ISOL VLV SWITCHES 23, 28

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-2733
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12180X
NASA FMEA #: 05-6KA-2030-2

NASA DATA:
BASELINE [   ]
NEW [   X   ]

SUBSYSTEM: ARCS
MDAC ID: 12180
ITEM: MANIFOLD 2, L/R OX & FU ISOL VLV SWITCHES 23, 28

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.

REPORT DATE 2/26/88 C-2734
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12181X
NASA FMEA #: 05-6KA-2030-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12181
ITEM: MANIFOLD 2, L/R OX & FU ISOL VLV SWITCHES 23, 28

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-2735
ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12182X
NASA FMEA #: 05-6KA-2030-1

SUBSYSTEM: ARCS
MDAC ID: 12182
ITEM: MANIFOLD 3, L/R OX & FU ISOL VLV SWITCHES 24, 29

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: ARCS-12183X
NASA FMEA #: 05-6KA-2030-2

SUBSYSTEM: ARCS
MDAC ID: 12183
ITEM: MANIFOLD 3, L/R OX & FU ISOL VLV SWITCHES 24, 29

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

CRITICALITY
FLIGHT
HDW/FUNC

REDUNDANCY SCREENS
A     B     C

CIL
ITEM

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-2737
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12184X
NASA FMEA #: 05-6KA-2030-2
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12184
ITEM: MANIFOLD 3, L/R OX & FU ISOL VLV SWITCHES 24, 29
LEAD ANALYST: D. HARTMAN

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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:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-2738
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:
NO DIFFERENCES.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12186X
NASA FMEA #: 05-6KA-2030-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12186
ITEM: MANIFOLD 3, L/R OX & FU ISOL VLV SWITCHES 24, 29

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-2740
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12187X
NASA FMEA #: 05-6KA-2030-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12187
ITEM: MANIFOLD 4, L/R OX & FU ISOL VLV SWITCHES 25, 30

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-2741
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12188X
NASA FMEA #: 05-6KA-2030-2

NASA DATA: BASELINE [ ] NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12188
ITEM: MANIFOLD 4, L/R OX & FU ISOL VLV SWITCHES 25, 30

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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

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

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

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-2742
APPENDIX C
ASSessment WORKSheet

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12189X
NASA FMEA #: 05-6KA-2030-2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12189
ITEM: MANIFOLD 4, L/R OX & FU ISOL VLV SWITCHES 25, 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:
NO DIFFERENCES.

REPORT DATE 2/26/88
C-2743
**APPENDIX C**

**ASSESSMENT WORKSHEET**

**ASSESSMENT DATE:** 1/29/88  
**ASSESSMENT ID:** ARCS-12190X  
**NASA FMEA #:** 05-6KA-2030-2  
**NASA DATA:**  
BASELINE [ ]  
NEW [ X ]

**SUBSYSTEM:** ARCS  
**MDAC ID:** 12190  
**ITEM:** MANIFOLD 4, L/R OX & FU ISOL VLV SWITCHES 25, 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:**

NO DIFFERENCES.

**REPORT DATE 2/26/88**

C-2744
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12191X
NASA FMEA #: 05-6KA-2030-1

SUBSYSTEM: ARCS
MDAC ID: 12191
ITEM: MANIFOLD 4, L/R OX & FU ISOL VLV SWITCHES 25, 30

LEAD ANALYST: D. HARTMAN

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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: ARCS-12192X
NASA FMEA #: 05-6KA-2255-1

SUBSYSTEM: ARCS
MDAC ID: 12192
ITEM: DIODE - LIMIT SWITCH (OPEN CIRCUIT)

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

CRITICALITY REDUNDANCY SCREENS CIL
FLIGHT HDW/FUNC A B C ITEM

NASA [ 2 /1R ] [ P ] [ F ] [ P ] [ X ] *
IOA [ 3 /3 ] [ ] [ ] [ ] [ ]
COMPARE [ N /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 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 (MULTIPLE FAILURES) WAS RAISED DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THIS ISSUE REMAINS OPEN.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12193X
NASA FMEA #: 05-6KA-2255-2

NASA DATA:
BASELINE [ ]
NEW [ x ]

SUBSYSTEM: ARCS
MDAC ID: 12193
ITEM: DIODE - LIMIT SWITCH (OPEN CIRCUIT)

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-2747
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12194X
NASA FMEA #: 05-6KA-2255-1
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12194
ITEM: DIODE - LIMIT SWITCH (CLOSE CIRCUIT)

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 (MULTIPLE FAILURES) WAS RAISED DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THIS ISSUE REMAINS OPEN.

REPORT DATE 2/26/88 C-2748
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12195X
NASA FMEA #: 05-6KA-2255-2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12195
ITEM: DIODE - LIMIT SWITCH (CLOSE CIRCUIT)

LEAD ANALYST: D. HARTMAN

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

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-2749
ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12196X
NASA FMEA #: 05-6KA-2255A-1
NASA DATA:
BASELINE [ ]
NEW [ x ]

SUBSYSTEM: ARCS
MDAC ID: 12196
ITEM: DIODE - GPC CLOSE

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

* CIL RETENTION RATIONALE: (If applicable)

REMARKS:
LOSE GPC COMMAND TO CLOSE THE VALVE. REDUNDANCY PROVIDED WITH MANUAL COMMAND. LOSS OF ALL REDUNDANCY PREVENTS ISOLATION OF 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.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88  NASA DATA:
ASSESSMENT ID: ARCS-12197X BASELINE [ ]
NASA FMEA #: 05-6KA-2255A-2 NEW [ X ]
SUBSYSTEM: ARCS
MDAC ID: 12197
ITEM: DIODE - GPC CLOSE
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: ARCS-12198X
NASA FMEA #: 05-6KA-2255B-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12198
ITEM: DIODE - GPC OPEN

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-2752
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12199X
NASA FMEA #: 05-6KA-2255B-2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12199
ITEM: DIODE - GPC OPEN

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-2753
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12199X
NASA FMEA #: 05-6KA-2255B-2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12231
ITEM: DIODE - GPC OPEN

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-2754
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12200X
NASA FMEA #: 05-6KA-2255C-1

SUBSYSTEM: ARCS
MDAC ID: 12200
ITEM: DIODE - MANUAL OPEN

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-2755
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12201X
NASA FMEA #: 05-6KA-2255C-2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12201
ITEM: DIODE - MANUAL OPEN

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-2756
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12202X
NASA FMEA #: 05-6KA-2255D-1
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12202
ITEM: DIODE - MANUAL CLOSE

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.
ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12203X
NASA FMEA #: 05-6KA-2255D-2
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12203
ITEM: DIODE - MANUAL CLOSE
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:** ARCS-12204X

**NASA FMEA #:** 05-6KA-2255E-1

**NASA DATA:**

- **BASELINE:** [ ]
- **NEW:** [ X ]

**SUBSYSTEM:** ARCS

**MDAC ID:** 12204

**ITEM:** DIODE - MANUAL OPEN/CLOSE INHIBIT

**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 (MULTIPLE FAILURES) WAS RAISED DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THIS ISSUE REMAINS OPEN.

**REPORT DATE** 2/26/88

C-2759
ASSessment DATE: 1/29/88
NASA FMEA #: 05-6KA-2255E-2
SUBSYSTEM: ARCS
MDAC ID: 12205
ITEM: DIODE - MANUAL OPEN/CLOSE INHIBIT
LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

| [3/1R ] [P] [F] [P] [X] | (ADD/DDELETE) |

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:

NASA FMEA CONSIDERS MULTIPLE FAILURES. THIS FAILURE CAUSES INABILITY 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 (MULTIPLE FAILURES) WAS RAISED DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THIS ISSUE REMAINS OPEN.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12206X
NASA FMEA #: 05-6KA-2255F-1

SUBSYSTEM: ARCS
MDAC ID: 12206
ITEM: DIODE - MANUAL CLOSE/OPEN INHIBIT

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 /3 ] | [ ] | [ ] | [ ] | [ ] |
| COMPARE | [ /N ] | [ N ] | [ N ] | [ N ] | [ N ] |

RECOMMENDATIONS:  (If different from NASA)

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

* 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 (MULTIPLE FAILURES) WAS RAISED DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THIS ISSUE REMAINS OPEN.

REPORT DATE 2/26/88   C-2761
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12207X
NASA FMEA #: 05-6KA-2255F-2
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12207
ITEM: DIODE - MANUAL CLOSE/OPEN INHIBIT

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

[ 3 /1R ] [ P ] [ F ] [ P ] [ X ]

(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

Adequate [ ]
Inadequate [ ]

REMARKS:
NASA FMEA CONSIDERS MULTIPLE FAILURES. THIS FAILURE MAY CAUSE INABILITY TO OPEN THE VALVE IF COMMAND WAS FROM THE GPC. LOSS OF ALL REDUNDANCY TO OPEN THE VALVE PREVENT PROPELLANTS TO BE EXPELLED TO MEET LANDING CONS

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

**ASSESSMENT WORKHEET**

**ASSESSMENT DATE:** 1/29/88  
**ASSESSMENT ID:** ARCS-12208X  
**NASA FMEA #:** 05-6KA-2255-1

**SUBSYSTEM:** ARCS  
**MDAC ID:** 12208  
**ITEM:** DIODE - LIMIT SWITCH (OPEN CIRCUIT)

**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 (MULTIPLE FAILURES) WAS RAISED DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THIS ISSUE REMAINS OPEN.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12209X
NASA FMEA #: 05-6KA-2255-2
SUBSYSTEM: ARCS
MDAC ID: 12209
ITEM: DIODE - LIMIT SWITCH (OPEN CIRCUIT)
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-2764
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12210X
NASA FMEA #: 05-6KA-2255-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12210
ITEM: DIODE - LIMIT SWITCH (CLOSE CIRCUIT)

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 (MULTIPLE FAILURES) WAS RAISED DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THIS ISSUE REMAINS OPEN.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12211X
NASA FMEA #: 05-6KA-2255-2
NASA DATA:
BASELINE [  ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12211
ITEM: DIODE - LIMIT SWITCH (CLOSE CIRCUIT)
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-2766
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12212X
NASA FMEA #: 05-6KA-2255A-1

SUBSYSTEM: ARCS
MDAC ID: 12212
ITEM: DIODE - GPC CLOSE

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

CRITICALLY REDUNDANCY CIL
FLIGHT HDW/FUNC A B C ITEM

NASA [ 3 /3 ] [ ] [ ] [ ] [ ] [ ] *
IOA [ 3 /1R ] [ P ] [ NA] [ P ] [ ]

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

Adequate [ ]
Inadequate [ ]

REMARKS:

LOSE GPC COMMAND TO CLOSE THE VALVE. REDUNDANCY PROVIDED WITH MANUAL COMMAND. LOSS OF ALL REDUNDANCY PREVENTS ISOLATION OF 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-2767
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:

NO DIFFERENCES.

REPORT DATE 2/26/88 C-2768
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12214X
NASA FMEA #: 05-6KA-2255B-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12214
ITEM: DIODE - GPC OPEN

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-2769
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12215X
NASA FMEA #: 05-6KA-2255B-2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12215
ITEM: DIODE - GPC OPEN

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-2770
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12216X
NASA FMEA #: 05-6KA-2255C-1

SUBSYSTEM: ARCS
MDAC ID: 12216
ITEM: DIODE - MANUAL OPEN

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
APPENDIX C

ASSESSMENT DATE: 1/ASSESSMENT WORKSHEET   NASA DATA:

ASSESSMENT ID:    ARCS-12217X
NASA FMEA #:       05-6KA-2255C-2
BASELINE [   ]
NEW [  X ]

SUBSYSTEM:        ARCS
MDAC ID:          12217
ITEM:             DIODE - MANUAL OPEN

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-2772
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12218X
NASA FMEA #: 05-6KA-2255D-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12218
ITEM: DIODE - MANUAL CLOSE

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-2773
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12219X
NASA FMEA #: 05-6KA-2255D-2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12219
ITEM: DIODE - MANUAL CLOSE

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

Adequate [ ]
Inadequate [ ]

REMARKS:
NO DIFFERENCES.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12220X
NASA FMEA #: 05-6KA-2255E-1

SUBSYSTEM: ARCS
MDAC ID: 12220
ITEM: DIODE - MANUAL OPEN/CLOSE INHIBIT
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 (MULTIPLE FAILURES) WAS RAISED DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THIS ISSUE REMAINS OPEN.

REPORT DATE 2/26/88 C-2775
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12221X
NASA FMEA #: 05-6KA-2255E-2
NASA DATA:
BASELINE [ ]
NEW [ X ]
SUBSYSTEM: ARCS
MDAC ID: 12221
ITEM: DIODE - MANUAL OPEN/CLOSE INHIBIT
LEAD ANALYST: D. HARTMAN

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IOA [ 3 /1R ] [ P ] [ F ] [ P ] [ X ]
COMPARE [ ] [ ] [ ] [ ] [ ]

RECOMMENDATIONS: (If different from NASA)

[ 3 /1R ] [ P ] [ F ] [ P ] [ X ]

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

REMARKS:
NASA FMEA CONSIDERS MULTIPLE FAILURES. THIS FAILURE CAUSES INABILITY 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 (MULTIPLE FAILURES) WAS RAISED DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THIS ISSUE REMAINS OPEN.

REPORT DATE 2/26/88 C-2776
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12222X
NASA FMEA #: 05-6KA-2255F-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12222
ITEM: DIODE - MANUAL CLOSE/OPEN INHIBIT

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 (MULTIPLE FAILURES) WAS RAISED DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THIS ISSUE REMAINS OPEN.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12223X
NASA FMEA #: 05-6KA-2255F-2

SUBSYSTEM: ARCS
MDAC ID: 12223
ITEM: DIODE - MANUAL CLOSE/OPEN INHIBIT

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

CRITICALITY REDUNDANCY SCREENS CIL
FLIGHT HDW/FUNC A B C ITEM

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:

NASA FMEA CONSIDERS MULTIPLE FAILURES. THIS FAILURE MAY CAUSE INABILITY TO OPEN THE VALVE IF COMMAND WAS FROM THE GPC. LOSS OF ALL REDUNDANCY TO OPEN THE VALVE PREVENT PROPELLANTS TO BE EXPELLED TO MEET LANDING CONS

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

REPORT DATE 2/26/88 C-2778
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12224X
NASA FMEA #: 05-6KA-2255-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12224
ITEM: DIODE - LIMIT SWITCH (OPEN CIRCUIT)

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 (MULTIPLE FAILURES) WAS RAISED DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THIS ISSUE REMAINS OPEN.

REPORT DATE 2/26/88 C-2779
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12225X
NASA FMEA #: 05-6KA-2255-2
NASA DATA: BASELINE [ ] NEW [ X ]

SUBSYSTEM: MDAC ID: ITEM: ARCS 12225 DIODE - LIMIT SWITCH (OPEN CIRCUIT)

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-2780
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12226X
NASA FMEA #: 05-6KA-2255-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12226
ITEM: DIODE - LIMIT SWITCH (CLOSE CIRCUIT)

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 (MULTIPLE FAILURES) WAS RAISED DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THIS ISSUE REMAINS OPEN.

REPORT DATE 2/26/88 C-2781
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12227X
NASA FMEA #: 05-6KA-2255-2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12227
ITEM: DIODE - LIMIT SWITCH (CLOSE CIRCUIT)

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

CRITICALITY REDUNDANCY SCREENS CIL ITEM
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-2782
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12228X
NASA FMEA #: 05-6KA-2255A-1

SUBSYSTEM: ARCS
MDAC ID: 12228
ITEM: DIODE - GPC CLOSE

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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

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

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

REMARKS:
LOSE GPC COMMAND TO CLOSE THE VALVE. REDUNDANCY PROVIDED WITH MANUAL COMMAND. LOSS OF ALL REDUNDANCY PREVENTS ISOLATION OF 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-2783
## APPENDIX C
### ASSESSMENT WORKSHEET

**ASSESSMENT DATE:** 1/29/88  
**ASSESSMENT ID:** ARCS-12229X  
**NASA FMEA #:** 05-6KA-2255A-2  
**NASA DATA:**  
- BASELINE [ ]  
- NEW [ X ]  

**SUBSYSTEM:** ARCS  
**MDAC ID:** 12229  
**ITEM:** DIODE - GPC CLOSE  
**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.

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**REPORT DATE 2/26/88**  
C-2784
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12230X
NASA FMEA #: 05-6KA-2255B-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12230
ITEM: DIODE - GPC OPEN

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-2785
ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12232X
NASA FMEA #: 05-6KA-2255C-1

SUBSYSTEM: ARCS
MDAC ID: 12232
ITEM: DIODE - MANUAL OPEN

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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IOA [3/IR] [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:** ARCS-12233X  
**NASA FMEA #:** 05-6KA-2255C-2  

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

**SUBSYSTEM:** ARCS  
**MDAC ID:** 12233  
**ITEM:** DIODE - MANUAL OPEN  

**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:** ARCS-12234X

**NASA FMEA #:** 05-6KA-2255D-1

**SUBSYSTEM:** ARCS

**MDAC ID:** 12234

**ITEM:** DIODE - MANUAL CLOSE

**LEAD ANALYST:** D. HARTMAN

**NASA DATA:**

BASELINE [ ]

NEW [ X ]

**SUBSYSTEM:** ARCS

**MDAC ID:** 12234

**ITEM:** DIODE - MANUAL CLOSE

**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-2788
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12235X
NASA FMEA #: 05-6KA-2255D-2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12235
ITEM: DIODE - MANUAL CLOSE

LEAD ANALYST: D. HARTMAN

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

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88   C-2789
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12236X
NASA FMEA #: 05-6KA-2255E-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12236
ITEM: DIODE - MANUAL OPEN/CLOSE INHIBIT

LEAD ANALYST: D. HARTMAN

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

* CIL RETENTION RATIONALE: (If applicable)

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 (MULTIPLE FAILURES) WAS RAISED DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THIS ISSUE REMAINS OPEN.

REPORT DATE 2/26/88 C-2790
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12237X
NASA FMEA #: 05-6KA-2255E-2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12237
ITEM: DIODE - MANUAL OPEN/CLOSE INHIBIT

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

| [ 3 /1R ] | [ P ] | [ F ] | [ P ] | [ X ] |

(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

| ADEQUATE | INADEQUATE |
| [ ] | [ ] |

REMARKS:

NASA FMEA CONSIDERS MULTIPLE FAILURES. THIS FAILURE CAUSES INABILITY 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 (MULTIPLE FAILURES) WAS RAISED DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THIS ISSUE REMAINS OPEN.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12238X
NASA FMEA #: 05-6KA-2255F-1

SUBSYSTEM: ARCS
MDAC ID: 12238
ITEM: DIODE - MANUAL CLOSE/OPEN INHIBIT

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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IOA [3/3] [ ] [ ] [ ] [ ]
COMPARE [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 (MULTIPLE FAILURES) WAS RAISED DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THIS ISSUE REMAINS OPEN.

REPORT DATE 2/26/88 C-2792
### APPENDIX C
#### ASSESSMENT WORKSHEET

**ASSESSMENT DATE:** 1/29/88  
**ASSESSMENT ID:** ARCS-12239X  
**NASA FMEA #:** 05-6KA-2255F-2

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

**SUBSYSTEM:** ARCS  
**MDAC ID:** 12239  
**ITEM:** DIODE - MANUAL CLOSE/OPEN INHIBIT

**LEAD ANALYST:** D. HARTMAN

**ASSESSMENT:**

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

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

* CIL RETENTION RATIONALE: (If applicable)

- ADEQUATE [ ]
- INADEQUATE [ ]

**REMARKS:**

NASA FMEA CONSIDERS MULTIPLE FAILURES. THIS FAILURE MAY CAUSE INABILITY TO OPEN THE VALVE IF COMMAND WAS FROM THE GPC. LOSS OF ALL REDUNDANCY TO OPEN THE VALVE PREVENT PROPELLANTS TO BE EXPelled TO MEET LANDING CONS

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

ASSessment DATE: 1/29/88  
NASA FMEA #: 05-6KA-2255-1  

SUBSYSTEM: ARCS  
MDAC ID: 12240  
ITEM: DIODE - LIMIT SWITCH (OPEN CIRCUIT)  

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 (MULTIPLE FAILURES) WAS RAISED DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THIS ISSUE REMAINS OPEN.

REPORT DATE 2/26/88  

C-2794
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12241X
NASA FMEA #: 05-6KA-2255-2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12241
ITEM: DIODE - LIMIT SWITCH (OPEN CIRCUIT)

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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| Iso         | [ 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.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12242X
NASA FMEA #: 05-6KA-2255-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12242
ITEM: DIODE - LIMIT SWITCH (CLOSE CIRCUIT)

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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| COMPARE [ N /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 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 (MULTIPLE FAILURES) WAS RAISED DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THIS ISSUE REMAINS OPEN.

REPORT DATE 2/26/88 C-2796
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12243X
NASA FMEA #: 05-6KA-2255-2
SUBSYSTEM: ARCS
MDAC ID: 12243
ITEM: DIODE - LIMIT SWITCH (CLOSE CIRCUIT)
LEAD ANALYST: D. HARTMAN

NASA DATA:
BASELINE [ ]
NEW [ X ]

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-2797
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12244X
NASA FMEA #: 05-6KA-2255A-1

SUBSYSTEM: ARCS
MDAC ID: 12244
ITEM: DIODE - GPC CLOSE
LEAD ANALYST: D. HARTMAN

NASA DATA:
BASELINE [ ]
NEW [ X ]

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-2798
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12245X
NASA FMEA #: 05-6KA-2255A-2

SUBSYSTEM: ARCS
MDAC ID: 12245
ITEM: DIODE - GPC CLOSE
LEAD ANALYST: D. HARTMAN

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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-2799
# APPENDIX C
## ASSESSMENT WORKSHEET

**ASSESSMENT DATE:** 1/29/88  
**ASSESSMENT ID:** ARCS-12246X  
**NASA FMEA #:** 05-6KA-2255B-I  
**SUBSYSTEM:** ARCS  
**MDAC ID:** 12246  
**ITEM:** DIODE - GPC OPEN  
**LEAD ANALYST:** D. HARTMAN  

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

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* CIL RETENTION RATIONALE: (If applicable)

**REMARKS:**

NO DIFFERENCES.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12247X
NASA FMEA #: 05-6KA-2255B-2

SUBSYSTEM: ARCS
MDAC ID: 12247
ITEM: DIODE - GPC OPEN

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-2801
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12248X
NASA FMEA #: 05-6KA-2255C-1
SUBSYSTEM: ARCS
MDAC ID: 12248
ITEM: DIODE - MANUAL OPEN
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-2802
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12249X
NASA FMEA #: 05-6KA-2255C-2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12249
ITEM: DIODE - MANUAL OPEN

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-2803
ASSessment WORKSheet

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS - 12250X
NASA FMEA #: 05-6KA-2255D-1
SUBSYSTEM: ARCS
MDAC ID: 12250
ITEM: DIODE - MANUAL CLOSE
LEAD ANALYST: D. HARTMAN
ASSESSMENT:

CRITICALITY
FLIGHT
HDW/FUNC

REDUNDANCY SCREENS
A    B    C

NASA [ 3 /1R ] [ P ] [ P ] [ P ] [ ] *

IOA [ 3 /1R ] [ P ] [ NA ] [ P ] [ ]

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

RECOMMENDATIONS: (If different from NASA)

[ / ] [ ] [ ] [ ] [ ]

(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]

INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88
C-2804
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12251X
NASA FMEA #: 05-6KA-2255D-2

NASA DATA:
BASELINE [   ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12251
ITEM: DIODE - MANUAL CLOSE

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: ARCS-12252X
NASA FMEA #: 05-6KA-2255E-1

SUBSYSTEM: ARCS
MDAC ID: 12252
ITEM: DIODE - MANUAL OPEN/CLOSE INHIBIT

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

CRITICALITY
FLIGHT
HDW/FUNC

REDUNDANCY SCREENS
A  B  C

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 (MULTIPLE FAILURES) WAS RAISED DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THIS ISSUE REMAINS OPEN.

REPORT DATE 2/26/88 C-2806
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12253X
NASA FMEA #: 05-6KA-2255E-2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12253
ITEM: DIODE - MANUAL OPEN/CLOSE INHIBIT

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

[ 3 /1R ] [ P ] [ F ] [ P ] [ X ]

(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NASA FMEA CONSIDERS MULTIPLE FAILURES. THIS FAILURE CAUSES INABILITY 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 (MULTIPLE FAILURES) WAS RAISED DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THIS ISSUE REMAINS OPEN.

REPORT DATE 2/26/88 C-2807
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12254X
NASA FMEA #: 05-6KA-2255F-1
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12254
ITEM: DIODE - MANUAL CLOSE/OPEN INHIBIT
LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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

* 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 (MULTIPLE FAILURES) WAS RAISED DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THIS ISSUE REMAINS OPEN.

REPORT DATE 2/26/88 C-2808
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12255X
NASA FMEA #: 05-6KA-2255F-2

SUBSYSTEM: ARCS
MDAC ID: 12255
ITEM: DIODE - MANUAL CLOSE/OPEN INHIBIT

LEAD ANALYST: D. HARTMAN

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12255
ITEM: DIODE - MANUAL CLOSE/OPEN INHIBIT

LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NASA FMEA CONSIDERS MULTIPLE FAILURES. THIS FAILURE MAY CAUSE INABILITY TO OPEN THE VALVE IF COMMAND WAS FROM THE GPC. LOSS OF ALL REDUNDANCY TO OPEN THE VALVE PREVENT PROPELLANTS TO BE EXPELLED TO MEET LANDING CONS

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

REPORT DATE 2/26/88  C-2809
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12256X
NASA FMEA #: 05-6KA-2035-1
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12256
ITEM: RJDA1B L1/L5/R1 MANIFOLD LOGIC SWITCH 3

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)
[ 2 /2 ] [ ] [ ] [ ] [ X ] (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

REMARKS:
NO DIFFERENCES FOR MANIFOLDS 1-4. NASA FMEA SHOULD INCLUDE BOTH MANIFOLD 5 EFFECTS ALSO (2/2).

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

REPORT DATE 2/26/88 C-2810
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12257X
NASA FMEA #: 05-6KA-2035-2

FDA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12257
ITEM: RJDA1B L1/L5/R1 MANIFOLD LOGIC SWITCH 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-2811
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12258X
NASA FMEA #: 05-6KA-2035-2
SUBSYSTEM: ARCS
MDAC ID: 12258
ITEM: RJDA1B L1/L5/R1 MANIFOLD LOGIC SWITCH 3
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-2812
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12259X
NASA FMEA #: 05-6KA-2035-1
SUBSYSTEM: ARCS
MDAC ID: 12259
ITEM: RJDA1B L1/L5/R1 MANIFOLD LOGIC SWITCH 3
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-2813
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12260X
NASA FMEA #: 05-6KA-2035-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12260
ITEM: RJDA1B L1/L5/R1 MANIFOLD LOGIC SWITCH 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 FOR MANIFOLDS 1-4. NASA FMEA SHOULD INCLUDE BOTH MANIFOLD 5 EFFECTS ALSO (2/2).

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: ARCS-12261X
NASA FMEA #: 05-6KA-2036-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12261
ITEM: RJDA1B L1/R1 MANIFOLD DRIVER SWITCH 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-2815
ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12262X
NASA FMEA #: 05-6KA-2036-2

SUBSYSTEM: ARCS
MDAC ID: 12262
ITEM: RJDA1B L1/R1 MANIFOLD DRIVER SWITCH 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:

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 (MULTIPLE FAILURES) WAS RAISED DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THIS ISSUE REMAINS OPEN.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12263X
NASA FMEA #: 05-6KA-2036-2

NASA DATA:
BASELINE [   ]
NEW [ X  ]

SUBSYSTEM: ARCS
MDAC ID: 12263
ITEM: RJDA1B L1/R1 MANIFOLD DRIVER SWITCH 4

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 (MULTIPLE FAILURES) WAS RAISED DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THIS ISSUE REMAINS OPEN.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12264X
NASA FMEA #: 05-6KA-2036-1
NASA DATA:
BASELINE [ ]
NEW [ X ]
SUBSYSTEM: ARCS
MDAC ID: 12264
ITEM: RJDA1B L1/R1 MANIFOLD DRIVER SWITCH 4
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: ARCS-12265X
NASA FMEA #: 05-6KA-2036-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12265
ITEM: RJDA1B L1/R1 MANIFOLD DRIVER SWITCH 4

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-2819
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12266X
NASA FMEA #: 05-6KA-2035-1

NASA DATA:
BASELINE [   ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12266
ITEM: RJDA1A L2/R2 MANIFOLD LOGIC SWITCH 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-2820
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12267X
NASA FMEA #: 05-6KA-2035-2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12267
ITEM: RJDA1A L2/R2 MANIFOLD LOGIC SWITCH 3

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-2821
APPENDIX C  
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88  
ASSESSMENT ID: ARCS-12268X  
NASA FMEA #: 05-6KA-2035-2

NASA DATA:  
BASELINE [ ]  
NEW [ X ]

SUBSYSTEM: ARCS  
MDAC ID: 12268  
ITEM: RJDA1A L2/R2 MANIFOLD LOGIC SWITCH 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-2822
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12269X
NASA FMEA #: 05-6KA-2035-1
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12269
ITEM: RJDA1A L2/R2 MANIFOLD LOGIC SWITCH 3

LEAD ANALYST: D. HARTMAN

RECOMMENDATIONS: (If different from NASA)

* CIL RETENTION RATIONALE: (If applicable)

REMARKS:
IOA AGREES WITH NASA FMEA.

REPORT DATE 2/26/88 C-2823
ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12270X
NASA FMEA #: 05-6KA-2035-1

SUBSYSTEM: ARCS
MDAC ID: 12270
ITEM: RJDA1A L2/R2 MANIFOLD LOGIC SWITCH 3

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-2824
**APPENDIX C**
**ASSESSMENT WORKSHEET**

**ASSESSMENT DATE:** 1/29/88  
**ASSESSMENT ID:** ARCS-12271X  
**NASA FMEA #:** 05-6KA-2036-1  

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

**SUBSYSTEM:** ARCS  
**MDAC ID:** 12271  
**ITEM:** RJDA1A L2/R2 MANIFOLD DRIVER SWITCH 4

**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-2825**
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12272X
NASA FMEA #: 05-6KA-2036-2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12272
ITEM: RJDAIA L2/R2 MANIFOLD DRIVER SWITCH 4

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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- 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 (MULTIPLE FAILURES) WAS RAISED DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THIS ISSUE REMAINS OPEN.

REPORT DATE 2/26/88 . C-2826
ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12273
NASA FMEA #: 05-6KA-2036-2
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12273
ITEM: RJDA1A L2/R2 MANIFOLD DRIVER SWITCH 4

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 (MULTIPLE FAILURES) WAS RAISED DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THIS ISSUE REMAINS OPEN.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12274X
NASA FMEA #: 05-6KA-2036-1
NASA DATA: BASELINE [ ] NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12274
ITEM: RJDA1A L2/R2 MANIFOLD DRIVER SWITCH 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.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12275X
NASA FMEA #: 05-6KA-2036-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12275
ITEM: RJDA1A L2/R2 MANIFOLD DRIVER SWITCH 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-2829
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12276X
NASA FMEA #: 05-6KA-2035-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12276
ITEM: RJDA2B L3/R3/R5 MANIFOLD LOGIC SWITCH 3

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 FOR MANIFOLDS 1-4. NASA FMEA SHOULD INCLUDE BOTH MANIFOLD 5 EFFECTS ALSO (2/2).

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

REPORT DATE 2/26/88 C-2830
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12277X
NASA FMEA #: 05-6KA-2035-2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12277
ITEM: RJDA2B L3/R3/R5 MANIFOLD LOGIC SWITCH 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-2831
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12278X
NASA FMEA #: 05-6KA-2035-2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12278
ITEM: RJDA2B L3/R3/R5 MANIFOLD LOGIC SWITCH 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-2832
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12279X
NASA FMEA #: 05-6KA-2035-1

SUBSYSTEM: ARCS
MDAC ID: 12279
ITEM: RJDA2B L3/R3/R5 MANIFOLD LOGIC SWITCH 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:
IOA AGREES WITH NASA FMEA.

REPORT DATE 2/26/88 C-2833
ASSESSMENT DATE: 1/29/88

ASSESSMENT ID: ARCS-12280X

NASA FMEA #: 05-6KA-2035-1

SUBSYSTEM: ARCS

MDAC ID: 12280

ITEM: RJDA2B L3/R3/R5 MANIFOLD LOGIC SWITCH 3

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 FOR MANIFOLDS 1-4. NASA FMEA SHOULD INCLUDE BOTH MANIFOLD 5 EFFECTS ALSO (2/2).

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: ARCS-12281X
NASA FMEA #: 05-6KA-2036-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12281
ITEM: RJDA2B L3/R3 MANIFOLD DRIVER SWITCH 4

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-2835
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12282X
NASA FMEA #: 05-6KA-2036-2
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12282
ITEM: RJDA2B L3/R3 MANIFOLD DRIVER SWITCH 4

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 (MULTIPLE FAILURES) WAS RAISED DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THIS ISSUE REMAINS OPEN.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12283X
NASA FMEA #: 05-6KA-2036-2
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12283
ITEM: RJDA2B L3/R3 MANIFOLD DRIVER SWITCH 4

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 (MULTIPLE FAILURES) WAS RAISED DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THIS ISSUE REMAINS OPEN.

REPORT DATE 2/26/88
C-2837
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12284X
NASA FMEA #: 05-6KA-2036-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12284
ITEM: RJDA2B L3/R3 MANIFOLD DRIVER SWITCH 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-2838
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12285X
NASA FMEA #: 05-6KA-2036-1
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12285
ITEM: RJDA2B L3/R3 MANIFOLD DRIVER SWITCH 4

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-2839
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12286X
NASA FMEA #: 05-6KA-2035-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12286
ITEM: RJDA2A L4/R4 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:
IOA AGREES WITH NASA FMEA.

REPORT DATE 2/26/88 C-2840
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12287X
NASA FMEA #: 05-6KA-2035-2

SUBSYSTEM: ARCS
MDAC ID: 12287
ITEM: RJDA2A L4/R4 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:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-2841
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12288X
NASA FMEA #: 05-6KA-2035-2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12288
ITEM: RJDA2A L4/R4 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:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-2842
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12289X
NASA FMEA #: 05-6KA-2035-2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12289
ITEM: RJDA2A L4/R4 MANIFOLD LOGIC SWITCH 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.

REPORT DATE 2/26/88  C-2843
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12290X
NASA FMEA #: 05-6KA-2035-1
NASA DATA: BASELINE [ ] NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12290
ITEM: RJDA2A L4/R4 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:
IOA AGREES WITH NASA FMEA.

REPORT DATE 2/26/88 . C-2844
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12291X
NASA FMEA #: 05-6KA-2036-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12291
ITEM: RJDA2A L4/R4 MANIFOLD DRIVER SWITCH 6

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-2845
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12292X
NASA FMEA #: 05-6KA-2036-2
NASA DATA:
BASELINE [ ]
NEW [X]

SUBSYSTEM: ARCS
MDAC ID: 12292
ITEM: RJDA2A L4/R4 MANIFOLD DRIVER SWITCH 6

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

CRITICALITY SHOWN ON
HDW/FUNC
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IOA [3/3] [ ] [ ] [ ] [ ]
COMPARE [ /N ] [ N ] [ N ] [ N ] [ ]

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

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 (MULTIPLE FAILURES) WAS RAISED DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THIS ISSUE REMAINS OPEN.

REPORT DATE 2/26/88  C-2846
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12293X
NASA FMEA #: 05-6KA-2036-2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12293
ITEM: RJDA2A L4/R4 MANIFOLD DRIVER SWITCH 6

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 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 (MULTIPLE FAILURES) WAS RAISED DUE TO DIFFERENT INTERPRETATIONS OF NSTS 22206. THEREFORE, THIS ISSUE REMAINS OPEN.

REPORT DATE 2/26/88 C-2847
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12294X
NASA FMEA #: 05-6KA-2036-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12294
ITEM: RJDA2A L4/R4 MANIFOLD DRIVER SWITCH 6

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-2848
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12295X
NASA FMEA #: 05-6KA-2036-1

SUBSYSTEM: ARCS
MDAC ID: 12295
ITEM: RJDA2A L4/R4 MANIFOLD DRIVER SWITCH 6

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-2849
APPENDIX C  
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88  
ASSESSMENT ID: ARCS-12296X  
NASA FMEA #: 05-6KA-2037-1

NASA DATA:  
BASELINE [ ]  
NEW [ X ]

SUBSYSTEM: ARCS  
MDAC ID: 12296  
ITEM: MANIFOLD 1, JETS HEATER CONTROL SWITCH 9

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-2850
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12297X
NASA FMEA #: 05-6KA-2037-2
SUBSYSTEM: ARCS
MDAC ID: 12297
ITEM: MANIFOLD 1, JETS HEATER CONTROL SWITCH 9
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-2851
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12298X
NASA FMEA #: 05-6KA-2037-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12298
ITEM: MANIFOLD 1, JETS HEATER CONTROL SWITCH 9

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: ARCS-12299X  
NASA FMEA #: 05-6KA-2037-2  

SUBSYSTEM: ARCS  
MDAC ID: 12299  
ITEM: MANIFOLD 1, JETS HEATER CONTROL SWITCH 9  
LEAD ANALYST: D. HARTMAN

NASADATA:  
BASELINE [ ]  
NEW [ X ]

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-2853
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12300X
NASA FMEA #: 05-6KA-2037-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12300
ITEM: MANIFOLD 1, JETS HEATER CONTROL SWITCH 9

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-2854
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12301X
NASA FMEA #: 05-6KA-2037-1

SUBSYSTEM: ARCS
MDAC ID: 12301
ITEM: MANIFOLD 2, JETS HEATER CONTROL SWITCH 10

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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* CIL RETENTION RATIONALE: (If applicable)

- ADEQUATE [ ]
- INADEQUATE [ ]

REMARKS:
IOA AGREES WITH NASA FMEA.

REPORT DATE 2/26/88 C-2855
### APPENDIX C
#### ASSESSMENT WORKSHEET

**ASSESSMENT DATE:** 1/29/88  
**ASSESSMENT ID:** ARCS-12302X  
**NASA FMEA #:** 05-6KA-2037-2  
**NASA DATA:**  
- BASELINE [ ]  
- NEW [ x ]

**SUBSYSTEM:** ARCS  
**MDAC ID:** 12302  
**ITEM:** MANIFOLD 2, JETS HEATER CONTROL SWITCH 10

**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.

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**REPORT DATE** 2/26/88  
**C-2856**
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12303X
NASA FMEA #: 05-6KA-2037-1

SUBSYSTEM: ARCS
MDAC ID: 12303
ITEM: MANIFOLD 2, JETS HEATER CONTROL SWITCH 10

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-2857
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12304X
NASA FMEA #: 05-6KA-2037-2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12304
ITEM: MANIFOLD 2, JETS HEATER CONTROL SWITCH 10

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-2858
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12305X
NASA FMEA #: 05-6KA-2037-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12305
ITEM: MANIFOLD 2, JETS HEATER CONTROL SWITCH 10

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-2859
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12306X
NASA FMEA #: 05-6KA-2037-1
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12306
ITEM: MANIFOLD 3, JETS HEATER CONTROL SWITCH II

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-2860
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12307X
NASA FMEA #: 05-6KA-2037-2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12307
ITEM: MANIFOLD 3, JETS HEATER CONTROL SWITCH 11

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-2861
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12308X
NASA FMEA #: 05-6KA-2037-1
NASA DATA: BASELINE [ ] NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12308
ITEM: MANIFOLD 3, JETS HEATER CONTROL SWITCH 11
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-2862
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12309X
NASA FMEA #: 05-6KA-2037-2
NASA DATA: BASELINE [ ] NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12309
ITEM: MANIFOLD 3, JETS HEATER CONTROL SWITCH 11

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: ARCS-12310X
NASA FMEA #: 05-6KA-2037-1

SUBSYSTEM: ARCS
MDAC ID: 12310
ITEM: MANIFOLD 3, JETS HEATER CONTROL SWITCH 11

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-2864
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12311X
NASA FMEA #: 05-6KA-2037-1

SUBSYSTEM: ARCS
MDAC ID: 12311
ITEM: MANIFOLD 4, JETS HEATER CONTROL SWITCH 12

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.
APPENDIX C  
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88  
ASSESSMENT ID: ARCS-12312X  
NASA FMEA #: 05-6KA-2037-2  

NASA DATA:  
BASELINE [ ]  
NEW [ X ]

SUBSYSTEM: ARCS  
MDAC ID: 12312  
ITEM: MANIFOLD 4, JETS HEATER CONTROL SWITCH 12  

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-2866
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12313X
NASA FMEA #: 05-6KA-2037-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12313
ITEM: MANIFOLD 4, JETS HEATER CONTROL SWITCH 12

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-2867
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12314X
NASA FMEA #: 05-6KA-2037-2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12314
ITEM: MANIFOLD 4, JETS HEATER CONTROL SWITCH 12

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: ARCS-12315X
NASA FMEA #: 05-6KA-2037-1

SUBSYSTEM: ARCS
MDAC ID: 12315
ITEM: MANIFOLD 4, JETS HEATER CONTROL SWITCH 12

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-2869
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12316X
NASA FMEA #: 05-6KA-2042-1
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12316
ITEM: MANIFOLD 5, JETS HEATER CONTROL SWITCH 13
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-2870
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12317X
NASA FMEA #: 05-6KA-2042-2

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12317
ITEM: MANIFOLD 5, JETS HEATER CONTROL SWITCH 13

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 2/26/88 C-2871
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12318X
NASA FMEA #: 05-6KA-2042-1
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12318
ITEM: MANIFOLD 5, JETS HEATER CONTROL SWITCH 13

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-2872
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12319X
NASA FMEA #: 05-6KA-2042-2
SUBSYSTEM: ARCS
MDAC ID: 12319
ITEM: MANIFOLD 5, JETS HEATER CONTROL SWITCH 13
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-2873
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12320X
NASA FMEA #: 05-6KA-2042-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12320
ITEM: MANIFOLD 5, JETS HEATER CONTROL SWITCH 13

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-2874
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12321X
NASA FMEA #: 05-6KA-2303-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12321
ITEM: SIGNAL CONDITIONER OLI

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-2875
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12322X
NASA FMEA #: 05-6KA-2302-1
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12322
ITEM: SIGNAL CONDITIONER OL2

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-2876
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12323X
NASA FMEA #: 05-6KA-2303-1
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12323
ITEM: SIGNAL CONDITIONER OR1
LEAD ANALYST: D. HARTMAN

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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:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-2877
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12324X
NASA FMEA #: 05-6KA-2302-1
SUBSYSTEM: ARCS
MDAC ID: 12324
ITEM: SIGNAL CONDITIONER OR2
LEAD ANALYST: D. HARTMAN

NASA DATA:
BASELINE [ ]
NEW [ X ]

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-2878
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12325X
NASA FMEA #: NONE
NASA DATA:
BASELINE [ ]
NEW [ ]

SUBSYSTEM: ARCS
MDAC ID: 12325
ITEM: JET DRIVER (PRIMARY-ALL)

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 COVERED BY A GN&C FMEA.

SUBSYSTEM MANAGER STATED THAT THE RJDS WERE PART OF THE GN&C ANALYSIS. IOA RECOMMENDS A REFERENCE TO THE GN&C FMEAS BE MADE IN THE RCS EDP&C FMEAS.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12326X
NASA FMEA #: NONE
SUBSYSTEM: ARCS
MDAC ID: 12326
ITEM: JET DRIVER (PRIMARY-ALL)
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 COVERED BY A GN&C FMEA.

SUBSYSTEM MANAGER STATED THAT THE RJDS WERE PART OF THE GN&C ANALYSIS. IOA RECOMMENDS A REFERENCE TO THE GN&C FMEAS BE MADE IN THE RCS EPD&C FMEAS.

REPORT DATE 2/26/88 C-2880
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12327X
NASA FMEA #: NONE
SUBSYSTEM: ARCS
MDAC ID: 12327
ITEM: JET DRIVER (VERNIER-ALL)

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 COVERED BY A GN&C FMEA.

SUBSYSTEM MANAGER STATED THAT THE RJD'S WERE PART OF THE GN&C ANALYSIS. IOA RECOMMENDS A REFERENCE TO THE GN&C FMEAS BE MADE IN THE RCS EPD&C FMEAS.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12328X
NASA FMEA #: NONE
SUBSYSTEM: ARCS
MDAC ID: 12328
ITEM: JET DRIVER (VERNIER-ALL)
LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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IOA [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]

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

RECOMMENDATIONS: (If different from NASA)

[ ] [ ] [ ] [ ] [ ] [ ]

(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]

INADEQUATE [ ]

REMARKS:
THIS FAILURE COVERED BY A GN&C FMEA.

SUBSYSTEM MANAGER STATED THAT THE RJDS WERE PART OF THE GN&C ANALYSIS. IOA RECOMMENDS A REFERENCE TO THE GN&C FMEAS BE MADE IN THE RCS EPD&C FMEAS.

REPORT DATE 2/26/88 C-2882
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12338X
NASA FMEA #: NONE

SUBSYSTEM: ARCS
MDAC ID: 12338
ITEM: MICROSWITCH

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

(ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
A MICROSWITCH FAILURE CAUSES LOSS OF ACCURATE INDICATION OF THE VALVE POSITION. THIS 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-2883
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12329X
NASA FMEA #: NONE

SUBSYSTEM: ARCS
MDAC ID: 12329
ITEM: DIODE
LEAD ANALYST: D. HARTMAN

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

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

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

REMARKS:
THIS FAILED OPEN DIODE CAUSES INABILITY TO OPEN THE VALVE. REDUNDANCY PROVIDED BY OTHER VALVE. LOSS OF THIS CAUSES INABILITY TO EXPEL PROPELLANTS TO MEET LANDING WEIGHT CONSTRAINTS.

SUBSYSTEM MANAGER STATED THAT THE DIODE WAS PART OF THE HELIUM TANK 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:** ARCS-12330X  
**NASA FMEA #:** NONE  
**SUBSYSTEM:** ARCS  
**MDAC ID:** 12330  
**ITEM:** DIODE  
**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 FAILED SHORT DIODE CAUSES NO EFFECT.

SUBSYSTEM MANAGER STATED THAT THE DIODE WAS PART OF THE HELIUM TANK 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: ARCS-12331X
NASA FMEA #: NONE

SUBSYSTEM: ARCS
MDAC ID: 12331
ITEM: MICROSWITCH

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 FAILED MICROSWITCH 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.

SUBSYSTEM MANAGER STATED THAT THE MICROSWITCH WAS PART OF THE HELIUM TANK 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: ARCS-12332X
NASA FMEA #: NONE

SUBSYSTEM: ARCS
MDAC ID: 12332
ITEM: MICROSWITCH

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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IOA [2/2] [ ] [ ] [ ] [ ] [X]

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

RECOMMENDATIONS: (If different from NASA)

[2/2] [ ] [ ] [ ] [ ] [A] (ADD/DELETE)

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]

INADEQUATE [ ]

REMARKS:

THE MICROSWITCH FAILURE ACROSS THE CLOSE CONTACTS WILL NOT ALLOW THE VALVE TO BE CLOSED. THIS PREVENTS CROSSFEED CAPABILITY THUS LOSS OF MISSION OPERATIONS. INABILITY TO CROSSFEED DURING RTLS/TAL MAY CAUSE INCOMPLETE OMS ABORT DUMP.

SUBSYSTEM MANAGER STATED THAT THE MICROSWITCH WAS PART OF THE TANK ISOLATION VALVE 1/2 ASSEMBLY. FOR COMPLETENESS, IOA RECOMMENDS THIS FAILURE BE INCORPORATED INTO A FMEA.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12333X
NASA FMEA #: NONE
SUBSYSTEM: ARCS
MDAC ID: 12333
ITEM: MICROSWITCH
LEAD ANALYST: D. HARTMAN

NASA DATA:
BASELINE [ ]
NEW [ ]

SUBSYSTEM: ARCS
MDAC ID: 12333
ITEM: MICROSWITCH
LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

[ 3 /1R ] [ P ] [ P ] [ P ] [ ]

* CIL RETENTION RATIONALE: (If applicable)

Adequate [ ]
Inadequate [ ]

REMARKS:
THE MICROSWITCH FAILURE ACROSS THE OPEN CONTACTS PREVENTS VALVE FROM BEING OPENED. HARDWARE REDUNDANCY PROVIDED. LOSS OF ALL REDUNDANCY CAUSES LOSS OF JETS REQUIRED TO EXPEL PROPELLANTS TO MEET LANDING WEIGHT CONSTRAINTS.

SUBSYSTEM MANAGER STATED THAT THE MICROSWITCH WAS PART OF THE TANK ISOLATION VALVE 3/4/5 ASSEMBLY. FOR COMPLETENESS, IOA RECOMMENDS THIS FAILURE BE INCORPORATED INTO A FMEA.

REPORT DATE 2/26/88 C-2888
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12334X
NASA FMEA #: NONE
SUBSYSTEM: ARCS
MDAC ID: 12334
ITEM: MICROSCHWITCH
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:
THE MICROSCHWITCH FAILURE ACROSS THE CLOSE CONTACTS PREVENTS VALVE FROM BEING CLOSED. THIS PREVENTS ISOLATION OF A THRUSTER LEAK.

SUBSYSTEM MANAGER STATED THAT THE MICROSCHWITCH WAS PART OF THE CROSSFEED ISOLATION VALVE 3/4/5 ASSEMBLY. FOR COMPLETENESS, IOA RECOMMENDS THIS FAILURE BE INCORPORATED INTO A FMEA.

REPORT DATE 2/26/88 C-2889
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12335X
NASA FMEA #: NONE

SUBSYSTEM: ARCS
MDAC ID: 12335
ITEM: MICROSWITCH

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS: (If different from NASA)

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

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

REMARKS:
THE MICROSWITCH FAILURE ACROSS THE CLOSE CONTACTS PREVENTS VALVE FROM BEING CLOSED. THIS PREVENTS ISOLATION OF A THRUSTER LEAK.

SUBSYSTEM MANAGER STATED THAT THE MICROSWITCH WAS PART OF THE CROSSFEED ISOLATION VALVE 3/4/5 ASSEMBLY. FOR COMPLETENESS, IOA RECOMMENDS THIS FAILURE BE INCORPORATED INTO A FMEA.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12336X
NASA FMEA #: NONE
SUBSYSTEM: ARCS
MDAC ID: 12336
ITEM: MICROSWITCH
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:
A MICROSWITCH FAILURE CAUSES LOSS OF ACCURATE INDICATION OF THE VALVE POSITION. THIS 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-2891
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12337X
NASA FMEA #: NONE

SUBSYSTEM: ARCS
MDAC ID: 12337
ITEM: MICROSWITCH

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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

RECOMMENDATIONS: (If different from NASA)

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

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

REMARKS:
A MICROSWITCH FAILURE CAUSES LOSS OF ACCURATE INDICATION OF THE VALVE POSITION. THIS MAY LEAD TO FALSELY FAILING THE VALVE CLOSED, POSSIBILY EFFECTING MISSION OPERATIONS.

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

REPORT DATE 2/26/88 C-2892
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12339X
NASA FMEA #: NONE
SUBSYSTEM: ARCS
MDAC ID: 12339
ITEM: MICROSWITCH
LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
A MICROSWITCH FAILURE CAUSES LOSS OF ACCURATE INDICATION OF THE VALVE POSITION. THIS 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-2893
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12340X
NASA FMEA #: 05-6KA-2252-3
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12340
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: ARCS-12341X
NASA FMEA #: 05-6KA-2252-3

SUBSYSTEM: ARCS
MDAC ID: 12341
ITEM: DIODE
LEAD ANALYST: D. HARTMAN

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| IOA [ 3 /1R ]  | [ P ] | [ F ] | [ P ] | [ X ] |
| COMPARE [ / ] | [ ] | [ ] | [ ] | [ ] |

RECOMMENDATIONS: (If different from NASA)

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

* CIL RETENTION RATIONALE: (If applicable)

| ADEQUATE [ ] |
| INADEQUATE [ ] |

REMARKS:
NO DIFFERENCES.

REPORT DATE 2/26/88 C-2895
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12342X
NASA FMEA #: 05-6KA-2252-3

SUBSYSTEM: ARCS
MDAC ID: 12342
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-2896
**APPENDIX C**  
**ASSESSMENT WORKSHEET**

**ASSESSMENT DATE:** 1/29/88  
**ASSESSMENT ID:** ARCS-12343X  
**NASA FMEA #:** 05-6KA-2252-3  
**SUBSYSTEM:** ARCS  
**MDAC ID:** 12343  
**ITEM:** DIODE  
**LEAD ANALYST:** D. HARTMAN

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

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

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

(ADD/DELETE)

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

ADEQUATE [ ]  
INADEQUATE [ ]

**REMARKS:**

NO DIFFERENCES.

REPORT DATE 2/26/88 C-2897
ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12344X
NASA FMEA #: 05-6KA-2258-3

SUBSYSTEM: ARCS
MDAC ID: 12344
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 CAPABILITY TO OPEN THE VALVE. THIS PREVENTS VERNIER OPERATION THUS LOSS OF MISSION OBJECTIVES

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: ARCS-12345X
NASA FMEA #: 05-6KA-2260-1
SUBSYSTEM: ARCS
MDAC ID: 12345
ITEM: DIODE
LEAD ANALYST: D. HARTMAN

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ASSESSMENT: CRITICALITY FLIGHT HDW/FUNC

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| IOA  | [ 3 /1R ] | [ P ] | [ F ] | [ P ] | [ X ] |

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-2899
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12346X
NASA FMEA #: 05-6KA-2260-1
SUBSYSTEM: ARCS
MDAC ID: 12346
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-2900
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12347X
NASA FMEA #: 05-6KA-2265-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12347
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-2901
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12348X
NASA FMEA #: 05-6KA-2265-1
SUBSYSTEM: ARCS
MDAC ID: 12348
ITEM: DIODE
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: ARCS-12349X
NASA FMEA #: 05-6KA-2260-1
SUBSYSTEM: ARCS
MDAC ID: 12349
ITEM: DIODE
LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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IOA [ 3 /1R ] [ P ] [ F ] [ P ] [ X ]
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: ARCS-12350X
NASA FMEA #: 05-6KA-2260-1

SUBSYSTEM: ARCS
MDAC ID: 12350
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)

(ADD/DELETE)

Adequate [ ]

Inadequate [ ]

REMARKS:

NO DIFFERENCES.

REPORT DATE 2/26/88 C-2904
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12351X
NASA FMEA #: 05-6KA-2265-1

SUBSYSTEM: ARCS
MDAC ID: 12351
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.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12352X
NASA FMEA #: 05-6KA-2265-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12352
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:
NO DIFFERENCES.

REPORT DATE 2/26/88  C-2906
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12353X
NASA FMEA #: 05-6KA-2260-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12353
ITEM: DIODE

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.

REPORT DATE 2/26/88 C-2907
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12354X
NASA FMEA #: 05-6KA-2260-1

SUBSYSTEM: ARCS
MDAC ID: 12354
ITEM: DIODE

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-2908
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12355X
NASA FMEA #: 05-6KA-2265-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12355
ITEM: DIODE

LEAD ANALYST: D. HARTMAN

ASSESSMENT:

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RECOMMENDATIONS:  (If different from NASA)

[ / ] [ ] [ ] [ ] [ ]

* CIL RETENTION RATIONALE: (If applicable)

ADEQUATE [ ]
INADEQUATE [ ]

REMARKS:
NO DIFFERENCES.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12356X
NASA FMEA #: 05-6KA-2260-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12356
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-2910
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12357X
NASA FMEA #: 05-6KA-2260-1

SUBSYSTEM: ARCS
MDAC ID: 12357
ITEM: DIODE
LEAD ANALYST: D. HARTMAN

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RECOMMENDATIONS: (If different from NASA)

* CIL RETENTION RATIONALE: (If applicable)

REMARKS:
NO DIFFERENCES.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12358X
NASA FMEA #: 05-6KA-2260-1
NASA DATA: BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12358
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-2912
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12359X
NASA FMEA #: 05-6KA-2265-1

SUBSYSTEM: ARCS
MDAC ID: 12359
ITEM: DIODE
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.
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12360X
NASA FMEA #: 05-6KA-2265-1
NASA DATA: BASELINE [ ] NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12360
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-2914
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12361X
NASA FMEA #: 05-6KA-2270-1

NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12361
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-2915
APPENDIX C
ASSESSMENT WORKSHEET

ASSESSMENT DATE: 1/29/88
ASSESSMENT ID: ARCS-12362X
NASA FMEA #: 05-6KA-2270-1
NASA DATA:
BASELINE [ ]
NEW [ X ]

SUBSYSTEM: ARCS
MDAC ID: 12362
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-2916
APPENDIX D

SUMMARY OF RCS ASSESSMENT RECOMMENDED CRITICAL ITEMS LIST

D-1
### APPENDIX D

**IOA RECOMMENDED CRITICAL ITEMS - FORWARD HARDWARE**

<table>
<thead>
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<th>NASA PMEA NUMBER</th>
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<th>ITEM</th>
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<td>03-2F-101010-1</td>
<td>FRCS-100</td>
<td>HELIUM STORAGE TANK</td>
<td>STRUCTURAL FAILURE (RUPTURE OR LEAK)</td>
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<tr>
<td>03-2F-101013-1</td>
<td>FRCS-105</td>
<td>HE LINE, ALL EXCEPT ISOL VLVS TO PRESS REGULATOR</td>
<td>STRUCTURAL FAILURE (RUPTURE OR LEAK)</td>
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<td>FRCS-107</td>
<td>HE LINE, ISOL VLVS TO PRESS REGULATOR</td>
<td>STRUCTURAL FAILURE (RUPTURE OR LEAK)</td>
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<tr>
<td>03-2F-101020-3</td>
<td>FRCS-103</td>
<td>HE ISOL A &amp; B VLVS</td>
<td>FAILS TO CLOSE, LEAKS INTERNALLY</td>
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<td>03-2F-101020-4</td>
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<tr>
<td>03-2F-101030-1</td>
<td>FRCS-1004X</td>
<td>HE PRESS REGULATOR ASSEMBLY</td>
<td>INTERNAL LEAKAGE</td>
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<td>FRCS-111</td>
<td>HE PRESS REGULATOR ASSEMBLY</td>
<td>FAILS OPEN, REGULATES AT HIGHER PRESSURE</td>
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<td>FRCS-112</td>
<td>HE PRESS REGULATOR ASSEMBLY</td>
<td>FAILS CLOSED</td>
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<td>03-2F-101060-1</td>
<td>FRCS-10001X</td>
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<td>EXTERNAL LEAKAGE</td>
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<td>03-2F-101060-2</td>
<td>FRCS-10007X</td>
<td>PRESSURE RELIEF ASSEMBLY</td>
<td>VALVE FAILS OPEN, OR LEAKS INTERNALLY</td>
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<td>03-2F-101060-3</td>
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<td>PRESSURE RELIEF ASSEMBLY</td>
<td>BURST DISK FAILURE, POPPET VALVE FAILS</td>
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<td>03-2F-101060-5</td>
<td>FRCS-140A</td>
<td>PRESSURE RELIEF ASSEMBLY</td>
<td>BURST DISK RUPTURE (LOW PRESSURE), OR LI</td>
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<td>03-2F-101070-1</td>
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<td>HELIUM FILLED COUPLING</td>
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<td>MANIFOLD 1, GROUND PURGE/DRAIN COUPLING</td>
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<td>03-2F-101091-1</td>
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<td>HIGH PRESSURE HELIUM TEST PORT COUPLINGS A &amp; B</td>
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<td>HE PRESS REGULATOR OUTLET TEST PORT COUPLING</td>
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<td>QUAD CHECK VALVE TEST PORT COUPLINGS A &amp; B</td>
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<td>RELIEF VALVE TEST PORT COUPLING</td>
<td>PRESS RELIEF VALV TEST PORT FAILS</td>
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<td>03-2F-101095-1</td>
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<td>QUAD CHECK VALVE ASSEMBLY</td>
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<td>PROP TK VENT AND REGULATOR CHECKOUT COUPLING</td>
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<tr>
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<tr>
<td>03-2F-102170-1</td>
<td>FRCS-174</td>
<td>MANIFOLD 5, ISOL VLV</td>
<td>FAILS TO OPEN</td>
</tr>
<tr>
<td>03-2F-102170-3</td>
<td>FRCS-177A</td>
<td>MANIFOLD ISOL VLVS</td>
<td>LEAKS EXTERNALLY</td>
</tr>
<tr>
<td>03-2F-111110-1</td>
<td>FRCS-123</td>
<td>PROPellant Tank</td>
<td>STRUCTURAL FAILURE (RUPTURE OR LEAK)</td>
</tr>
<tr>
<td>03-2F-111110-3</td>
<td>FRCS-128</td>
<td>PROP CHANNEL SCREENS</td>
<td>STRUCTURAL FAILURE (RUPTURE)</td>
</tr>
<tr>
<td>03-2F-121308-1</td>
<td>FRCS-179</td>
<td>JET ALIGNMENT BELLows, PRIMARY, ALL AXES</td>
<td>STRUCTURAL FAILURE (RUPTURE OR LEAK)</td>
</tr>
<tr>
<td>03-2F-121310-1</td>
<td>FRCS-10116X</td>
<td>THRUSTER BIPROP SOLENOID VALVE, PRIMARY, ALL AXES</td>
<td>FAILS ON, PREMAature OPERATION</td>
</tr>
<tr>
<td>03-2F-121310-2</td>
<td>FRCS-185</td>
<td>THRUSTER BIPROP SOLENOID VALVE, PRIMARY, -X AXIS</td>
<td>LEAKS INTERNALLY, ONE PROPELLANT</td>
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<tr>
<td>03-2F-121310-3</td>
<td>FRCS-10015X</td>
<td>THRUSTER BIPROP SOLENOID VALVE, PRIMARY, +Z AXIS</td>
<td>FAILS CLOSED, FAILS OFF</td>
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<tr>
<td>03-2F-121312-1</td>
<td>FRCS-197</td>
<td>THRUSTER CHAMBER OR NOZZLE, PRIMARY, ALL AXES</td>
<td>FAILS TO OPEN</td>
</tr>
<tr>
<td>03-2F-121313-1</td>
<td>FRCS-197A</td>
<td>THRUSTER CHAMBER OR NOZZLE, PRIMARY, ALL AXES</td>
<td>FAILS TO OPEN</td>
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<td>03-2F-131310-1</td>
<td>FRCS-193</td>
<td>THRUSTER BIPROP SOLENOID VALVE, VERNIERS, ALL AXES</td>
<td>THRUSTER CHAMBER OR NOZZLE BURNTHROUGH</td>
</tr>
<tr>
<td>03-2F-131310-2</td>
<td>FRCS-192</td>
<td>THRUSTER BIPROP SOLENOID VALVE, VERNIERS, ALL AXES</td>
<td>FAILS TO OPEN</td>
</tr>
<tr>
<td>03-2F-131310-3</td>
<td>FRCS-195</td>
<td>THRUSTER BIPROP SOLENOID VALVE, VERNIERS, ALL AXES</td>
<td>LEAKS INTERNALLY, ONE PROPELLANT</td>
</tr>
<tr>
<td>03-2F-131310-4</td>
<td>FRCS-198</td>
<td>THRUSTER CHAMBER OR NOZZLE, VERNIER, ALL AXES</td>
<td>THRUSTER CHAMBER OR NOZZLE BURNTHROUGH</td>
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<tr>
<td>NONE</td>
<td>FRCS-10002X</td>
<td>HE ISOL VLV</td>
<td>RESTRICTED FLOW</td>
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<td>FRCS-10003X</td>
<td>HE ISOL VLV</td>
<td>EXTERNAL LEAKAGE</td>
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<td>FRCS-10006X</td>
<td>QUAD CHECK VALVE ASSEMBLY</td>
<td>EXTERNAL LEAKAGE</td>
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<td>FRCS-10008X</td>
<td>PRESSURE RELIEF ASSEMBLY</td>
<td>RESTRICTED FLOW</td>
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<td>FRCS-10014X</td>
<td>MANIFOLD 5 ISOLATION VALVE</td>
<td>RELIEF DEVICE FAILS TO RELIEVE</td>
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<td>FRCS-10018X</td>
<td>THRUSTER INJECTOR HEAD ASSEMBLY, PRIMARY</td>
<td>STRUCTURAL FAILURE, BURN-THROUGH</td>
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<tr>
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<td>FRCS-10019X</td>
<td>THRUSTER INJECTOR HEAD ASSEMBLY, PRIMARY</td>
<td>DELAYED OPERATION, VALVE OPENS SLOWLY, LATE</td>
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<td>FRCS-10042X</td>
<td>THRUSTER BIPROP SOLENOID VALVE, PRIMARY, ALL AXES</td>
<td>FAILS TO CLOSE, LEAKS INTERNALLY</td>
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<tr>
<td></td>
<td>FRCS-103A</td>
<td>HE ISOL A &amp; B VLVS</td>
<td>RESTRICTED FLOW</td>
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<tr>
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<td>FRCS-113</td>
<td>HE PRESS REGULATOR ASSEMBLY</td>
<td>LEAKS EXTERNALLY</td>
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<td>FRCS-114</td>
<td>HE PRESS REGULATOR ASSEMBLY</td>
<td>LEAKS EXTERNALLY</td>
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<td>FRCS-115</td>
<td>HE PRESS REGULATOR PRIMARY SENSING PORT</td>
<td>BURST DISK RUPTURE (LOW PRESSURE), OR LEAKS</td>
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<td>FRCS-140</td>
<td>PRESSURE RELIEF ASSEMBLY</td>
<td>LEAKS EXTERNALLY</td>
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<td>FRCS-146</td>
<td>GROUND MANUAL ISOLATION VALVE</td>
<td>RESTRICTED FLOW</td>
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<td>FRCS-178</td>
<td>MANIFOLD ISOL VLVS</td>
<td>LEAKS EXTERNALLY, ONE PROPELLANT</td>
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<td>FRCS-182</td>
<td>THRUSTER BIPROP SOLENOID VALVE, PRIMARY, ALL AXES</td>
<td>RESTRICTED FLOW</td>
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<tr>
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<td>FRCS-183</td>
<td>THRUSTER BIPROP SOLENOID VALVE, PRIMARY, ALL AXES</td>
<td>LEAKS EXTERNALLY, ONE PROPELLANT</td>
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<td>FRCS-194</td>
<td>THRUSTER BIPROP SOLENOID VALVE, VERNIERS, ALL AXES</td>
<td>RESTRICTED FLOW</td>
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<td>NASA FMEA NUMBER</td>
<td>ASSESSMENT ID</td>
<td>ITEM</td>
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<tr>
<td>03-2A-201010-1</td>
<td>ARCS-199</td>
<td>HELIUM STORAGE TANK</td>
<td>STRUCTURAL FAILURE (RUPTURE OR LEAK)</td>
</tr>
<tr>
<td>03-2A-201010-1</td>
<td>ARCS-204</td>
<td>HE LINE, ALL EXCEPT ISOL VLV TO PRESS REGULATOR</td>
<td>STRUCTURAL FAILURE (RUPTURE OR LEAK)</td>
</tr>
<tr>
<td>03-2A-201010-1</td>
<td>ARCS-206</td>
<td>HE LINE, ISOL VLV TO PRESS REGULATOR</td>
<td>STRUCTURAL FAILURE (RUPTURE OR LEAK)</td>
</tr>
<tr>
<td>03-2A-201020-1</td>
<td>ARCS-203</td>
<td>HE ISOL A &amp; B VLVS</td>
<td>FAILS TO OPEN</td>
</tr>
<tr>
<td>03-2A-201020-2</td>
<td>ARCS-202</td>
<td>HE ISOL A &amp; B VLVS</td>
<td>FAILS TO CLOSE, LEAKS INTERNALLY</td>
</tr>
<tr>
<td>03-2A-201030-1</td>
<td>ARCS-10022X</td>
<td>HE PRESS REGULATOR ASSEMBLY</td>
<td>INTERNAL LEAKAGE</td>
</tr>
<tr>
<td>03-2A-201030-2</td>
<td>ARCS-210</td>
<td>HELIUM PRESSURE REGULATOR ASSEMBLY</td>
<td>FAILS OPEN, REGulates AT HIGH PRESSURE</td>
</tr>
<tr>
<td>03-2A-201030-2</td>
<td>ARCS-211</td>
<td>HELIUM PRESSURE REGULATOR ASSEMBLY</td>
<td>FAILS CLOSED</td>
</tr>
<tr>
<td>03-2A-201030-2</td>
<td>ARCS-212</td>
<td>HELIUM PRESSURE REGULATOR ASSEMBLY</td>
<td>RESTRICTED FLOW</td>
</tr>
<tr>
<td>03-2A-201030-2</td>
<td>ARCS-212</td>
<td>HELIUM PRESSURE REGULATOR ASSEMBLY</td>
<td>EXTERNAL LEAKAGE</td>
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<tr>
<td>03-2A-201030-2</td>
<td>ARCS-212</td>
<td>HELIUM PRESSURE REGULATOR ASSEMBLY</td>
<td>VALVE FAILS OPEN, OR LEAKS INTERNALLY</td>
</tr>
<tr>
<td>03-2A-201030-2</td>
<td>ARCS-212</td>
<td>HELIUM PRESSURE REGULATOR ASSEMBLY</td>
<td>BURST DISK FAILS, POPPET VALVE FAILS</td>
</tr>
<tr>
<td>03-2A-201030-2</td>
<td>ARCS-212</td>
<td>HELIUM PRESSURE REGULATOR ASSEMBLY</td>
<td>BURST DISK RUPTURES (LOW PRESSURE), LEAKS</td>
</tr>
<tr>
<td>03-2A-201080-1</td>
<td>ARCS-254</td>
<td>MANIFOLD 1/2 GROUND PURGE COUPLING</td>
<td>FAILS TO CLOSE, LEAKS EXTERNALLY</td>
</tr>
<tr>
<td>03-2A-201080-1</td>
<td>ARCS-256</td>
<td>MANIFOLD 3/4 GROUND PURGE COUPLING</td>
<td>FAILS TO CLOSE, LEAKS EXTERNALLY</td>
</tr>
<tr>
<td>03-2A-201080-1</td>
<td>ARCS-268</td>
<td>MANIFOLD 1, GROUND PURGE/DRAIN COUPLING</td>
<td>FAILS TO CLOSE, LEAKS EXTERNALLY</td>
</tr>
<tr>
<td>03-2A-201080-1</td>
<td>ARCS-272</td>
<td>MANIFOLD 2, GROUND PURGE/DRAIN COUPLING</td>
<td>FAILS TO CLOSE, LEAKS EXTERNALLY</td>
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<tr>
<td>03-2A-201080-1</td>
<td>ARCS-276</td>
<td>MANIFOLD 3, GROUND PURGE/DRAIN COUPLING</td>
<td>FAILS TO CLOSE, LEAKS EXTERNALLY</td>
</tr>
<tr>
<td>03-2A-201080-1</td>
<td>ARCS-280</td>
<td>MANIFOLD 4, GROUND PURGE/DRAIN COUPLING</td>
<td>FAILS TO CLOSE, LEAKS EXTERNALLY</td>
</tr>
<tr>
<td>03-2A-201080-1</td>
<td>ARCS-284</td>
<td>MANIFOLD 5, GROUND PURGE/DRAIN COUPLING</td>
<td>FAILS TO CLOSE, LEAKS EXTERNALLY</td>
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<tr>
<td>03-2A-201090-1</td>
<td>ARCS-229</td>
<td>PROP TK UPPER COMPARTMENT CHANNEL CHECKOUT COUPLING</td>
<td>FAILS TO CLOSE, LEAKS EXTERNALLY</td>
</tr>
<tr>
<td>03-2A-201090-1</td>
<td>ARCS-233</td>
<td>PROP TK LOWER COMPARTMENT CHECKOUT COUPLING</td>
<td>FAILS TO CLOSE, LEAKS EXTERNALLY</td>
</tr>
<tr>
<td>03-2A-201090-1</td>
<td>ARCS-235</td>
<td>PROP TK PLENUM SCREEN CHECKOUT COUPLING</td>
<td>FAILS TO CLOSE, LEAKS EXTERNALLY</td>
</tr>
<tr>
<td>03-2A-201091-1</td>
<td>ARCS-208</td>
<td>HIGH PRESSURE HELIUM TEST PORT COUPLINGS A &amp; B</td>
<td>FAILS TO CLOSE, LEAKS</td>
</tr>
<tr>
<td>03-2A-201091-1</td>
<td>ARCS-216</td>
<td>HELIUM PRESSURE REGULATOR OUTLET TEST PORT COUPLING</td>
<td>FAILS TO CLOSE, LEAKS</td>
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<tr>
<td>03-2A-201091-1</td>
<td>ARCS-220</td>
<td>QUAD CHECK VALVE TEST PORT COUPLINGS A &amp; B</td>
<td>FAILS TO CLOSE, LEAKS</td>
</tr>
<tr>
<td>03-2A-201091-1</td>
<td>ARCS-243A</td>
<td>RELIEF VALVE TEST PORT COUPLING</td>
<td>PRESS RELIEF VALVE TEST PORT FAILS</td>
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<tr>
<td>03-2A-201095-1</td>
<td>ARCS-218</td>
<td>QUAD CHECK VALVE ASSEMBLY</td>
<td>FAILS TO CLOSE, LEAKS (REVERSE FLOW)</td>
</tr>
<tr>
<td>03-2A-201095-2</td>
<td>ARCS-219</td>
<td>QUAD CHECK VALVE ASSEMBLY</td>
<td>FAILS TO OPEN</td>
</tr>
<tr>
<td>03-2A-201095-3</td>
<td>ARCS-10023X</td>
<td>QUAD CHECK VALVE ASSEMBLY</td>
<td>RESTRICTED FLOW</td>
</tr>
<tr>
<td>03-2A-202108-1</td>
<td>ARCS-223</td>
<td>PROP LINES, ALL</td>
<td>STRUCTURAL FAILURE (RUPTURE OR LEAK)</td>
</tr>
<tr>
<td>03-2A-202108-1</td>
<td>ARCS-265</td>
<td>CROSSFEED LINES</td>
<td>STRUCTURAL FAILURE (RUPTURE OR LEAK)</td>
</tr>
<tr>
<td>03-2A-202110-1</td>
<td>ARCS-251</td>
<td>PROP TANK ISOL VLV 1/2</td>
<td>FAILS TO OPEN</td>
</tr>
<tr>
<td>03-2A-202110-2</td>
<td>ARCS-10029X</td>
<td>PROP TANK ISOL VLV 1/2</td>
<td>RELIEF DEVICE FAILS TO RELIEVE</td>
</tr>
<tr>
<td>03-2A-202110-3</td>
<td>ARCS-250</td>
<td>PROP TANK ISOL VLV 1/2</td>
<td>FAILS TO CLOSE, LEAKS INTERNALLY</td>
</tr>
<tr>
<td>03-2A-202111-2</td>
<td>ARCS-252</td>
<td>PROP TANK ISOL VLV 3/4/5 A &amp; B</td>
<td>FAILS TO CLOSE, LEAKS INTERNALLY</td>
</tr>
<tr>
<td>03-2A-202111-2</td>
<td>ARCS-256</td>
<td>RCS CROSSFEED VLV 1/2</td>
<td>FAILS TO OPEN</td>
</tr>
<tr>
<td>03-2A-202111-2</td>
<td>ARCS-263</td>
<td>RCS CROSSFEED VLV 3/4/5</td>
<td>FAILS TO OPEN</td>
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<tr>
<td>03-2A-202112-1</td>
<td>ARCS-248</td>
<td>PROP TANK ISOL VLVS 1/2 &amp; 3/4/5</td>
<td>LEAKS EXTERNALLY</td>
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<tr>
<td>03-2A-202112-1</td>
<td>ARCS-259</td>
<td>RCS CROSSFEED VLV 1/2 OR 3/4/5</td>
<td>LEAKS EXTERNALLY</td>
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<tr>
<td>03-2A-202112-1</td>
<td>ARCS-286</td>
<td>MANIFOLD ISOL VLVS</td>
<td>LEAKS EXTERNALLY</td>
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<tr>
<td>03-2A-202120-2</td>
<td>ARCS-10033X</td>
<td>MANIFOLD 1-4 ISOL VALVES</td>
<td>RELIEF DEVICE FAILS CLOSED</td>
</tr>
<tr>
<td>03-2A-202120-3</td>
<td>ARCS-267</td>
<td>MANIFOLD 1, ISOL VLV</td>
<td>FAILS TO OPEN</td>
</tr>
<tr>
<td>03-2A-202120-3</td>
<td>ARCS-271</td>
<td>MANIFOLD 2, ISOL VLV</td>
<td>FAILS TO OPEN</td>
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<tr>
<td>03-2A-202120-3</td>
<td>ARCS-275</td>
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<td>ARCS-279</td>
<td>MANIFOLD 4, ISOL VLV</td>
<td>FAILS TO OPEN</td>
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<tr>
<td>03-2A-202140-1</td>
<td>ARCS-283</td>
<td>MANIFOLD 5, ISOL VLV</td>
<td>RELIEF DEVICE FAILS CLOSED</td>
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<tr>
<td>03-2A-202140-3</td>
<td>ARCS-10036X</td>
<td>VERNIER MANIFOLD ISOL VALVE</td>
<td>LEAKS EXTERNALLY</td>
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<td>ARCS-286A</td>
<td>MANIFOLD ISOL VLV</td>
<td>LEAKS EXTERNALLY</td>
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<td>03-2A-202150-1</td>
<td>ARCS-225</td>
<td>PROP FILL/VENT COUPLING</td>
<td>FAILS TO CLOSE, LEAKS EXTERNALLY</td>
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<tr>
<td>03-2A-211110-1</td>
<td>ARCS-222</td>
<td>PROPELLANT TANK</td>
<td>FAILS TO CLOSE, LEAKS EXTERNALLY</td>
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<tr>
<td>03-2A-211110-2</td>
<td>ARCS-227</td>
<td>PROP CHANNEL SCREENS</td>
<td>FAILS TO CLOSE, LEAKS EXTERNALLY</td>
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<tr>
<td>03-2A-211120-1</td>
<td>ARCS-239</td>
<td>GIMBAL BELLOWS</td>
<td>STRUCTURAL FAILURE (RUPTURE)</td>
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<tr>
<td>03-2A-221308-1</td>
<td>ARCS-288</td>
<td>JET ALIGNMENT BELLOWS, PRIMARY, ALL AXES</td>
<td>STRUCTURAL FAILURE (RUPTURE)</td>
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<tr>
<td>03-2A-221310-1</td>
<td>ARCS-290</td>
<td>THRUSTER BIPROP SOLENOID VLVS, PRIMARY, ALL AXES</td>
<td>FAILS TO OPEN</td>
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<td>ARCS-294</td>
<td>THRUSTER BIPROP SOLENOID VLVS, PRIMARY, +X AXIS</td>
<td>LEAKS INTERNALLY, ONE PROPELLANT</td>
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<td>ARCS-296</td>
<td>THRUSTER BIPROP SOLENOID VLVS, PRIMARY, Y AXIS</td>
<td>LEAKS INTERNALLY, ONE PROPELLANT</td>
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<td>ARCS-298</td>
<td>THRUSTER BIPROP SOLENOID VLVS, PRIMARY, Z AXIS</td>
<td>LEAKS INTERNALLY, ONE PROPELLANT</td>
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<tr>
<td>03-2A-221310-3</td>
<td>ARCS-10138X</td>
<td>THRUSTER BIPROP SOLENOID VALVE, PRIMARY, ALL AXES</td>
<td>PREMATURE OPERATION, FAILS ON</td>
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<tr>
<td>03-2A-221310-4</td>
<td>ARCS-293</td>
<td>THRUSTER BIPROP SOLENOID VLVS, PRIMARY, +X AXIS</td>
<td>FAILS TO OPEN</td>
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<td>ARCS-295</td>
<td>THRUSTER BIPROP SOLENOID VLVS, PRIMARY, Y AXIS</td>
<td>FAILS TO OPEN</td>
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<td>ARCS-297</td>
<td>THRUSTER BIPROP SOLENOID VLVS, PRIMARY, Z AXIS</td>
<td>FAILS TO OPEN</td>
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<tr>
<td>03-2A-221312-1</td>
<td>ARCS-306</td>
<td>THRUSTER CHAMBER OR NOZZLE, PRIMARY, ALL AXES</td>
<td>THRUSTER CHAMBER OR NOZZLE BURNTHROUGH</td>
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<tr>
<td>03-2A-221313-1</td>
<td>ARCS-306A</td>
<td>THRUSTER CHAMBER OR NOZZLE, PRIMARY, ALL AXES</td>
<td>THRUSTER CHAMBER OR NOZZLE BURNTHROUGH</td>
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<tr>
<td>03-2A-231310-1</td>
<td>ARCS-302</td>
<td>THRUSTER BIPROP SOLENOID VLVS, VERNIERS, ALL AXES</td>
<td>FAILS TO OPEN</td>
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<td>ARCS-305</td>
<td>THRUSTER BIPROP SOLENOID VLVS, VERNIERS, ALL AXES</td>
<td>RESTRICTED FLOW</td>
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<tr>
<td>03-2A-231310-2</td>
<td>ARCS-307</td>
<td>THRUSTER CHAMBER OR NOZZLE, PRIMARY, ALL AXES</td>
<td>THRUSTER CHAMBER OR NOZZLE BURNTHROUGH</td>
</tr>
<tr>
<td>03-2A-231310-3</td>
<td>ARCS-304</td>
<td>THRUSTER BIPROP SOLENOID VLVS, VERNIERS, ALL AXES</td>
<td>FAILS TO CLOSE</td>
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<tr>
<td></td>
<td>ARCS-304</td>
<td>THRUSTER BIPROP SOLENOID VLVS, VERNIERS, ALL AXES</td>
<td>LEAKS INTERNALLY, ONE PROPELLANT</td>
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<td>ARCS-10020X</td>
<td>HE ISOL VLV</td>
<td>RESTRICTED FLOW</td>
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<td>ARCS-10021X</td>
<td>HE ISOL VLV</td>
<td>EXTERNAL LEAKAGE</td>
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<td>QUAD CHECK VALVE ASSEMBLY</td>
<td>EXTERNAL LEAKAGE</td>
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## APPENDIX D

### IQA RECOMMENDED CRITICAL ITEMS - FORWARD EP&D&c

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**Note:** The table above lists critical items identified in the IQA assessment, focusing on forward equipment and control (EP&D&C) systems. Each entry includes the NASA FMEA number, assessment ID, item description, and the failure mode associated with each item.
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### APPENDIX D
**IOA Recommended Critical Items - AFT EP&D**

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