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**PFR-147 Title: BAU reset during IDPU Safe-to-Mate**

<b>Assembly :</b> BAU	<b>SubAssembly : Magnetics</b>	
<b>Component :</b>	<b>Units Affected:</b>	<b>Units fixed:</b>
<b>Originator:</b> Ellen Taylor	- X - - - -	- O - - - -
<b>Organization:</b> Swales/UCB	<b>Date:</b> 2/24/06 (date found)	
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**Failure Occurred During (Check one ☒)**

☐ Functional test   ☐ Qualification test   ☐ S/C Integration   ☐ Launch operations   ☒ Other (Flight Assy)

**Environment when failure occurred:**

☒ Ambient                      ☐ Vibration                      ☐ Shock                      ☐ Acoustic  
☐ Thermal                      ☐ Vacuum                      ☐ Thermal-Vacuum                      ☐ EMI/EMC

<b>Problem Description</b>
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During the IDPU Safe-to-Mate on 2/24/06, the flight BAU (SN101) reset. The probe was powered on DPC/Battery. The IDPU was not yet integrated. The breakout box was on the IDPU Data Interface (P301). IDPU command link (using /cbuidpucdena) was enabled about 1 minute before the reset, from event log:

06-055-23:55:47 STOL\_ECHO: Interactive: /cbuidpucdena  
at ~055-23:56:53 UTCTelemetry was lost

<b>Analyses Performed to Determine Cause</b>
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From Mark Lewis e-mail Date: Fri, 24 Feb 2006 17:02:02 -0800 (PST):

>>We noted that the telemetry dropped out and that nothing was hitting the bit sync. We suspected a reset, but sent a /ctprstdl command just in case. When that didn't work, we executed the warmreset.proc which has sometimes worked in the past. It did not work (tried twice, second time allowing more time for boot-up) so we decided to send the hardware processor reset command, and then sent commands to recover telemetry. This worked, and spacecraft came up showing there had been 2 cold resets.>>

<b>Corrective Action/ Resolution</b>
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Event log and archive files were sent to Hammers and Swales on 2/24/06. As of 3/12/06, this problem has not been seen again. The most probable cause of this failure is that the break-out configuration caused some glitch that reset the BAU. As such, this PFR can be closed and moved to the unverifiable failure list.

Acceptance:

MAM: Ron Jackson \_\_\_\_\_; MSE: Ellen Taylor \_\_\_\_\_

PM: Peter Harvey \_\_\_\_\_; Cognizant Engineer \_\_\_\_\_

Date of Closure \_\_\_\_\_