April 1970

Brief 70-10217

NASA TECH BRIEF

Improved Shielding Termination Adapter for Electrical Cable Connectors

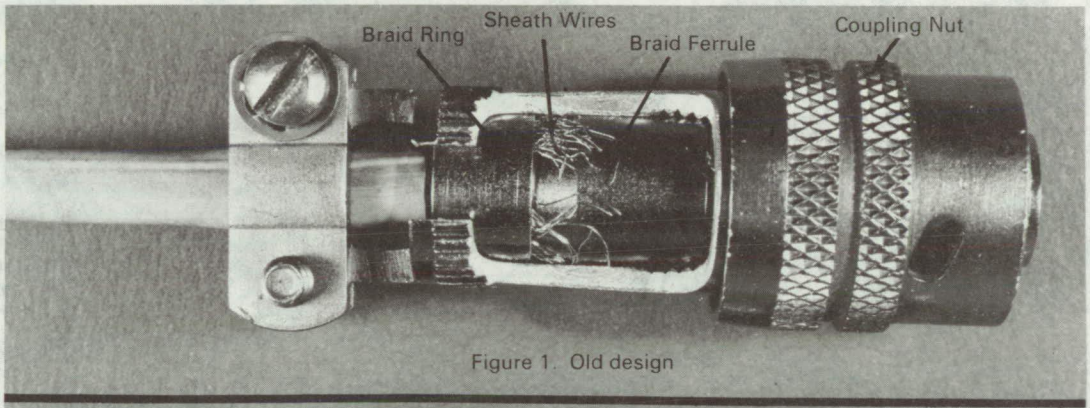

Figure 1. Old design

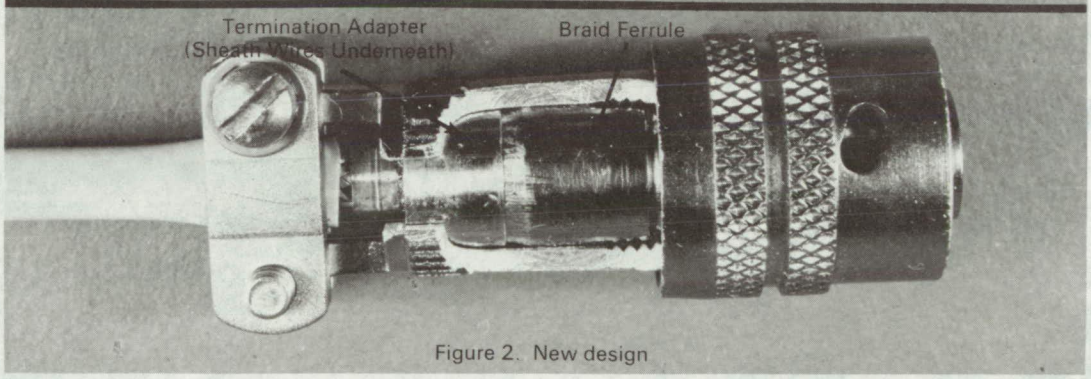

Figure 2. New design

In one type of commercially available shielded-cable connector, the metal shielding braid (cable sheath) is grounded by expanding the wires at the end of the braid and clamping them between the braid ring and the braid ferrule of the connector. The cut-away assembly, Figure 1, shows how the lay of the sheath wires is uncontrolled in this type of connector. Upon disassembly of the connector for inspection, the wires are usually so bent and damaged that reassembly is impractical.

A new termination adapter, Figure 2 and Figure 3 (on the reverse side), which has been devised to replace the braid ring component of the cable connector, ensures permanent attachment and grounding of the sheath wires in a controlled manner. Figure 3 shows an expanded cross sectional detail of the term-

(continued overleaf)

ination and its position relative to a standard crimp-type outer ferrule. To secure the wires for grounding, the inner ferrule of the termination is slipped inside the exposed ends of the sheath wires and the outer ferrule is placed over the wires and crimped in place.

Note:

This Tech Brief is complete in itself. No additional information is available.

Patent status:

No patent action is contemplated by NASA.

Source: Maurice A. Vanasse of North American Rockwell Corp. under contract to Manned Spacecraft Center (MSC-15565)

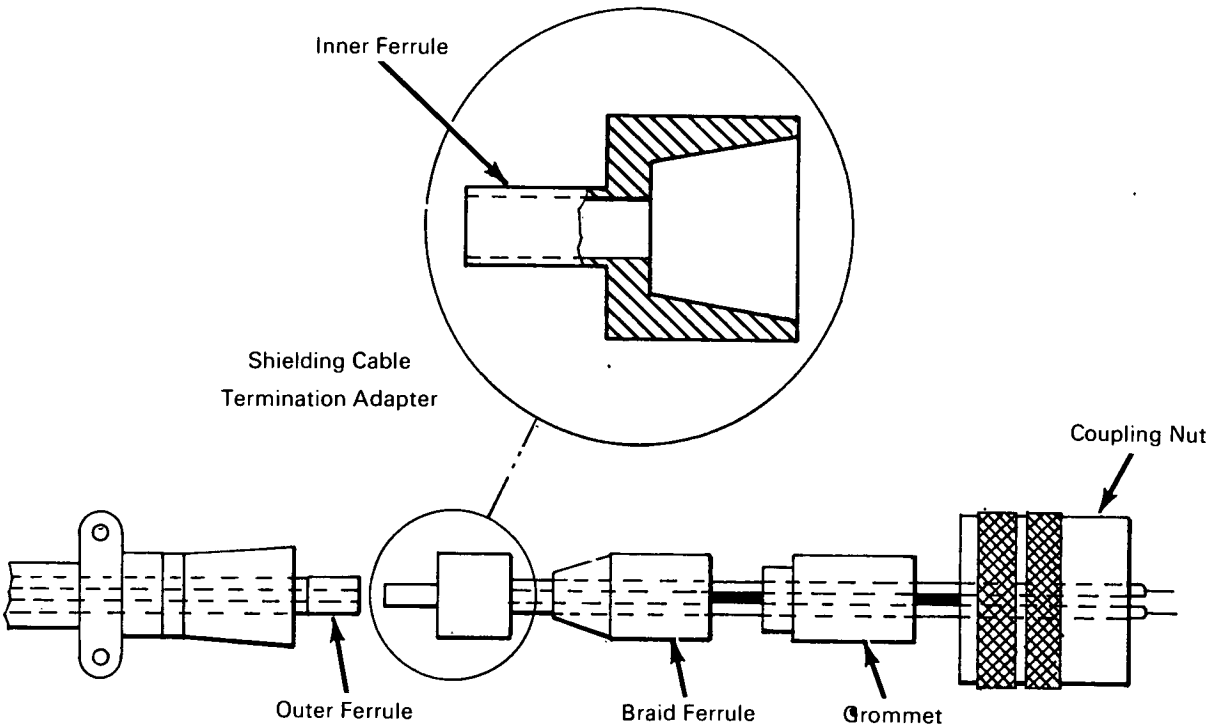

Figure 3.