

SUBSYSTEM CCU
 UNIT Pan/Tilt Unit (PTU)
 ASSY. DRWG. 2294822-502, 503, 504
 QUANTITY/LOCATION 1/MULTIPLE (CARGO BAY STACK)

SHUTTLE CCU FAILURE MODE
& EFFECTS ANALYSIS

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 DATE 8-20-86
 REVISED 7-11-82

FUNCTION: The PTU will move in the Pan right or left direction in response to a command.

ITEM	FAILURE MODE	FAILURE CAUSE	FAILURE EFFECT ON END ITEM	FAILURE DETECT FLIGHT/GROUND	CORRECT ACTION TIME AVAIL/REQ	CRIT'Y	HAZARDS/REMARKS
2.4.2.2	Loss of elevation (tilt) drive due to a mechanical failure.	(1) Motor Failure. (2) Gear Head Failure. (3) Gear Box Failure. (4) Elevation Bearing Failure.	Loss of travel in the tilt up or down direction. :Worst Case: :Loss of mission critical video.	FLI- (1) Scene information from camera mounted on PTU as observed on TVM appears stationary in response to tilt commands. (2) May observe lack of movement of PTU through the crew cabin window. (3) May use TVM in conjunction with another camera to observe suspect PTU. GND- Scene information from camera mounted on PTU as observed on TVM appears stationary in response to tilt commands.	None	2/2	
			Worst Case til video is not mission critical, (for B & C cameras only): Unable to verify PTU door aft bulkhead latches are closed.	Same as above	None. (Usage of EVA tools is available.)	3/1R	

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 ATTACHMENT -
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