

PFR-134 Title: Unable to process long uplink command to IDPU Assembly : BAU SubAssembly : DPM **Component : FSW Units Affected:** Units fixed: **Originator:** Ellen Taylor - X - - - -- X - -_ _ **Organization:** Swales/UCB **Date:** 12/21/05 **Phone:** (510) 643-4054 Email: ertaylor@ssl.berkeley.edu **Failure Occurred During (Check one** $\sqrt{}$) $\sqrt{\text{Functional test}}$ \Box Qualification test \Box S/C Integration \Box Launch operations \Box Other (Flight Assy) **Environment when failure occurred:** √ Ambient □ Vibration □ Shock □ Acoustic Thermal-Vacuum □ Thermal □ Vacuum □ EMI/EMC

Problem Description

During further investigation of the commanding problem noted in PFR 125, two large RAW diagnostic commands (APID 0x401, true TC packet lengths 145 bytes and 100 bytes respectively) were not being processed and passed on correctly to the IDPU.

Analyses Performed to Determine Cause

The problem was recreated at Swales using the IDPU diagnostic command procedure. It was found that the BAU FSW defined a maximum data length of 128 bytes for IDPU commands. This is incorrect; it should be 200 bytes (data field).

Corrective Action/ Resolution

The data field constant was changed in the BAU FSW. Testing at Swales after the fix showed the long commands were received and processed correctly by FSW, and the IDPU SOH1 page showed both commands received.

This issue has been entered into the Hammers Co. Issue tracking system as Issue #335. The FSW fix will be in the next released FSW Build and tested at UCB with BAU flight delivery.

This PFR was officially closed at UCB per THM-MINT-PROC-101 F2 PFR Close-out Procedure on 3/2/06. Raw diagnostic commands w/packet length >128bytes was sent and received at the IDPU without issue.

Acceptance:		
MAM: Ron Jackson	; MSE: Ellen Taylor	
DM: Dotor Horwow	: Cognizent Engineer	

PM: Peter Harvey_____; Cognizant Engineer_____

Date of Closure_____