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NAVAL SURFACE WARFARE CENTER
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From: Commander, Carderock Division, Naval Surface Warfare Center,
Philadelphia Station, Philadelphia, PA 19112-5083

To: Commander, Naval Sea Systems Command (SEA 03J2)

Subj: MIL-C-83522/16 ST CONNECTOR CORRECTED DESIGNATION

Ref: (a) Military Specification Sheet MIL-C-83522/16B Connector, Fiber Optic, Single terminus, Plug, bayonet Coupling (ST Style), 2.5 Millimeters diameter Ferrule, Epoxy of 11 May 1995
(b) NSWCCD-SSES ltr 9504/Ser09 of 30 May 1997

1. This letter addresses the designation to be used for specifying ST connectors qualified to reference (a), MIL-C-83522/16. This designation is the Part or Identification Number (PIN) found on page 5 of reference (a). The PIN is composed of a prefix (i.e. M83522/16-) followed by four letters. The first letter, the configuration, is the subject covered in this letter. Drawings and acquisition documentation are to be revised to specify the proper configuration designation.
2. Currently, military qualified, ST connectors on the Qualified Products List (QPL) have the configuration designation "A", "B" or "C". Configuration designations "A" and "C" are for the locking and non-locking ST connector, respectively, meeting the dimensions and configuration shown in the figure on page 1 of reference (a). Likewise, configuration designation "B" is for the non-locking ST connector meeting the dimensions and configuration shown in the figure on page 2 of reference (a). The bayonet cap is the outer metal component of the ST connector that mates with the pins on the ST-to-ST adapter. The PIN terminology for configuration designations "A" and "C" is "long cap" while "B" is "short cap".
3. Functionally, the two configurations are equivalent. The development of separate figures is due to the historical evolution of MIL-C-83522 by a joint Government-Industry committee. Configuration designation "D" is assigned to the PIN for ordering and drawing specification purposes so that either of the two non-locking ST connector configurations ("B" or "C") could be used. Current plans are to drop the "B" and "C" configuration designators in the next specification sheet revision and supersede it with the "D" configuration designator. Configuration designation "D" is the one to be used to specify the MIL-C-83522/16 ST non-locking connector.
4. Drawings and acquisition documentation are to be revised to specify configuration designation "D". In addition, there exists documentation developed prior to the availability of qualified QPL ST connectors. This documentation may specify commercial components and is to be updated if the systems involved require QPL components. There may be slight differences in the functional replacement for a commercial to a military component. Form and Fit must be verified before the military replacement is implemented.
5. Also, functional differences must be addressed before drawings and acquisition documentation are revised. One functional difference between multimode QPL ST connectors and the commercial variety is a higher spring force. Two situations addressing non-suitability of commercial and QPL ST connector interface are addressed in paragraphs 4b and Sa of reference (b).

6. Installation may differ between QPL and commercial ST connectors used previously. Use of a different crimp tool may be included under the fabrication equipment considerations. Installation procedure differences may include the optical fiber strip length and boot assembly method. Documentation, training and support should be revised accordingly.

7. NSWCCD-SSES point of contact and NAVSEA technical agent for fiber optic component QPL is E. Bluebond. He can be contacted at (215) 897-8510, Fax (215) 897-8509.

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