

SUBSYSTEM CCV
 UNIT TVC/MIA
 ASSY. DWG. 2294819-506, 508/2294820-502
 QUANTITY/LOCATION 1/MULTIPLE (CARGO BAY STACK)

SHUTTLE CCV FAILURE MODE
& EFFECTS ANALYSIS

PREPARED BY M. Kravitz
 DATE 8-19-85
 REVISED 2-17-87

FUNCTION: Provide a video output signal from the TVC to the VSO/TVM.

ITEM	FAILURE MODE	FAILURE CAUSE	FAILURE EFFECT ON EMD ITEM	FAILURE DETECT FLIGHT/GROUND	CORRECT ACTION TIME AVAIL/REQ	CRIT'Y	HAZARDS/REMARKS
2.1.1	No output signal to the VSO. Neither video or synchronization information is present.	<u>TVC</u> <u>A1 Sync Generator. Clock Divider Chain.</u> <u>A2 Camera Timing Logic.</u> <u>A4 Sync Formatter. Video Output Drive.</u> <u>A6 Power ON/OFF Switching Input Voltage Regulator. Output Voltage Regulators.</u> <u>A7 DC-DC Converter. Primary Oscillator Drive. Secondary Rectifiers/Filters.</u> <u>A13 Master Oscillator.</u>	Loss of camera output depicting scene information within FOV of lens assembly. <u>Worst Case:</u> Loss of mission critical video.	<u>FLI</u> (1) No visual display of scene information on the TVM. (2) No status talkback to the panel titles for ALC/DMMMA. <u>GND</u> (1) No visual display of scene information on ground monitor display. (2) No signal present on waveform monitor. (3) No readout present on GSE of camera status.	None	2/2	
			<u>Worst Case</u> (if video is not mission critical, for B & C cameras only): Unable to verify #1B door aft bulkhead latches are closed.	Same as above	None. (Usage of EVA tools is available.)	3/1R	