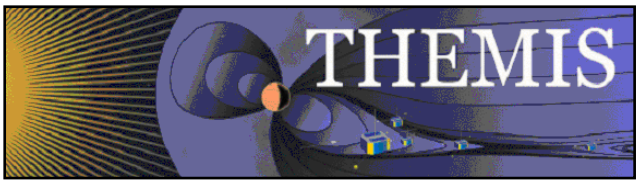

Problem/Failure Report
THM_PFR_073

PFR-073 Title: Length Discrepancy between SCM Flight Harnesses

Assembly: MAG	**Sub-Assembly: SCB**	
Component: Harness	**Units Affected:**	**Units fixed:**
Originator: Ellen Taylor	X X 0 0 X X	X X 0 0 X X
Organization: UCBSSL	**Date: 15 June 2005**	
Phone: 510-643-4054	**Email: ertaylor@ssl.berkeley.edu**	

Failure Occurred During (Check one √)

□ Functional test □ Qualification test □ S/C Integration □ Launch operations **X** Other (Flight Assy)

Environment when failure occurred:

X Ambient	□ Vibration	□ Shock	□ Acoustic
□ Thermal	□ Vacuum	□ Thermal-Vacuum	□ EMI/EMC

Problem Description

(In this section it is important to document the specific symptoms of the problem. In the event we see it happen again, we would like to know as much as possible)

During assembly of the flight SCM Boom Units, it was discovered that the F3 and F4 SCB harnesses were approximately 10 inches longer than the other SCB flight harnesses.

Analyses Performed to Determine Cause

(How do we know how the failure happened? Was it a bad part, bad handling, what?)

Although no specific failure occurred due to the discrepancy, harness length can have an effect on sensor calibration, which was done with the flight harnesses. A PFR was logged to ensure that corrective action would be taken.

Corrective Action/ Resolution

(How do we fix the unit? And how do we make sure it doesn't happen again?)

A decision was made to cut all of the harnesses the same length (54.5 inches from where the harness exits the boom to the SCM pre-amp). The SCM team was contacted to see if the change in length would adversely affect previous calibration results. The SCM team responded that the impact on the electrical characterisitics of the SCM would be minor. (See e-mail From: Christophe Coillot; Sent: Monday, June 20, 2005; Subject: Re: SCM harness lengths).

Acceptance:

MAM: Ron Jackson_____; MSE: Ellen Taylor_____

PM: Peter Harvey_____; Cognizant Engineer_____

Date of Closure_____