

FAILURE MODES AND EFFECTS ANALYSIS

ASSY NOMENCLATURE: RMS IFM DBC KIT
 ASSY P/N: SED39108106-304

SYSTEM: REMOTE MANIPULATOR SYSTEM
 SUBSYSTEM: RMS IN-FLIGHT MAINTENANCE DBC KIT

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NAME AND DRAWING	FUNCTION	FAILURE MODE AND CAUSE	MISSION PHASE	FAILURE EFFECT ON			FAILURE DETECTION FLIGHT GROUND	CORRECTIVE ACTION TIME AVAILABLE/ TIME REQUIRED	CRIT. H/F	HAZARDS/REMARK
				END ITEM	MISSION	CREW/VEHICLE				
SAFING INHIBIT SWITCH (SS) (continued)		<p>7090 Mode: Short to case</p> <p>Cause: • structural failure • contamination • mechanical shock • vibration</p>	Orbit	<p>Fuse opens due to excessive current resulting in loss of 28 V dc to the IFM kit - loss of IFM kit direct drive, EE functions and safing inhibit.</p> <p><u>Worst Case</u> Subsequent failures may result in inability to release payload or cradle arm.</p> <p>Redundant Paths Remaining Backup mode. RMS Jettison</p>		<p>Subsequent failures may result in inability to release payload or cradle arm.</p>	<p>Operator detects that arm and EE do not respond to commands, EE TB's on RMS D B C panel do not change.</p>	<p>Select backup mode or jettison arm or arm/payload combination.</p> <p>Seconds/minutes</p>	3/R	<p><u>Redundancy Screens:</u> A - Pass B - Pass C - Pass</p>

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 ATTACHMENT -
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PREPARED BY J. P. Grisham

SUPERSEDING DATE 10/89

BY R. I. Moore

DATE: 9/90