Designation: ~~F1716 – 96 (Reapproved 2008)~~ F1716 – 96 (Reapproved 2015)

An American National Standard

Standard Guide for Transition and Performance of Marine Software Systems Maintenance[1]

This standard is issued under the fixed designation F1716; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ε) indicates an editorial change since the last revision or reapproval.

1. Scope

1.1 This guide covers a recommended plan for transition and acceptance of marine software that was developed by an activity other than the maintaining activity. It further provides a recommended iterative process model for managing and executing software maintenance activities.

2. Referenced Documents

2.1 *ASTM Standards:*[2]

E622 Guide for Developing Computerized Systems (Discontinued 2000) (Withdrawn 2000)[3]

E919 Specification for Software Documentation for a Computerized System (Discontinued 2000) (Withdrawn 2000)[3]

E1013 Terminology Relating to Computerized Systems (Withdrawn 2000)[3]

2.2 *IEEE Standards:*[4]

100 Standard Dictionary for Electrical and Electronic Terms

610 Standard Glossary of Software Engineering Terminology

1063 Standard for Software User Documentation

1074 Standard for Developing Software Life Cycle Processes

1219 Standard for Software Maintenance

2.3 *ANSI Standards:*[5]

ANSI/ISO/ASQC Q9000—3 Quality Management and Quality Assurance Standards: Guidelines for the Application of ANSI/ISO/ASQC Q 9001 to the Development, Supply and Maintenance of Software

ANSI/ISO/ASQC Q 9001 Quality Systems—Model for Quality Assurance in Design, Development, Production, Installation and Servicing

2.4 *Military Standards and Specifications:*[6]

MIL-STD 498 Software Development and Documentation

3. Terminology

3.1 The terminology used in this guide is defined in Terminology E1013 and Guide E622.

3.2 Other computer-related terms in this guide are defined in IEEE 100 and IEEE 610.12.

4. Significance and Use

4.1 This guide provides a recommended transition plan for a marine software maintainer, when the maintainer is other than the supplier, to develop the capability to make extensive changes or extensions to the programs. Further, this guide provides a

---

[1] This guide is under the jurisdiction of ASTM Committee F25 on Ships and Marine Technology and is the direct responsibility of Subcommittee F25.05 on Computer Applications.

Current edition approved ~~May 1, 2008~~May 1, 2015. Published ~~July 2008~~June 2015. Originally approved in 1996. Last previous edition approved in ~~2002~~2008 as ~~F1716 - 96~~F1716 – 96 (2008).~~(2002).~~ DOI: ~~10.1520/F1716-96R08.~~10.1520/F1716-96R15.

[2] For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

[3] The last approved version of this historical standard is referenced on www.astm.org.

[4] Available from Institute of Electrical and Electronics Engineers, Inc. (IEEE), 445 Hoes Ln., P.O. Box 1331, Piscataway, NJ 08854-1331, http://www.ieee.org.

[5] Available from American National Standards Institute (ANSI), 25 W. 43rd St., 4th Floor, New York, NY 10036, http://www.ansi.org.

[6] Available from Standardization Documents Order Desk, DODSSP, Bldg. 4, Section D, 700 Robbins Ave., Philadelphia, PA 19111-5098, http://www.dodssp.daps.mil.