

FAILURE MODE EFFECTS ANALYSIS/CRITICAL ITEMS LIST

FMEA NUMBER: PRD-FM05

ORIGINATOR: JSC

PROJECT: GFE - SHUTTLE

PART NAME: Main Shaft Assy

PART NUMBER: 10163-2004-02

QUANTITY: 1

LRU PART NUMBER: 10163-10063-03

LRU PART NAME: PRD

SYSTEM: EVA Tools

DRAWING:

SUBSYSTEM: PRD

EFFECTIVITY: STS-70

CRITICAL ITEM? NO

CRITICALITY:

CRITICALITY CATEGORY: 1R/3

REUNDANCY SCREEN:

A - PASS

B - PASS

C - PASS

FUNCTION: Anchors output reel assembly to PRD.

FAILURE MODE: Latch jams under tension.

CAUSE: Contamination.

FAILURE DETECTION: N/A

REMAINING PATHS: Spare PRD

EFFECT/ MISSION PHASE: EVA

CORRECTIVE ACTION:

Use spare PRD to relieve tension, and then remove failed PRD.

-FAILURE EFFECTS-

END ITEM: Unable to extend or retract strap.

INTERFACE: Unable to securely restrain RMS, payload or PLB doors.

MISSION: None.

CREW/VEHICLE : Possible vehicle damage from unsecured payload. Loss of vehicle if PLB doors can't be closed.

HAZARD INFORMATION:HAZARD: YES ___ NO X

HAZARD ORGANIZATION CODE:

HAZARD NUMBER:

TIME TO EFFECT: Immediate

TIME TO DETECT: Immediate

TIME TO CORRECT: Minutes

FAILURE MODE EFFECTS ANALYSIS/CRITICAL ITEMS LIST

FMEA NUMBER: PRD-FM03

ORIGINATOR: JSC

PROJECT: GFE - SHUTTLE

PART NAME: Main Shaft Assy

PART NUMBER: 10163-20004-02

QUANTITY: 1

LRU PART NUMBER: 10163-10063-03

LRU PART NAME: PRD

SYSTEM: EVA Tools

DRAWING:

SUBSYSTEM: PRD

EFFECTIVITY: STS-70

FAILURE DETECTION/FLIGHT: Visual, tactile

REMARKS

-RATIONALE FOR ACCEPTABILITY-

(A) DESIGN: N/A

(B) TEST: N/A

(C) INSPECTION: N/A

(D) FAILURE HISTORY: N/A

(E) OPERATIONAL USE N/A

(F) MAINTAINABILITY: N/A

PREPARED BY: C. L. Hartman

REVISION:

DATE: 05/24/95

WAIVER NUMBER:
