



PFR-Probe Lifting Outrigger Interference

Title:

Assembly : Probe Lifting GSE	SubAssembly : Outrigger	
Component : Outrigger Body	Units Affected:	Units fixed:
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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

Problem Description

During a fit check it was discovered that the lifting outriggers interfere with the Magnetometer Boom mounting feet.

Analyses Performed to Determine Cause

The outriggers were designed to work with an early foot design, but the feet were enlarged during boom development, and apparently the ICD change was not brought to the GSE designer. The result is that the feet and their shims now protrude into the space required by the outriggers.

Corrective Action/ Resolution

The outrigger mechanical drawings were obtained and SW models built to determine the extent of the interference. The amount of material that needed to be removed from the outriggers to clear the feet was determined, and an FEA was performed to show that this would not result in an increase in the maximum stress. Both sets of outriggers have been modified.

Acceptance:

MAM: Ron Jackson _____; MSE: Ellen Taylor _____

PM: Peter Harvey _____; Cognizant Engineer _____

Date of Closure _____