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Title: Rework of Ground Test Harnesses for Grounding Scheme Compliance
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Issue: 1.0

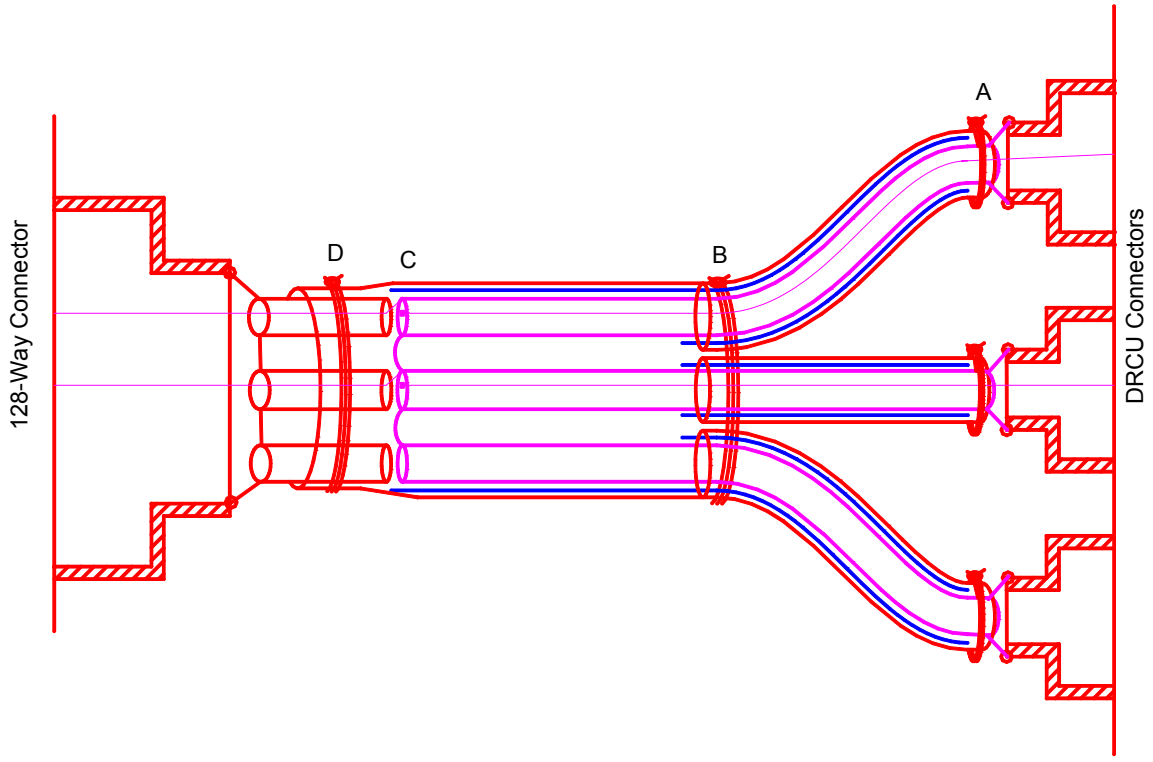

Figure 1 - Diagrammatic representation of rework.

Scope:

This rework is to be performed on each of the SPIRE Ground Test Warm Harnesses (I1 thru I13).

Description of Work:

(1) **Tail lengths:** The length of each individual tail is to be greater than 300mm. (Distance A ⇒ B)
(2) **Insulation wrapping** (indicated in Blue): Between the DRCU tails (point A) and point C near the 128-Way connector, a flexible insulating tape is to be wound around the existing shield braid (Mauve). This insulation does no need to cover each individual tail between B and C but could be wrapped around the entire group of tails as drawn. The insulation guarantees electrical isolation between the existing braids (Mauve) and the overshield (Red) at all points except Point A where they are electrically joined.
(3) **Existing braid to FPU Faraday Shield Conductors**: At approximately 50mm from the back of the 128-Way connector (Point C), the existing braided shield is cut. Any tail that has a conductor identified as "FPU Faraday Shield Link" in the SPIRE Harness Definition Doc - Issue 1.0 has the conductor broken at Point C. The ends of these conductors connected to the DRCU (which is now redundant) are left un-terminated with insulation over any bare conductor. The ends of the FPU Faraday Shield Links passing to the 128-Way connector are

joined to the existing braids that terminate at the DRCU end. The existing shield over each of the tails are to be daisy chained together at this point as shown.

(4) **Overshield:** Between points A and D, a >80% optical coverage wrapped braid will act as the bundle overshield. At points A and D, the overshield will make a 360° connection to the existing overshield being the closest we have to a connector backshell.