

METRIC**MIL-PRF-89049/13
15 December 2005****PERFORMANCE SPECIFICATION SHEET
TACTICAL OCEAN DATA LEVEL 3 (TOD3)**

This specification is approved for use by all Departments and Agencies of the Department of Defense.

1. SCOPE

1.1 Scope. This specification sheet defines the content and format for the U.S. National Geospatial-Intelligence Agency (NGA) Tactical Ocean Data Level 3 (TOD3) product. References to the TOD3 specification in this document assume use of both the general specification (MIL-PRF-89049A, dated 15 December 2005) and this specification sheet.

1.2 Purpose. The TOD3 is a vector-based digital product that portrays seafloor configuration, particularly in shallow water areas between 20 meters and 200 meters along with Non-submarine contacts data in a format suitable for computerized subsurface navigation. TOD3 is designed to be used in conjunction with the Digital Nautical Chart (DNC) and Tactical Ocean Data Level 1 and/or Level 2 for complete navigation information. The TOD3 also functions as a general-purpose database designed to support Geographic Information System (GIS) applications. This specification sheet provides a description of the content, accuracy, data format, and design of the TOD3 database. In addition, the TOD3 product portrays strategic information to support naval operations.

2. APPLICABLE DOCUMENTS

2.1 General. The documents listed in this section are specified in sections 3, 4, or 5 of this specification. This section does not include documents cited in other sections of this specification or recommended for additional information or as examples. While every effort has been made to ensure the completeness of this list, document users are cautioned that they must meet all specified requirements of documents cited in sections 3, 4, or 5 of this specification whether or not they are listed.

2.2 Government documents.

2.2.1 Specifications, standards, and handbooks. The following specifications, standards, and handbooks form a part of this document to the extent specified herein. Unless otherwise specified, the issues of these documents are those cited in the solicitation or contract.

Comments, suggestions or questions on this document should be addressed to the National Geospatial-Intelligence Agency, National Center for Geospatial Intelligence Standards (NCGIS), Mail Stop P-106, 12310 Sunrise Valley Drive, Reston, VA 20191-3449, or emailed to ncgis-mail@nga.mil. Since contact information can change, you may want to verify the currency of this address information using the ASSIST Online database at <http://assist.daps.dla.mil/>.

AMSC N/A

AREA GINT

DISTRIBUTION STATEMENT F: Further dissemination only as directed by NGA Release Officer or higher DOD authority.

MIL-PRF-89049/13

DEPARTMENT OF DEFENSE STANDARDS

MIL-STD-2407 Vector Product Format, 28 June 1996
Change Notice 1, 22 October 1999

DEPARTMENT OF DEFENSE SPECIFICATIONS

MIL-PRF-89049 Vector Product Format (VPF) Products,
General Specification for
MIL-PRF-89023 Digital Nautical Chart
MIL-PRF-89049/12 Performance Specification Sheet Tactical Ocean
Data Level 2 (TOD2)
MIL-B-89200 Bathymetric Navigation Planning Chart (BNPC)
(CONFIDENTIAL)

(Copies of these documents are available online at <http://assist.daps.dla.mil/quicksearch/> or from the Standardization Document Order Desk, 700 Robbins Avenue, Building 4D, Philadelphia, PA 19111-5094.)

2.2.2 Other government documents. The following other Government documents, drawings, and publications form a part of this document to the extent specified herein. Unless otherwise specified, the issues of these documents are those cited in the solicitation or contract.

PRODUCT SPECIFICATIONS

NATIONAL GEOSPATIAL-INTELLIGENCE AGENCY

PS/2BD/040 DMA Product Specifications for
Bottom Contour Charts (All Series)

(Copies of the above publication are available from the National Geospatial-Intelligence Agency, National Center for Geospatial Intelligence Standards (NCGIS), Mail Stop P-106, 12310 Sunrise Valley Drive, Reston, VA 20191-3449, or request can be e-mailed to ncgis-mail@nga.mil.)

2.3 Order of precedence. In the event of a conflict between the text of this document and the references cited herein, the text of this document takes precedence. Nothing in this document, however, supersedes applicable laws and regulations unless a specific exemption has been obtained.

3. REQUIREMENTS

3.1 First article. When specified (see 6.2), a sample shall be subjected to first article inspection in accordance with Section 4.2.

3.2 Accuracy.

3.2.1 Absolute horizontal accuracy. The absolute horizontal accuracy requirement for TOD3 is 250 meters circular error at 90 percent probability.

3.2.2 Absolute vertical accuracy. TOD3 does not contain features above mean sea level; it only contains information at or below the sounding datum. Therefore, no vertical accuracy requirement exists for this product.

MIL-PRF-89049/13

3.2.3 Relative accuracy. NGA does not have a formal relative accuracy objective defined for this product.

3.2.4 Hydrographic Accuracy. Much of the data used as source for the TOD3 is derived from NAVOCEANO Ocean Survey Program (OSP) data. The horizontal and vertical accuracies for hydrographic features in surveyed areas are specified in TOD 3 extraction guidance.

3.3 Datums.

3.3.1 Horizontal datum. The horizontal datum shall be referenced to WGS84. If the source map/chart sheets are not referenced to WGS84, then they will be converted from their original horizontal datum to WGS84.

3.3.2 Vertical datum. The Hydrographic Features on the TOD3 are referenced to a vertical datum based on Mean Sea Level (MSL) and is called the Sounding Datum or Hydrographic Datum. Hydrographic datums used in TOD3 will be specified in the Geographic Reference Table (grt) for each library.

3.4 Coordinate System. TOD3 Data Libraries shall implement a decimal degree geographic coordinate system. The horizontal coordinate resolution for geographic coordinates shall be 0.02 arc-seconds or 0.000005 decimal degrees.

3.5 Continuity. All TOD3 data are subject to the portrayal criteria specified in section 3.14.

a. TOD3 is based on the same feature content as that of Tactical Ocean Data Level 2 (TOD2) produced by NGA, but covering depths shallower than 200 meters. TOD3 will, in addition, contain only the information that is not covered by the Digital Nautical Chart (DNC). The TOD3 must be used in conjunction with the appropriate DNC, TOD1, and/or TOD2 library coverage in the same area to ensure complete coverage for subsurface navigation.

b. MIL-PRF-89049A and this specification sheet contain the database design and the feature content for a thematically layered, relationally structured set of databases to support electronic chart display systems.

3.6 Thematic layer organization. The TOD3 database is organized into multiple data libraries containing thematic layers. Each thematic layer is stored as a single coverage. The TOD3 data libraries contain two reference coverages and up to five thematic layers, two of which correspond to the same coverages in the DNC. Table 1 lists the thematic coverages defined for the TOD3 product.

TABLE 1. Thematic layers for the TOD3 library.

VPF Structure Level	TOD3 library thematic layers	Coverage name
Data Libraries	Library Reference	libref
	Tile Reference	tileref
	Data Quality	dq
	Earth Cover	ecr
	Hydrography	hyd
	Non-submarine Contacts	nsc
	Survey Information	sur

MIL-PRF-89049/13

3.7 Dimensions. The minimum size of features collected from source materials shall be in conformance with the portrayal criteria from MIL-PRF-89023 and the attribute values provided in the TOD3 data dictionary, Appendix C. Features may be captured as points, lines, areas, or text.

3.8 Feature and attribute coding scheme. TOD3 implements the 8 April 2002 version of the NIMA Profile of FACC which is based on the Digital Geospatial Information Exchange Standard (DIGEST) Part 4, Feature and Attribute Coding Catalogue (FACC) to define features, attributes, and values. See Appendix D for a listing of the FACC feature codes and attribute codes allowable for TOD3 thematic files.

3.9 Units of measure. Units of measurement in this specification are generally given in the metric system. With very few exceptions, units of measurement for the TOD3 will employ the metric system. Units of measure and increments for attributes shall be in accordance with the FACC.

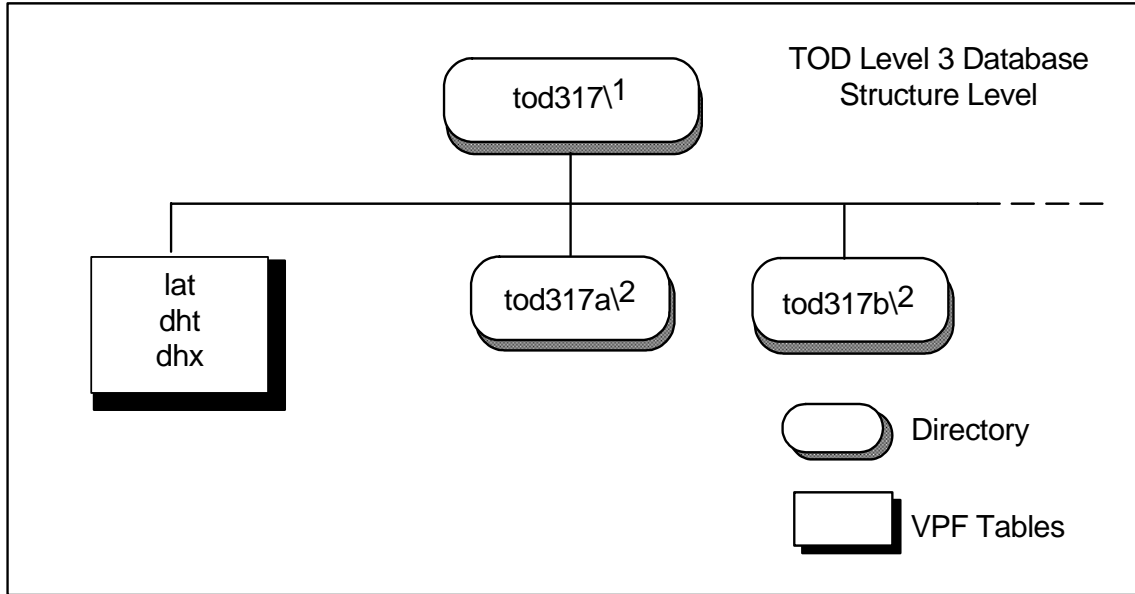
3.10 TOD3 directory organization.

3.10.1 Databases. TOD3 consists of a number of individual databases, geographically coincident with the corresponding DNC databases. Each CD-ROM shall contain a single database directory and at least one data library. Each data library contains a mix of reference coverages and thematic coverages.

3.11 VPF structure levels, tables, and files. The following sections identify VPF structure information specific to TOD3. General database, library, and coverage level tables are defined in MIL-PRF-89049A. The TOD3 specific content information for the database and library level metadata tables is described in Appendix B of this specification sheet. The record layout and content of the TOD3 tables and files are described in Appendix C of this specification sheet.

3.11.1 Database directory files.

a. The TOD3 product shall contain a number of database directories, each of which has its own unique database directory files and is contained on exactly one CD-ROM disc. The database name is represented as a directory name and shall be in lower case letters. The appropriate database directory shall be present on each CD-ROM at the root level. A representation of the tables and files appearing at the TOD3 database level is depicted in Figure 1.



- 1 This is a representative directory name for a TOD3 database.
- 2 These are representative directory names for TOD3 libraries.

FIGURE 1. TOD3 database directory.

b. As described in MIL-PRF-89049A, section 3.16.1 and Appendix B therein, the database directory contains three required metadata tables. The required tables include the Library Attribute Table (lat), Database Header Table (dht), and Database Header Table variable length index (dhx) (see Table 2). Appendix B in this specification sheet defines the TOD3 implementation of the database level metadata tables.

TABLE 2. TOD3 database table and file names and description.

Table or File Description	Table or File Name
TOD3 database directory	tod317 ¹
Library Attribute Table	lat
Database Header Table	dht
Database Header Table variable length index	dhx
TOD3 library directories	tod317a ²

¹This is a representative directory name for a TOD3 database.

²This is a representative directory name for a TOD3 library.

MIL-PRF-89049/13

3.11.2 Database and library naming conventions.

a. The database name is represented as a directory name and shall be represented in six lower case letters. The first four characters are 'tod3' and the last two characters represent the disc number. The discs are numbered geographically, not sequentially, and match the Minimum Bounding Rectangle (MBR) of the underlying DNC database. Hence, tod303 may be produced after tod304 if the data comprising the tod303 geographic area is issued on a later disc.

b. TOD3 library names shall be represented in eight lower case characters. The first six characters are the TOD3 database name. The seventh and eighth characters can be used for single or double alphabetic characters beginning with 'a' used to uniquely identify each data library contained in a TOD3 database.

3.11.3 Library directory files. The contents of each TOD3 library are stored in a directory, whose name shall be no more than eight lower case alphanumeric characters in length. The entire contents of one or more TOD3 libraries shall be contained in a dataset. The size of the dataset shall not exceed the maximum size limit allowable for the exchange medium (i.e., CD-ROM). A representation of the tables and files present in a TOD3 library is provided in MIL-PRF-89049A, Figure 4. TOD3 will not implement a reference library, as defined in MIL-PRF-89049A.

3.11.3.1 Library metadata. The library metadata tables and their content are described in MIL-PRF-89049A, section 3.16.2.1. Appendix B in this specification sheet defines the TOD3 implementation of the library level metadata tables.

3.11.3.2 Library reference coverages. Each tiled TOD3 data library shall contain the Tile Reference Coverage (tileref) and Library Reference Coverage (libref). The tileref coverage shall be implemented as defined by MIL-PRF-89049A, Appendix D. The optional text feature table shall not be implemented in TOD3.

The libref coverage shall be implemented as defined by Appendix C in this specification sheet.

3.11.3.3 Use of TOD3 in conjunction with DNC, TOD1, and TOD2. The TOD3 data library is to be used in conjunction with the appropriate DNC and/or TOD1 or TOD2 library that contains the same coverage area. All DNC CDs will contain a BROWSE library, which is used to support overview displays at a global scale. Because BROWSE is already part of DNC, TOD3 will not contain a BROWSE Library.

3.11.4 Coverage directory files.

3.11.4.1 Coverage metadata. The coverage metadata tables and their content are described in MIL-PRF-89049A, section 3.16.3.1. Product specific information for TOD3 is provided in Appendix C of this specification sheet.

3.11.4.2 Data coverages. There are up to four possible data coverage directories present in any TOD3 data library. Within a library, coverage directories shall not be included if data does not exist for that coverage

MIL-PRF-89049/13

within the library's geographic area. The contents of each TOD3 data coverage are stored in a directory whose name shall be represented in lower case letters with a three character name representative of the thematic layer name (i.e., hyd for Hydrographic, ecr for Earth Cover). In addition, each TOD3 library can contain a data quality (dq) coverage. The dq coverage contains information about the accuracy of the source(s) that were used to produce TOD3.

3.11.4.3 Coverage topology. The topology level of each coverage is specified in the coverage attribute table (cat) within each library, see MIL-PRF-89049A, section 3.16.2.1 and Appendix D. Topology is not supported between coverages. The cat for each library is tailored based on the coverages actually present. See Appendix B of this specification sheet for the definition of the TOD3 cat containing all possible TOD3 coverages.

3.11.5 Feature class structure level. TOD3 feature classes are shown in Table 3. Only those feature classes containing data shall be present in the coverage. Descriptions of the feature classes, with the exception of those located in the Data Quality (dq) coverage, are found in Appendix C of this specification sheet. For feature class descriptions of data quality features, see MIL-PRF-89049A, Appendix E. TOD3 will implement the optional text feature table in the dq coverage.

TABLE 3. TOD3 thematic coverages and feature classes.

Coverage Name	Feature Classes			
	Point	Line	Area	Text
dq		dqline	dqvoida dqarea	dqtxt
ecr				ecrtext
hyd	soundp	hydrol	hydroa	
nsc	contactp			
sur		trackl	swatha	

3.11.5.1 Feature table structure and contents. Feature tables and join tables will be implemented per MIL-PRF-89049A, section 3.16.4.2. In addition to implementing the required feature-to-primitive links using join tables for all line and area feature classes, TOD3 also implements the feature-to-primitive links using join tables for all text feature classes.

3.11.5.2 Related attribute tables.

3.11.5.2.1 Notes related attribute table. Digital marginalia refers to the information that originally appeared in notes, tables, and graphs on the borders of the hardcopy chart sheets. For the TOD3, this information is included in the Notes Related Attribute Table (notes.rat) in each coverage. The notes.rat shall be implemented for all feature tables (except for ecrtext, dqline, dqarea, and dqtxt), when appropriate, in accordance with MIL-PRF-89049A, section 3.16.4.3.1.

MIL-PRF-89049/13

3.11.5.2.2 Symbol related attribute table. The TOD3 product shall not implement the symbol related attribute table (symbol.rat) defined in MIL-PRF-89049A, section 3.16.4.3.3.

3.11.5.3 Text feature class. A text feature class is composed of a text feature table (*.tft) and a text primitive (txt) table. This primitive table contains information that may be used to replicate text strings found on an original chart or other source for representation on a plot or digital display. All text (both at the feature and primitive level) will be limited to the characters found in the Latin alphabet primary code table, FIGURE 24 of MIL-STD-2407.

3.11.6 Primitive Tables and associated files. VPF uses the primitive tables defined in MIL-STD-2407 to model a feature's location, geometry and topology. See MIL-PRF-89049, section 3.16.5 for the format to be used for VPF primitive tables in TOD3. All coverages in TOD3 data libraries shall implement 2-dimensional (2D) geometry for the coordinates contained in the primitive tables. All primitive tables contained in the TOD3 data libraries shall use a field type of "C" (2D, short floating-point) to store the coordinate data.

3.12 TOD3 tiling scheme. Each TOD3 coverage is divided into a seamless set of tiles using the World Geographic Reference System (GEOREF) described in DMA TM 8358.1. This system divides the surface of the earth into quadrangles, the sides of which are specific arc lengths of longitude and latitude. Each quadrangle is identified by a simple systematic letter code giving positive identification with no risk of ambiguity.

3.12.1 TOD3 tile sizes. In the latitudes from 0-81 degrees, TOD3 is divided into 3° by 3° tiles. In the Polar Regions (latitudes from 81-90 degrees), TOD3 is divided into 4 9° by 9° degree tiles. The lower left (southwestern most) corner of each tile is identified using the GEOREF naming conventions described in MIL-PRF-89049A, section 3.17. This GEOREF identifier is used as the name for the directory containing the primitives contained in that tile.

3.12.2 Cross-tile topology. Cross-tile topology ensures that topology is retained between the primitive tables across the tile boundaries. Topology across the tiles is maintained through the use of a reference tile ID in the edge and connected node primitive tables that establishes a "cross-tile" link over the tile partitions. This enables the database to function as a seamless unit for analysis purposes.

3.13 Distribution medium. The TOD3 will normally be distributed on CD-ROM discs, each of which is a single TOD3 database. The format of the CD-ROM discs conforms to ISO Standard 9660. Data may also be distributed via web services (i.e., NGA Gateway), or other media, for example, Digital Versatile Disc (DVD) as required to support customer needs.

3.13.1 Geographic organization. The TOD3 shall be organized on multiple CDRom discs based on geographic regions of the world. There is no overlap present on adjoining discs.

3.13.2 Database size. The size of a TOD3 database is dependent on the complexity of the source used to produce the product and the number of particular charts included in the database. A single database will not exist on more than one CD-ROM.

MIL-PRF-89049/13

3.14 Cartographic considerations for TOD3 database.

3.14.1 Source. Detailed survey data and Non-submarine contacts data are generally used to provide the fundamental source data set.

3.14.2 Compilation scale. The compilation scale will vary based on the density of available data and will generally range from 1:50,000 to 1:100,000.

3.14.3 Minimum polygon size. The minimum polygon size depicted in the TOD3 product will conform to the criteria set forward in MIL-PRF-89023.

3.14.4 Bathymetry. Portrayal of bathymetric information will be in accordance with MIL-B-89200, Bathymetric Navigation Planning Chart (BNPC). Further guidance is provided as follows:

a. TOD3 shall contain bathymetric data collected from areas between the 20 meter depth curve and the 200 meter depth curve. Due to irregularities in the bottom, there may be areas containing depths deeper than 200 meters contained within the area of coverage of a TOD3. They will be included within the TOD3 dataset as long as they are landward of the 200 meter curve.

b. Depth area features shall be portrayed from the 20 to 25 meters, 25 to 50 meters, 50 to 75 meters, 75 to 100 meters, 100 to 150 meters, and 150 to 200 meters.

c. Depth Contours will be collected at 5-meter intervals between 20 meters and 200 meters. Depth contours will be portrayed as follows: the 20 meter, 25 meter, 50 meter, 75 meter, 100 meter, 125 meter, 150 meter, 175 meter and 200 meter contours will be attributed as index contours; all other contours will be attributed as intermediate contours. Supplemental contours of $\frac{1}{2}$ the contour interval may also be portrayed and attributed as such where needed to accurately delineate the bottom configuration.

d. Depth contours shall be contiguous unless they either are broken on the source chart, or cannot be discerned at the product resolution.

e. Soundings will be portrayed in their actual location; no soundings will be portrayed with lead lines.

3.15 Security.

3.15.1 Classification. TOD3 data shall be classified as follows:

a. Tactical Ocean Data Level 3 (TOD3) datasets are always classified SECRET.

3.16 CD ROM labeling and packaging. General CD-ROM labeling, labeling on the cardboard sleeve, or jewel case liner/information booklet, as applicable shall be as described in MIL-PRF-89049A. Items specific to TOD3 are shown below.

3.16.1 CD labeling. Labeling of the TOD3 CDs shall be in accordance with the contract instructions.

MIL-PRF-89049/13

3.16.1.1 Product specific items.

- a. Product Logo: TOD3 CDs shall show the VPF logo.
- b. Product Description: Tactical Ocean Data Level 3 (TOD3 TM)
- c. Series: TOD3
- d. Item: The three digit TOD3 CD number.
- e. NGA reference number format is TOD3nnn00, where nnn represents the three digit TOD3 CD number.

3.16.2 Information booklet. Information booklets shall be provided for TOD3 CDs. Labeling of the TOD3 information booklet covers shall be in accordance with contract instructions. When used in conjunction with the jewel case, the front cover of the information booklet also serves as the front cover of the case.

3.16.2.1 Information booklet TOD3 specific items. All information booklet TOD3 specific items are the same as those shown on the CD, see 3.16.1.1.

3.16.2.2 Information booklet text.

- a. The interior pages of the information booklet shall contain the following statements. The point of contact information (NGA User's Note) shown below is current as of the date of publication of this specification. See contract for updates (if applicable).

Tactical Ocean Data Level 3 (TOD3)

The Tactical Ocean Data Level 3 (TOD3) provides databases of shallow water nautical information in Vector Product Format (VPF) that are contained on CD-ROM discs. The data content is intended to closely replicate NGA's Tactical Ocean Data Level 2 (TOD2) data in waters shallower than 200 meters. TOD Level 3 must be used in conjunction with the Digital Nautical Chart (DNC), and Tactical Ocean Data Level 1 and Level 2 to provide feature coverage necessary for subsurface navigation. The NGA Classified Notice to Mariners (CNM) supports TOD3 with maintenance information. To be added to the distribution for CNM, send a request to Headquarters, NGA, ATTN: OGIH.

This TOD3 was produced under DoD Specification MIL-PRF-89049/13, dated 15 December 2005.

Users should refer corrections, additions, and comments regarding this or other NGA products to the NGA Operational Help Desk: 1-800-455-0899; commercial 314-263-4864; DSN 693-4864; or write to: Director, National Geospatial-Intelligence Agency, ATTN: ES, Mail Stop L-88, 4600 Sangamore Road, Bethesda, MD 20816-5003.

- b. Source information (library, CNM number) shall be shown as illustrated in the following example:

Note: This TOD3 contains libraries TOD303a and TOD303b, which are corrected through Classified Notice to Mariners 15/03 b.

MIL-PRF-89049/13

4. VERIFICATION

Verification shall be in accordance with MIL-PRF-89049A, section 4.

5. PACKAGING

5.1 Packaging. For acquisition purposes, the packaging requirements shall be as specified in the contract or order (see 6.2). When packaging of material is to be performed by DoD or in-house contractor personnel, these personnel need to contact the responsible packaging activity to ascertain packaging requirements. Packaging requirements are maintained by the Inventory Control Point's packaging activities within the Military Service or Defense Agency, or within the military service's system command. Packaging data retrieval is available from the managing Military Department's or Defense Agency's automated packaging files, CD-ROM products, or by contacting the responsible packaging activity.

6. NOTES

(This section contains information of a general or explanatory nature that may be helpful, but is not mandatory.)

6.1 Intended use. The Tactical Ocean Data Level 3 database is intended to supplement electronic chart display systems with detailed classified depth information to permit the safe underwater navigation of submarines. The TOD3 is intended for use by military branches of the government.

6.1.1 Analysis limitation. Analytical use of TOD3 data at a scale greater than that of the original cartographic source nautical chart is not recommended.

6.2 Acquisition requirements. See MIL-PRF-89049A, section 6.2.

6.3 Supersession data. This specification sheet is the initial release of the document.

6.4 Definitions. Refer to MIL-PRF-89049A for definition of terms used in this specification sheet that are not defined below.

6.4.1 Mean Sea Level (MSL). - The average height of the surface of the sea for all stages of the tide, used as a reference for elevations. (Usually determined by averaging height readings observed hourly over a minimum period of 19 years.)

6.5 Subject term (key word) listing.

DNC
FACC
GEOREF
GIS
Hydrographic survey
Non-submarine Contacts
Thematic layer
TOD
WGS84

MIL-PRF-89049/13

6.6 NGA operational help desk. For questions concerning this or other NGA products, services, or specifications, please telephone the NGA Operational Help Desk at 1-800-455-0899; Commercial 314-263-4864; or DSN 693-4864.

MIL-PRF-89049/13
APPENDIX A**TOD3 DATA DICTIONARY ORGANIZATION**

A.1 SCOPE.

A.1.1 Scope. This appendix provides information about the data dictionary organization for the TOD3 product. It is a mandatory part of the specification sheet. The information contained herein is intended for compliance.

A.2 APPLICABLE DOCUMENTS

The TOD3 must be used in conjunction with the Digital Nautical Chart (DNC) to provide complete coverage of a given area. Refer to MIL-PRF-89023, Digital Nautical Chart, for DNC data dictionary information.

A.3 TOD3 DATA DICTIONARY ORGANIZATION

A.3.1 Data dictionary organization.

a. The data provided in these appendices are organized according to VPF structure levels. The TOD3 database and library tables appear first, as described in MIL-PRF-89049A, Appendixes B and D. The information provided in the database tables applies to the entire database. The TOD3 database contains only data libraries (containing the product data) described in Appendix C of this document.

b. Appendix B in this specification sheet contains information on the database and library level metadata tables for TOD3.

c. Appendix C in this specification sheet contains the data coverages and the library reference coverage. For each coverage there is a series of tables that describe the data in that coverage. Listed for each coverage are the character value description table, integer value description table, feature tables, feature class attribute table, and feature class schema table.

d. Appendix D in this specification sheet contains two consolidated listings of the TOD3 features and attributes along with their respective primitive types for the TOD3 libraries. They are designed as an index to the TOD3 features and attributes. The first is a listing by coverage of the TOD3 feature names and codes, and their associated attribute names and codes. The second is a similar consolidated listing of all the TOD3 features sorted by feature code.

MIL-PRF-89049/13

APPENDIX B

TOD3 DATABASE AND LIBRARY VPF TABLE IMPLEMENTATION**B.1 SCOPE**

B.1.1 Scope. This appendix defines the TOD3 implementation of the required database and library level metadata tables. It is a mandatory part of this specification sheet. The information contained herein is intended for compliance.

B.2 APPLICABLE DOCUMENTS

This section is not applicable to this appendix.

B.3 TOD3 DATABASE AND LIBRARY VPF TABLE CONTENTS

The following sections define the default record content for each of the database and library level metadata tables that require product-specific information. The actual record content of these metadata tables in a TOD3 dataset shall be tailored to accurately represent the dataset. In certain cases, the structure of a metadata table in TOD3 differs from the structure of that table as defined in MIL-PRF-89049A. For those metadata tables, the TOD3 structure is defined in this appendix.

B.3.1 Database-level record layout. The TOD3 consists of a number of individual databases. Three required VPF tables and files are implemented at the database level. These are the database header table (dht) and corresponding variable-length index (dhx) and the library attribute table(lat). The following sections describe these tables and their default record content for the TOD3 database.

B.3.1.1 Database header table. This table contains information about the contents of the database and security information. For TOD3, the format of the dht is different than the one defined in MIL-PRF-89049A. Table B-1 herein defines the structure and the default record contents for the dht in the TOD3 databases. TOD3 does not implement the optional disclaim.doc that can be associated with the dht.

MIL-PRF-89049/13

APPENDIX B

TABLE B-1. Structure and Record Contents for database header table (dht).

<pre> {Header length}L; Database Header Table;-; id=I,1,P,Row Identifier,-,-,-,: vpf_version=T,10,N,VPF version number,-,-,-,: database_name=T,8,N,Directory name of this database,-,-,-,: database_desc=T,100,N,Description of this database,-,-,-,: media_standard=T,20,N,Media Standard,-,-,-,: originator=T,*N,Producer of this database,-,-,-,: addressee=T,*N,Address of the producer,-,-,-,: media_volumes=T,4,N,Number of Volumes in this database,-,-,-,: seq_numbers=T,*N,The Sequential Number(s) in this database,-,-,-,: num_data_sets=T,4,N,Number of Libraries,-,-,-,: security_class=T,1,N,Security Classification,-,-,-,: downgrading=T,3,N,Downgrading,-,-,-,: downgrade_date=D,1,N,Date of downgrading,-,-,-,: releasability=T,20,N,Releasability restrictions of data,-,-,-,: transmittal_id=T,1,N,Unique Transmittal Identifier,-,-,-,: edition_number=T,10,N,Edition Number of this database,-,-,-,: edition_date=D,1,N,Date of edition,-,-,-,: declassification=T,*N,Declassificaton Note,-,-,-,: class_just=T,*N,Justification for classification,-,-,-,: </pre>
<pre> 1\ 9606\ tod317\¹ Tactical Ocean Data Level 3 database supporting tactical GIS applications.\² ISO 9660\ NATIONAL GEOSPATIAL-INTELLIGENCE AGENCY\ ATTN: NGA/P, Mail Stop D-134, 4600 Sangamore Road, Bethesda, MD 20816- 5003\ 1\ N/A\ 1\ S\ NO\ [NULL]\ TBD\ 1\ 1\ 0000000000000000.\ Derived from: OPNAVINST S5513.5B-24; DECLASSIFY ON: X3,X4; Date of Source: 25 AUG 1993\ Classification is based on the accuracy and completeness of bathymetry (SECRET) and the survey lines (SECRET) </pre>

¹This is a representative directory name for a TOD3 database.²This is a representative description for a TOD3 database.

MIL-PRF-89049/13

APPENDIX B

B.3.1.2 Library attribute table. This table contains a row for each TOD3 library that describes the library's name and the minimum bounding rectangle that defines the geographic extent of that library. The format of the lat is defined in MIL-PRF-89049A, Appendix B. There is no TOD3-specific default record content for the lat.

B.3.2 Library-level record layout. Each TOD3 data library shall contain the four required metadata tables and associated narrative tables and indices. These include the library header table (lht), geographic reference table (grt), coverage attribute table (cat), data quality table (dqt), a lineage narrative table (lineage.doc) and variable-length indices (lhx, grx, dqx, lineage.dox). The following sections describe these tables and their default record content for TOD3 data libraries.

B.3.2.1 TOD3 library header table. The library header table identifies the data set, sources and security information in the data library. For TOD3, the format of the lht is different than the one defined in MIL-PRF-89049A. Table B-2 herein defines the structure and the default record contents for the lht in the TOD3 libraries.

MIL-PRF-89049/13

APPENDIX B

TABLE B-2. Structure and Content for TOD3 library header table (lht).

<pre> {Header length}L; Library Header Table;-; id=I,1,P,Row Identifier,-,-,-,: product_type=T,12,N,Product Type,-,-,-,: library_name=T,12,N,Name,-,-,-,: description=T,100,N,Description of the library,-,-,-,: data_struct_code=T,1,N,Data Structure Code,-,-,-,: scale=I,1,N,Scale of the library,-,-,-,: source_series=T,15,N,Series,-,-,-,: source_id=T,30,N,Identifier of the source reference,-,-,-,: source_edition=T,20,N,Edition number of the source,-,-,-,: source_name=T,100,N,Name of library source,-,-,-,: source_date=D,1,N,Source Date,-,-,-,: security_class=T,1,N,Security Classification,-,-,-,: downgrading=T,3,N,Downgrading,-,-,-,: downgrading_date=D,1,N,Date of downgrading,-,-,-,: releasability=T,20,N,Releasability,-,-,-,: declassification=T,*N,Declassificaton Note,-,-,-,: class_just=T,*N,Justification for classification,-,-,-,: 1\ TOD3\ tod317a\ Bathymetric and NSC data to be used for submarine navigation with the accompanying DNC17.\¹ 8\ (scale of library)\² 2BD\ BC\ Various\ Various\ 00000000000000.\² C\ NO\ [NULL]\ TBD\ Derived from: OPNAVINST S5513.5B-24; DECLASSIFY ON: X3,X4; Date of Source: 25 AUG 1993\ Classification is based on the accuracy and completeness of bathymetry (CONFIDENTIAL) </pre>
--

Note: Each line represents the record value for each defined column.

¹This is a representative description for a TOD3 library.

²Insert actual scale of library.

³Indicates earliest source date.

MIL-PRF-89049/13

APPENDIX B

B.3.2.2 Geographic reference table. This table contains the geographic parameters, and projection information about a TOD3 library. The format of the grt is defined in MIL-PRF-89049A, Appendix D. Table B-3 herein defines the default record contents for the grt in a TOD3 data library.

TABLE B-3. Record contents for a TOD3 library geographic reference table (grt).

Column Name	Record Entry
id	1
data_type	GEO
units	DEG
ellipsoid_name	WGS 84
ellipsoid_code	WGE
ellipsoid_detail	A=6378137,B=6356752
vert_datum_name	MEAN SEA LEVEL
vert_datum_code	MSL
vert_units	M
sound_datum_name	N/A
sound_datum_code	N/A
sound_units	M
geo_datum_name	WGS 84
geo_datum_code	WGE
projection_name	DECIMAL DEGREES UNPROJECTED

B.3.2.3 Coverage attribute table. The cat defines the topology level for each coverage in a TOD3 data library. The format of the cat is defined in MIL-PRF-89049A, Appendix D. Table B-4 herein defines the record content of the cat for all coverages in TOD3.

TABLE B-4. Record contents for a TOD3 coverage attribute table (cat).

id	coverage_name ¹	description	level ²
1	libref	Library Reference	2
2	tileref	Tile Reference	3
3	dq	Data Quality	3
4	ecr	Earth Cover	0
5	hyd	Hydrography	3
6	nsc	Non-submarine Contacts	0
7	sur	Survey Information	3

NOTES:

1. This table depicts all coverages which may be present in a TOD3 library. Presence of these coverages will vary with data availability. If a library does not contain any data for a particular coverage, then the record describing the coverage will not be present.

2. The number in the level column represents the topology level of each coverage.

MIL-PRF-89049/13

APPENDIX B

B.3.2.4 Data Quality Table The dqt provides information about the quality and accuracy of the data contained in the TOD3 data library. The format of the dqt and the associated lineage.doc is defined in MIL-PRF-89049A, Appendix D. Table B-5 herein defines the default record contents for the dqt in a TOD3 data library. No default contents are specified for the lineage.doc.

TABLE B-5. Record contents for a TOD3 library data quality table (dqt).

Column Name	Record Entry
id	1
vpf_level	LIBRARY
vpf_level_name	tod3xxx
feature_complete	All features in this library are captured from the source materials in accordance with this specification
attrib_complete	All features in this library have valid attribute codes assigned to them in accordance with this specification
logical_consist	All data are topologically correct. No duplicate features are present within a coverage. All data were consistently captured using the rules described in the documentation table associated with this table.
edition_num	1
creation_date	20050820000000.
revision_date	00000000000000.
spec_name	MIL-PRF-89049/13
spec_date	20050420000000.
earliest_source	19700101000000.
latest_source	00000000000000.
collection_spec	MIL-PRF-89049/13
abs_horiz_acc	250
abs_horiz_units	METERS
abs_vert_acc	N/A
abs_vert_units	N/A
rel_horiz_acc	N/A
rel_horiz_units	N/A
rel_vert_acc	N/A
rel_vert_units	N/A
comments	Additional descriptions of data lineage are available in the documentation table associated with this data quality table (lineage.doc)

MIL-PRF-89049/13

APPENDIX C

TOD3 THEMATIC COVERAGES VPF TABLES AND CONTENTS

C.1 SCOPE

C.1.1 Scope. This appendix describes thematic coverage directory record layout for TOD3 data. It is a mandatory part of this specification sheet. The information contained herein is intended for compliance.

C.2 APPLICABLE DOCUMENTS

This section is not applicable to this appendix.

C.3 TOD3

C.3.1 General. Appendix C contains the data coverages and the libref coverage for TOD3. For each coverage there is a series of tables that describe the data in that coverage. Listed for each coverage is the character value description table, integer value description table, feature tables, feature class attribute table, and feature class schema table

TABLE C-1. TOD3 data coverages.

Data Quality coverage	(dq)
Earth Cover coverage	(ecr)
Hydrography coverage	(hyd)
Non-submarine Contacts coverage	(nsc)
Survey Information coverage	(sur)

C.3.1.1 Data Quality Coverage. As shown in Table C-1, this appendix details 4 of the 5 data coverages contained in the TOD3 product. The Data Quality coverage is described in MIL-PRF-89049A, Appendix E. The minimum collection area size is 15,625 square meters.

MIL-PRF-89049/13

APPENDIX C

C.3.2 **Earth Cover Coverage.**

This coverage contains miscellaneous features of significance to marine navigation. This coverage is tiled.

TABLE C-2. Earth Cover Character Value Description Table.

Thematic Layer: Earth Cover
 Coverage Name: ecr
 Feature Table Description: Earth Cover Character Value Description Table
 Table Name: char.vdt

<pre>{Header length}L; Earth Cover Character Value Description Table;-; id=I,1,P,Row Identifier,-,-,-,: table=T,12,N,Name of the Feature Table,-,-,-,: attribute=T,6,N,Column Name,-,-,-,: value=T,5,N,Unique Value of Attribute,-,-,-,: description=T,*N,Description of Value,-,-,-,;;</pre>				
1	ecrtext.tft	f_code	ZD040	Named Location
2	fca	type	T	Text Feature

MIL-PRF-89049/13

APPENDIX C

TABLE C-3. Earth Cover Text Feature Table.

Thematic Layer: Earth Cover
 Coverage Name: ecr
 Feature Table Description: Earth Cover Text Feature Table
 Table Name: ecrtext.tft
 Thematic Index ID Number: 1

```
{Header length}L;
Earth Cover Text Feature Table;-;
id=I,1,P,Row Identifier,-,-,-,:
f_code=T,5,N,FACC Feature Code,char.vdt,-,-,:;
```

Column	Description	Value	Value Meaning	Applicable f_code for Each Attribute Value
id	Row Identifier		Sequential beginning with 1	
f_code	FACC Feature Code	ZD040	Named Location	

MIL-PRF-89049/13

APPENDIX C

TABLE C-4. Earth Cover Feature Class Attribute Table.

Thematic Layer: Earth Cover
 Coverage Name: ecr
 Feature Table Description: Earth Cover Feature Class Attribute Table
 Table Name: fca

```
{Header length}L;
Earth Cover Feature Class Attribute Table;-;
id=I,1,P,Row Identifier,-,-,-,:
fclass=T,8,U,Feature Class Name,-,-,-,:
type=T,1,N,Feature Type,char.vdt,-,-,:
descr=T,* ,N,Description,-,-,-,;
```

Column	Description	Value	Value Meaning	Applicable f_code for Each Attribute Value
id	Row Identifier		Sequential beginning with 1	
fclass	Feature Class Name			ecrtext
type	Feature Type	T	Text Feature	ecrtext
descr	Description		Earth Cover Text Feature	ecrtext

MIL-PRF-89049/13

APPENDIX C

TABLE C-5. Content and Format for Earth Cover Feature Class Schema Table.

Thematic Layer: Earth Cover
 Coverage Name: ecr
 Feature Table Description: Earth Cover Feature Class Schema Table
 Table Name: fcs

<pre>{Header length}L; Earth Cover Feature Class Schema Table;-; id=I,1,P,Row Identifier,-,-,-,: feature_class=T,8,N,Name of Feature Class,-,-,-,: table1=T,12,N,First Table,-,-,-,: table1_key=T,16,N,Column Name in First Table,-,-,-,: table2=T,12,N,Second Table,-,-,-,: table2_key=T,16,N,Column Name in Second Table,-,-,-,;</pre>					
1	ecrtext	ecrtext.tft	id	ecrtext.tjt	ecrtext.tft_id
2	ecrtext	ecrtext.tjt	txt_id	txt	id
3	ecrtext	txt	id	ecrtext.tjt	txt_id
4	ecrtext	ecrtext.tjt	ecrtext.tft_id	ecrtext.tft	id

MIL-PRF-89049/13

APPENDIX C

C.3.3 Hydrography Coverage.

This coverage contains hydrographic features including depth contours, depth areas, and soundings used to provide a graphic picture of the seafloor configuration. This coverage is tiled.

TABLE C-6. Hydrography Character Value Description Table.

Thematic Layer: Hydrography
 Coverage Name: hyd
 Feature Table Description: Hydrography Character Value Description Table
 Table Name: char.vdt

{Header length}L; Hydrography Character Value Description Table;-; id=I,1,P,Row Identifier,-,-,-,; table=T,12,N,Name of the Feature Table,-,-,-,; attribute=T,6,N,Column Name,-,-,-,; value=T,5,N,Unique Value of Attribute,-,-,-,; description=T,*,N,Description of Value,-,-,-,;;				
1	soundp.pft	f_code	BE020	Sounding
2	soundp.pft	cdv	UNK	Unknown
3	hydrol.lft	f_code	BE015	Depth Contour
4	hydroa.aft	f_code	BE019	Depth Area
5	fca	type	P	Point/Node Feature
6	fca	type	L	Line Feature
7	fca	type	A	Area Feature

MIL-PRF-89049/13

APPENDIX C

TABLE C-7. Hydrography Integer Value Description Table.

Thematic Layer: Hydrography
 Coverage Name: hyd
 Feature Table Description: Hydrography Integer Value Description Table
 Table Name: int.vdt

{Header length}L; Hydrography Integer Value Description Table;-; id=I,1,P,Row Identifier,-,-,-,; table=T,12,N,Name of the Feature Table,-,-,-,; attribute=T,3,N,Column Name,-,-,-,; value=S,1,N,Unique Value of Attribute,-,-,-,; description=T,*,N,Description of Value,-,-,-,;:				
1	soundp.pft	acc	1	Accurate
2	soundp.pft	acc	2	Approximate
3	soundp.pft	acc	3	Doubtful
4	soundp.pft	coe	1	Definite
5	soundp.pft	coe	2	Doubtful
6	soundp.pft	coe	3	Reported
7	soundp.pft	snd	2	No Bottom Found
8	soundp.pft	snd	9	Slant
9	soundp.pft	snd	10	Ordinary
10	soundp.pft	snd	999	Other
11	soundp.pft	sou	1	Within the range of depth of the surrounding depth area
12	soundp.pft	sou	2	Shallower than the range of depth of the surrounding depth area
13	soundp.pft	sou	3	Deeper than the range of depth of the surrounding depth area
14	soundp.pft	svc	0	Unknown
15	soundp.pft	svc	1	Echo Sounder Calibrated at 4800 ft/sec Uncorrected
16	soundp.pft	svc	2	Echo Sounder Calibrated at 1500 m/sec Uncorrected
17	soundp.pft	svc	5	Corrected by other means of calibration
18	hydrol.lft	acc	1	Accurate
19	hydrol.lft	acc	2	Approximate
20	hydrol.lft	hqc	0	Unknown
21	hydrol.lft	hqc	1	Index
22	hydrol.lft	hqc	2	Intermediate
23	hydrol.lft	hqc	3	Supplementary (1/2)
24	hydrol.lft	hqc	14	Supplementary (1/4)
25	hydroa.aft	acc	1	Accurate
26	hydroa.aft	acc	2	Approximate

MIL-PRF-89049/13
APPENDIX C

TABLE C-8. Soundings Point Feature Table.

Thematic Layer: Hydrography
 Coverage Name: hyd
 Feature Table Description: Soundings Point Feature Table
 Table Name: soundp.pft
 Thematic Index ID Number: 1

```
{Header length}L;
Soundings Point Feature Table;-;
id=I,1,P,Row Identifier,-,-,-,:
f_code=T,5,N,FACC Feature Code,char.vdt,-,-,:
acc=S,1,N,Accuracy Category,int.vdt,accl.pti,-,:
cdv=T,8,N,Calendar Date Value,char.vdt,-,-,:
coe=S,1,N,Certainty of Existence,int.vdt,coel.pti,-,:
hdp=F,1,N,Hydrographic Depth,-,-,-,:
snd=S,1,N,Sounding Category,int.vdt,sndl.pti,-,:
sou=S,1,N,Exposition of Sounding,int.vdt,soul.pti,-,:
svc=S,1,N,Sounding Velocity,int.vdt,svcl.pti,-,:
tile_id=S,1,N,Tile Reference ID,-,ttl_id.pti,-,:
end_id=I,1,N,Entity Node Primitive ID,-,endl_id.pti,-,;:
```

Column	Description	Value	Value Meaning	Applicable f_code for Each Attribute Value
id	Row Identifier		Sequential beginning with 1	
f_code	FACC Feature Code	BE020	Sounding	
acc	Accuracy Category	default		
		1	Accurate	BE020
		2	Approximate	BE020
		3	Doubtful	BE020
cdv	Calendar Date Value	default		
		UNK	Unknown	BE020
			Character text string	BE020
coe	Certainty of Existence	default		
		1	Definite	BE020
		2	Doubtful	BE020
		3	Reported	BE020
hdp	Hydrographic Depth [meters]			
		>=0.1 and <=12000.0		BE020

MIL-PRF-89049/13

APPENDIX C

TABLE C-8. Soundings Point Feature Table (continued).

snd	Sounding Category			
		2	No Bottom Found	BE020
		9	Slant	BE020
	default	10	Ordinary	BE020
		999	Other	BE020
sou	Exposition of Sounding			
	default	1	Within the range of depth of the surrounding depth area	BE020
		2	Shallower than the range of depth of the surrounding depth area	BE020
		3	Deeper than the range of depth of the surrounding depth area	BE020
svc	Sounding Velocity			
	default	0	Unknown	BE020
		1	Echo Sounder Calibrated at 4800 ft/sec Uncorrected	BE020
		2	Echo Sounder Calibrated at 1500 m/sec Uncorrected	BE020
		5	Corrected by other means of calibration	BE020

MIL-PRF-89049/13

APPENDIX C

TABLE C-9. Hydrography Line Feature Table.

Thematic Layer: Hydrography
 Coverage Name: hyd
 Feature Table Description: Hydrography Line Feature Table
 Table Name: hydrol.lft
 Thematic Index ID Number: 2

```
{Header length}L;
Hydrography Line Feature Table;-;
id=I,1,P,Row Identifier,-,-,-,:
f_code=T,5,N,FACC Feature Code,char.vdt,-,-,:
acc=S,1,N,Accuracy Category,int.vdt,acc2.lti,-,:
crv=F,1,N,Depth Curve or Contour Value,-,crv2.lti,-,:
hqc=S,1,N,Hypsography Portrayal Category,int.vdt,hqc2.lti,-,:;
```

Column	Description	Value	Value Meaning	Applicable f_code for Each Attribute Value
id	Row Identifier		Sequential beginning with 1	
f_code	FACC Feature Code	BE015	Depth Contour	
acc	Accuracy Category	1	Accurate	BE015
	default	2	Approximate	BE015
crv	Depth Curve or Contour Value [meters]			
	default	-32767.0	Unknown	BE015
		>=0.1 and <=12000.0		BE015
hqc	Hypsography Portrayal Category			
		0	Unknown	BE015
		1	Index	BE015
	default	2	Intermediate	BE015
		3	Supplementary (1/2)	BE015
		14	Supplementary (1/4)	BE015

MIL-PRF-89049/13

APPENDIX C

TABLE C-10. Hydrography Area Feature Table.

Thematic Layer: Hydrography
 Coverage Name: hyd
 Feature Table Description: Hydrography Area Feature Table
 Table Name: hydroa.aft
 Thematic Index ID Number: 3

```
{Header length}L;
Hydrography Area Feature Table;-;
id=I,1,P,Row Identifier,-,-,-,:
f_code=T,5,N,FACC Feature Code,char.vdt,-,-,:
acc=S,1,N,Accuracy Category,int.vdt,acc3.ati,-,:
cvh=F,1,N,Depth Curve or Contour Value High,-,cvh3.ati,-,:
cvl=F,1,N,Depth Curve or Contour Value Low,-,cvl3.ati,-,;;
```

Column	Description	Value	Value Meaning	Applicable f_code for Each Attribute Value	
id	Row Identifier		Sequential beginning with 1		
f_code	FACC Feature Code	BE019	Depth Area		
acc	Accuracy Category	default	1	Accurate	BE019
			2	Approximate	BE019
cvh	Depth Curve or Contour Value High [meters]	default	-32767.0	Unknown	BE019
			>=0.1 and <=12000.0		BE019
cvl	Depth Curve or Contour Value Low [meters]	default	-32767.0	Unknown	BE019
			>=0.1 and <=12000.0		BE019

MIL-PRF-89049/13

APPENDIX C

TABLE C-11. Hydrography Feature Class Attribute Table.

Thematic Layer: Hydrography
 Coverage Name: hyd
 Feature Table Description: Hydrography Feature Class Attribute Table
 Table Name: fca

```
{Header length}L;
Hydrography Feature Class Attribute Table;-;
id=I,1,P,Row Identifier,-,-,-,:
fclass=T,8,U,Feature Class Name,-,-,-,:
type=T,1,N,Feature Type,char.vdt,-,-,-,:
descr=T,* ,N,Description,-,-,-,;
```

Column	Description	Value	Value Meaning	Applicable f_code for Each Attribute Value
id	Row Identifier		Sequential beginning with 1	
fclass	Feature Class Name			soundp hydrol hydroa
type	Feature Type	P L A	Point/Node Feature Line Feature Area Feature	soundp hydrol hydroa
descr	Description		Soundings Point Feature Hydrography Line Feature Hydrography Area Feature	soundp hydrol hydroa

MIL-PRF-89049/13

APPENDIX C

TABLE C-12. Content and Format for Hydrography Feature Class Schema Table.

Thematic Layer: Hydrography
 Coverage Name: hyd
 Feature Table Description: Hydrography Feature Class Schema Table
 Table Name: fcs

{Header length}L; Hydrography Feature Class Schema Table;-; id=I,1,P,Row Identifier,-,-,-,; feature_class=T,8,N,Name of Feature Class,-,-,-,; table1=T,12,N,First Table,-,-,-,; table1_key=T,16,N,Column Name in First Table,-,-,-,; table2=T,12,N,Second Table,-,-,-,; table2_key=T,16,N,Column Name in Second Table,-,-,-,;					
1	soundp	soundp.pft	end_id	end	id
2	soundp	end	id	soundp.pft	end_id
3	soundp	soundp.pft	id	soundp.njt	soundp.pft_id
4	soundp	soundp.njt	notes.rat_id	notes.rat	id
5	soundp	notes.rat	id	soundp.njt	notes.rat_id
6	soundp	soundp.njt	soundp.pft_id	soundp.pft	id
7	hydrol	hydrol.lft	id	hydrol.ljt	hydrol.lft_id
8	hydrol	hydrol.ljt	edg_id	edg	id
9	hydrol	edg	id	hydrol.ljt	edg_id
10	hydrol	hydrol.ljt	hydrol.lft_id	hydrol.lft	id
11	hydrol	hydrol.lft	id	hydrol.njt	hydrol.lft_id
12	hydrol	hydrol.njt	notes.rat_id	notes.rat	id
13	hydrol	notes.rat	id	hydrol.njt	notes.rat_id
14	hydrol	hydrol.njt	hydrol.lft_id	hydrol.lft	id
15	hydroa	hydroa.aft	id	hydroa.ajt	hydroa.aft_id
16	hydroa	hydroa.ajt	fac_id	fac	id
17	hydroa	fac	id	hydroa.ajt	fac_id
18	hydroa	hydroa.ajt	hydroa.aft_id	hydroa.aft	id
19	hydroa	hydroa.aft	id	hydroa.njt	hydroa.aft_id
20	hydroa	hydroa.njt	notes.rat_id	notes.rat	id
21	hydroa	notes.rat	id	hydroa.njt	notes.rat_id
22	hydroa	hydroa.njt	hydroa.aft_id	hydroa.aft	id

MIL-PRF-89049/13

APPENDIX C

C.3.4 Non-submarine Contacts Coverage.

This coverage contains Non-submarine Contacts. This coverage is tiled.

TABLE C-13. Non-submarine Contacts Character Value Description Table.

Thematic Layer: Non-submarine Contacts
 Coverage Name: nsc
 Feature Table Description: Non-submarine Contacts Character Value
 Description Table
 Table Name: char.vdt

{Header length}L; Non-submarine Contacts Character Value Description Table;-; id=I,1,P,Row Identifier,-,-,-,; table=T,12,N,Name of the Feature Table,-,-,-,; attribute=T,6,N,Column Name,-,-,-,; value=T,5,N,Unique Value of Attribute,-,-,-,; description=T,*,N,Description of Value,-,-,-,;;				
1	contactp.pft	f_code	BD005	Miscellaneous Underwater Feature
2	contactp.pft	f_code	BD180	Wreck
3	contactp.pft	cdv	UNK	Unknown
4	contactp.pft	na4	UNK	Unknown
5	contactp.pft	nam	UNK	Unknown
5	contactp.pft	txt	N_A	Not Applicable
7	fca	type	P	Point/Node Feature

MIL-PRF-89049/13

APPENDIX C

TABLE C-14. Non-submarine Contacts Integer Value Description Table.

Thematic Layer: Non-submarine Contacts
 Coverage Name: nsc
 Feature Table Description: Non-submarine Contacts Integer Value
 Description Table
 Table Name: int.vdt

{Header length}L;				
Non-submarine Contacts Integer Value Description Table;-;				
id=I,1,P,Row Identifier,-,-,-,:				
table=T,12,N,Name of the Feature Table,-,-,-,:				
attribute=T,3,N,Column Name,-,-,-,:				
value=I,1,N,Unique Value of Attribute,-,-,-,:				
description=T,*,N,Description of Value,-,-,-,;:				
1	contactp.pft	acc	1	Accurate
2	contactp.pft	acc	2	Approximate
3	contactp.pft	acc	3	Doubtful
4	contactp.pft	coe	1	Definite
5	contactp.pft	coe	2	Doubtful
6	contactp.pft	coe	3	Reported
7	contactp.pft	exs	57	Sonar Confirmed
8	contactp.pft	exs	58	Sonar Not Confirmed
9	contactp.pft	pev	1	Accuracy <= 1 nautical mile
10	contactp.pft	pev	2	Accuracy > 1 nautical mile and <= 3 nautical miles
11	contactp.pft	pev	3	Accuracy > 3 nautical miles and <= 5 nautical miles
12	contactp.pft	pev	4	Accuracy > 5 nautical miles and <= 10 nautical miles
13	contactp.pft	pev	5	Accuracy uncertain
14	contactp.pft	rag	0	Unknown
15	contactp.pft	rag	1	Survivor Report
16	contactp.pft	rag	2	Salvage Report
17	contactp.pft	rag	3	Casualty Report
18	contactp.pft	rag	4	Action Report
19	contactp.pft	rag	5	Photograph Report
20	contactp.pft	rag	6	US Coast & Geodetic Survey/National Ocean Service Report
21	contactp.pft	rag	7	US Naval Headquarters/Commands Report
22	contactp.pft	rag	8	Hydrographic/Admiralty Office
23	contactp.pft	rag	9	Wreck List
24	contactp.pft	rag	10	Chart Records
25	contactp.pft	rag	11	Coast Guard Records
26	contactp.pft	rag	12	Notice to Mariners
27	contactp.pft	rag	13	North Sea Fishing Charts

MIL-PRF-89049/13

APPENDIX C

TABLE C-14. Non-submarine Contacts Integer Value Description Table
(continued).

28	contactp.pft	rag	14	Chart
29	contactp.pft	rag	15	Minesweeper
30	contactp.pft	rag	16	Survey
31	contactp.pft	rag	17	Position Accurate Field Check
32	contactp.pft	rag	18	Sonar Report
33	contactp.pft	rag	19	MAD Report
34	contactp.pft	rag	20	Undifferentiated Sonar or MAD Report
35	contactp.pft	rag	997	Unpopulated
36	contactp.pft	rag	998	Not Applicable
37	contactp.pft	rag	999	Other
38	contactp.pft	sfc	0	Unknown (Obstruction)
39	contactp.pft	sfc	3	Fish Haven
40	contactp.pft	sfc	4	Well
41	contactp.pft	sfc	5	Submerged Production Platform
42	contactp.pft	sfc	6	Wreckage
43	contactp.pft	sfc	7	Shoaling
44	contactp.pft	sfc	8	Less Water Reported
45	contactp.pft	sfc	9	Unexploded Ordnance
46	contactp.pft	sfc	10	Unspecified Non-submarine Contact
47	contactp.pft	sfc	11	Pinnacle
48	contactp.pft	sfc	999	Other
49	contactp.pft	tng	-2147483647	Unknown
50	contactp.pft	wkt	0	Unknown
51	contactp.pft	wkt	1	Anomalies
52	contactp.pft	wkt	2	Aircraft
53	contactp.pft	wkt	3	Auxiliary
54	contactp.pft	wkt	4	Battleship
55	contactp.pft	wkt	5	Barge
56	contactp.pft	wkt	6	Buoy
57	contactp.pft	wkt	7	Caisson
58	contactp.pft	wkt	8	Aircraft Carrier
59	contactp.pft	wkt	9	Cargo
60	contactp.pft	wkt	10	Subchaser
61	contactp.pft	wkt	11	Coaster
62	contactp.pft	wkt	12	Cruiser
63	contactp.pft	wkt	13	Ship Debris (plates, misc. metal)
64	contactp.pft	wkt	14	Destroyer, Destroyer Escort, Corvette
65	contactp.pft	wkt	15	Dredge
66	contactp.pft	wkt	16	Drill Vessel or Drill Rig
67	contactp.pft	wkt	17	Explosives
68	contactp.pft	wkt	18	Fishing Vessel
69	contactp.pft	wkt	19	Fishing Reef
70	contactp.pft	wkt	20	Ferry

MIL-PRF-89049/13

APPENDIX C

TABLE C-14. Non-submarine Contacts Integer Value Description Table
(continued).

71	contactp.pft	wkt	21	Frigate
72	contactp.pft	wkt	22	Gunboat
73	contactp.pft	wkt	23	Hospital Ship
74	contactp.pft	wkt	24	Hydrographic Survey, Air Cushion, Hydrofoil
75	contactp.pft	wkt	25	Junk
76	contactp.pft	wkt	26	Lash Vessel
77	contactp.pft	wkt	27	Landing Craft, Infantry (LCI)
78	contactp.pft	wkt	28	Gas Carrier, Natural Petroleum
79	contactp.pft	wkt	29	Landing Ship, Infantry (LSI)
80	contactp.pft	wkt	30	Landing Ship, Tank (LST)
81	contactp.pft	wkt	31	Lightship
82	contactp.pft	wkt	32	Minesweeper, Minelayer
83	contactp.pft	wkt	33	Net Tender
84	contactp.pft	wkt	34	Bulk Carrier
85	contactp.pft	wkt	35	Obstruction
86	contactp.pft	wkt	36	Passenger Cargo
87	contactp.pft	wkt	37	Patrol Boat
88	contactp.pft	wkt	38	Pinnacle Rock
89	contactp.pft	wkt	39	Roll On - Roll Off
90	contactp.pft	wkt	40	Sailing Ship
91	contactp.pft	wkt	41	Sea Bee, Lash Barge
92	contactp.pft	wkt	42	Submarine Float
93	contactp.pft	wkt	43	Submarine
94	contactp.pft	wkt	44	Survey Vessel
95	contactp.pft	wkt	45	Tanker
96	contactp.pft	wkt	46	Tender, Submarine, Airplane, Oil Rig
97	contactp.pft	wkt	47	Target
98	contactp.pft	wkt	48	Torpedo Boat
99	contactp.pft	wkt	49	Transport
100	contactp.pft	wkt	50	Tug
101	contactp.pft	wkt	51	Trawler
102	contactp.pft	wkt	52	Very Large Container
103	contactp.pft	wkt	53	Well Head
104	contactp.pft	wkt	54	Yacht
105	contactp.pft	wkt	998	Not Applicable
106	contactp.pft	wsr	0	Unknown
107	contactp.pft	wsr	8	Report SONAR verified
108	contactp.pft	wsr	9	Report MAD verified
109	contactp.pft	wsr	10	Japanese Naval and Merchant Losses during WW II By All Causes NAVEXOS P-468
110	contactp.pft	wsr	11	US Losses - Director, Fleet Operations

MIL-PRF-89049/13

APPENDIX C

TABLE C-14. Non-submarine Contacts Integer Value Description Table
(continued).

111	contactp.pft	wsr	12	H.O. Files
112	contactp.pft	wsr	13	COMNAVPAAC
113	contactp.pft	wsr	14	COMNAVFE
114	contactp.pft	wsr	15	H.O. Chart Reports and Charts
115	contactp.pft	wsr	16	H.O. Notice to Mariners
116	contactp.pft	wsr	17	Lloyds and Marine Underwriter's Reports
117	contactp.pft	wsr	18	The Imperial Japanese Navy in WW II
118	contactp.pft	wsr	19	U.S. Navy at War 1941-1945
119	contactp.pft	wsr	20	German, Japanese, and Italian Submarine Losses in WW II
120	contactp.pft	wsr	21	Swedish Merchant Losses 1914-1920
121	contactp.pft	wsr	22	H.O. Wreck Information List and Supplement dated 10 MAR 1945 and 30 SEP 1946
122	contactp.pft	wsr	23	American Ship Casualties of WW I
123	contactp.pft	wsr	24	U.S. Coast Guard and Geodetic Survey Records
124	contactp.pft	wsr	25	Tenth Fleet Records (OP-374)
125	contactp.pft	wsr	26	Naval Losses of All Nations 9/3/39 - 8/15/45
126	contactp.pft	wsr	27	Italian Naval and Merchant Losses, WW II
127	contactp.pft	wsr	28	List of Danish War Losses 1914 - 1918
128	contactp.pft	wsr	29	British Merchant Vessels Captured or Destroyed by Enemy Action 1914 - 1918
129	contactp.pft	wsr	30	Abstracts of Losses 1914 - 1918
130	contactp.pft	wsr	31	British and Foreign Merchant Ships Lost During WW II
131	contactp.pft	wsr	32	A List of Neutral Ships Sunk by Germany
132	contactp.pft	wsr	33	Greek Losses WW II
133	contactp.pft	wsr	34	Italian Naval Losses - WW I
134	contactp.pft	wsr	35	Spanish Merchant Losses - WW I
135	contactp.pft	wsr	36	Netherlands Merchant Losses - WW I
136	contactp.pft	wsr	37	Italian Merchant Losses - WW I
137	contactp.pft	wsr	38	Maritime Declarations for Norwegian Ships for War Losses 1914 - 1918
138	contactp.pft	wsr	39	Reports of Known Wrecks by U.S. Coast Guard Districts 1950
139	contactp.pft	wsr	40	France - Naval and Merchant Losses during WW I
140	contactp.pft	wsr	41	Sonar Reports and MAD Reports, U.S. Navy
141	contactp.pft	wsr	42	Maritime Commission also ONI List WW I
142	contactp.pft	wsr	43	Smaling Soforklaringer - Danish Ship War Losses 1914 - 1918

MIL-PRF-89049/13

APPENDIX C

TABLE C-14. Non-submarine Contacts Integer Value Description Table
(continued).

143	contactp.pft	wsr	44	Merchant Vessels of the U.S. Lost (Commerce Department)
144	contactp.pft	wsr	45	Naval Chronology WW II
145	contactp.pft	wsr	46	Ship Visit Reports
146	contactp.pft	wsr	47	Spanish Hydrographic Office
147	contactp.pft	wsr	48	British Admiralty Wreck Charts 1921
148	contactp.pft	wsr	49	Swedish Board of Shipping and Navigation, Hydrographic Dept.
149	contactp.pft	wsr	50	British Admiralty Wreck Charts, 1961
150	contactp.pft	wsr	51	Portugal Hydrographic Office
151	contactp.pft	wsr	52	Italian Navy Survey
152	contactp.pft	wsr	53	State of Shipping Casualties (Resulting in total loss in St. Lawrence River and Gulf, on the Atlantic Coast from 1896 up to date)
153	contactp.pft	wsr	54	Italian Naval Surveys Charts and Lists
154	contactp.pft	wsr	55	ONI
155	contactp.pft	wsr	57	R.C.N. Wreck List (RCN Pub. 272)
156	contactp.pft	wsr	58	Dutch Wreck List
157	contactp.pft	wsr	59	North Sea Fishing Charts
158	contactp.pft	wsr	60	Photographs of Pinnacles and Miscellaneous Metals
159	contactp.pft	wsr	61	Coast and Geodetic Survey (National Ocean Survey) Charts
160	contactp.pft	wsr	62	Radio Navigation Warning
161	contactp.pft	wsr	63	OMAN National Hydrographic Office
162	contactp.pft	wsr	998	Not Applicable

MIL-PRF-89049/13

APPENDIX C

TABLE C-15. Non-submarine Contacts Point Feature Table.

Thematic Layer: Non-submarine Contacts
 Coverage Name: nsc
 Feature Table Description: Non-submarine Contacts Point Feature Table
 Table Name: contactp.pft
 Thematic Index ID Number: 1

```
{Header length}L;
Non-submarine Contacts Point Feature Table;-;
id=I,1,P,Row Identifier,-,-,-,:
f_code=T,5,N,FACC Feature Code,char.vdt,f_codel.pti,-,:
acc=S,1,N,Accuracy Category,int.vdt,accl.pti,-,:
cdv=T,8,N,Calendar Date Value,char.vdt,-,-,:
coe=S,1,N,Certainty of Existence,int.vdt,coel.pti,-,:
exs=S,1,N,Existence Category,int.vdt,exsl.pti,-,:
hdp=F,1,N,Hydrographic Depth,-,-,-,:
na4=T,*N,Country Code (FIPS Pub 10-4),char.vdt,-,-,:
nam=T,*N,Name,char.vdt,-,-,:
pev=S,1,N,Position Evaluation,int.vdt,pevl.pti,-,:
rag=S,1,N,Non-submarine Contact Reporting Agency Type,int.vdt,ragl.pti,-,:
sfc=S,1,N,Sea Floor Feature Category,int.vdt,sfcl.pti,-,:
tng=I,1,N,Tonnage,int.vdt,-,-,:
txt=T,*N,Text Attribute,char.vdt,-,-,:
wkt=S,1,N,Wreck Type,int.vdt,wktl.pti,-,:
wsr=S,1,N,Source of report,int.vdt,wsrl.pti,-,:
tile_id=S,1,N,Tile Reference ID,-,til1_id.pti,-,:
end_id=I,1,N,Entity Node Primitive ID,-,end1_id.pti,-,;:
```

Column	Description	Value	Value Meaning	Applicable f_code for Each Attribute Value	
id	Row Identifier		Sequential beginning with 1		
f_code	FACC Feature Code	BD005	Miscellaneous Underwater Feature		
		BD180	Wreck		
acc	Accuracy Category	default	1	Accurate	BD005,BD180
			2	Approximate	BD005,BD180
			3	Doubtful	BD005,BD180
cdv	Calendar Date Value	default	UNK	Unknown	BD005,BD180
				Character text string	BD005,BD180

MIL-PRF-89049/13

APPENDIX C

TABLE C-15. Non-submarine Contacts Point Feature Table (continued).

coe	Certainty of Existence			
		1	Definite	BD005,BD180
		2	Doubtful	BD005,BD180
		3	Reported	BD005,BD180
exs	Existence Category			
		57	Sonar Confirmed	BD005,BD180
		58	Sonar Not Confirmed	BD005,BD180
hdp	Hydrographic Depth [meters]			
	default	-32767.0	Unknown	BD005,BD180
		>=0.1 and <=12000.0		BD005,BD180
na4	Country Code (FIPS Pub 10-4)			
	default	UNK	Unknown	BD005,BD180
		Character text string		BD005,BD180
nam	Name			
	default	UNK	Unknown	BD005,BD180
		Character text string		BD005,BD180
pev	Position Evaluation			
	default	1	Accuracy <= 1 nautical mile	BD005,BD180
		2	Accuracy > 1 nautical mile and <= 3 nautical miles	BD005,BD180
		3	Accuracy > 3 nautical miles and <= 5 nautical miles	BD005,BD180
		4	Accuracy > 5 nautical miles and <= 10 nautical miles	BD005,BD180
		5	Accuracy uncertain	BD005,BD180
rag	Non-submarine Contact Reporting Agency Type			
		0	Unknown	BD005,BD180
		1	Survivor Report	BD005,BD180
		2	Salvage Report	BD005,BD180
		3	Casualty Report	BD005,BD180
		4	Action Report	BD005,BD180
		5	Photograph Report	BD005,BD180
		6	US Coast & Geodetic Survey/ National Ocean Service Report	BD005,BD180
		7	US Naval Headquarters/ Commands Report	BD005,BD180
		8	Hydrographic/Admiralty Office	BD005,BD180
	9	Wreck List	BD005,BD180	

MIL-PRF-89049/13

APPENDIX C

TABLE C-15. Non-submarine Contacts Point Feature Table (continued).

	10	Chart Records	BD005,BD180
	11	Coast Guard Records	BD005,BD180
	12	Notice to Mariners	BD005,BD180
	13	North Sea Fishing Charts	BD005,BD180
	14	Chart	BD005,BD180
	15	Minesweeper	BD005,BD180
	16	Survey	BD005,BD180
	17	Position Accurate Field Check	BD005,BD180
	18	Sonar Report	BD005,BD180
	19	MAD Report	BD005,BD180
	20	Undifferentiated Sonar or MAD Report	BD005,BD180
	997	Unpopulated	BD005,BD180
	998	Not Applicable	BD005,BD180
	999	Other	BD005,BD180
sfc	Sea Floor Feature Category		
	-32768	Null	BD180
default	0	Unknown (Obstruction)	BD005
	3	Fish Haven	BD005
	4	Well	BD005
	5	Submerged Production Platform	BD005
	6	Wreckage	BD005
	7	Shoaling	BD005
	8	Less Water Reported	BD005
	9	Unexploded Ordnance	BD005
	10	Unspecified Non-submarine Contact	BD005
	11	Pinnacle	BD005
	999	Other	BD005
tng	Tonnage [tons]		
	-2147483648	Null	BD005
default	-2147483647	Unknown	BD180
	>=1		BD180
txt	Text Attribute		
default	N_A	Not Applicable	BD005,BD180
		Character text string	BD005,BD180
wkt	Wreck Type		
	0	Unknown	BD005,BD180
	1	Anomalies	BD005
	2	Aircraft	BD180
	3	Auxiliary	BD180
	9	Cargo	BD180
	10	Subchaser	BD180

MIL-PRF-89049/13
APPENDIX CTABLE C-15. Non-submarine Contacts Point Feature Table (continued).

4	Battleship	BD180
5	Barge	BD180
6	Buoy	BD005
7	Caisson	BD005
8	Aircraft Carrier	BD180
11	Coaster	BD180
12	Cruiser	BD180
13	Ship Debris (plates, misc. metal)	BD180
14	Destroyer, Destroyer Escort, Corvette	BD180
15	Dredge	BD180
16	Drill Vessel or Drill Rig	BD180
17	Explosives	BD005
18	Fishing Vessel	BD180
19	Fishing Reef	BD005
20	Ferry	BD180
21	Frigate	BD180
22	Gunboat	BD180
23	Hospital Ship	BD180
24	Hydrographic Survey, Air Cushion, Hydrofoil	BD180
25	Junk	BD180
26	Lash Vessel	BD180
27	Landing Craft, Infantry (LCI)	BD180
28	Gas Carrier, Natural Petroleum	BD180
29	Landing Ship, Infantry (LSI)	BD180
30	Landing Ship, Tank (LST)	BD180
31	Lightship	BD180
32	Minesweeper, Minelayer	BD180
33	Net Tender	BD180
34	Bulk Carrier	BD180
35	Obstruction	BD005
36	Passenger Cargo	BD180
37	Patrol Boat	BD180
38	Pinnacle Rock	BD005
39	Roll On - Roll Off	BD180
40	Sailing Ship	BD180
41	Sea Bee, Lash Barge	BD180
42	Submarine Float	BD005
43	Submarine	BD180

MIL-PRF-89049/13
APPENDIX CTABLE C-15. Non-submarine Contacts Point Feature Table (continued).

	44	Survey Vessel	BD180
	45	Tanker	BD180
	46	Tender, Submarine, Airplane, Oil Rig	BD180
	47	Target	BD005
	48	Torpedo Boat	BD180
	49	Transport	BD180
	50	Tug	BD180
	51	Trawler	BD180
	52	Very Large Container	BD180
	53	Well Head	BD005
	54	Yacht	BD180
	998	Not Applicable	BD005,BD180
wsr		Source of report	
	0	Unknown	BD005,BD180
	8	Report SONAR verified	BD005,BD180
	9	Report MAD verified	BD005,BD180
	10	Japanese Naval and Merchant Losses during WW II By All Causes NAVEXOS P-468	BD005,BD180
	11	US Losses - Director, Fleet Operations	BD005,BD180
	12	H.O. Files	BD005,BD180
	13	COMNAVPAC	BD005,BD180
	14	COMNAVFE	BD005,BD180
	15	H.O. Chart Reports and Charts	BD005,BD180
	16	H.O. Notice to Mariners	BD005,BD180
	17	Lloyds and Marine Underwriter's Reports	BD005,BD180
	18	The Imperial Japanese Navy in WW II	BD005,BD180
	19	U.S. Navy at War 1941-1945	BD005,BD180
	20	German, Japanese, and Italian Submarine Losses in WW II	BD005,BD180
	21	Swedish Merchant Losses 1914-1920	BD005,BD180
	22	H.O. Wreck Information List and Supplement dated 10 MAR 1945 and 30 SEP 1946	BD005,BD180
	23	American Ship Casualties of WW I	BD005,BD180
	24	U.S. Coast Guard and Geodetic Survey Records	BD005,BD180

MIL-PRF-89049/13
APPENDIX CTABLE C-15. Non-submarine Contacts Point Feature Table (continued).

25	Tenth Fleet Records (OP-374)	BD005,BD180
26	Naval Losses of All Nations 9/3/39 - 8/15/45	BD005,BD180
27	Italian Naval and Merchant Losses, WW II	BD005,BD180
28	List of Danish War Losses 1914 - 1918	BD005,BD180
29	British Merchant Vessels Captured or Destroyed by Enemy Action 1914 - 1918	BD005,BD180
30	Abstracts of Losses 1914 - 1918	BD005,BD180
31	British and Foreign Merchant Ships Lost During WW II	BD005,BD180
32	A List of Neutral Ships Sunk by Germany	BD005,BD180
33	Greek Losses WW II	BD005,BD180
34	Italian Naval Losses - WW I	BD005,BD180
35	Spanish Merchant Losses - WW I	BD005,BD180
36	Netherlands Merchant Losses - WW I	BD005,BD180
37	Italian Merchant Losses - WW I	BD005,BD180
38	Maritime Declarations for Norwegian Ships for War Losses 1914 - 1918	BD005,BD180
39	Reports of Known Wrecks by U.S. Coast Guard Districts 1950	BD005,BD180
40	France - Naval and Merchant Losses during WW I	BD005,BD180
41	Sonar Reports and MAD Reports, U.S. Navy	BD005,BD180
42	Maritime Commission also ONI List WW I	BD005,BD180
43	Smaling Soforklaringer - Danish Ship War Losses 1914 - 1918	BD005,BD180
44	Merchant Vessels of the U.S. Lost (Commerce Department)	BD005,BD180
45	Naval Chronology WW II	BD005,BD180
46	Ship Visit Reports	BD005,BD180
47	Spanish Hydrographic Office	BD005,BD180
48	British Admiralty Wreck Charts 1921	BD005,BD180

MIL-PRF-89049/13
APPENDIX CTABLE C-15. Non-submarine Contacts Point Feature Table (continued).

49	Swedish Board of Shipping and Navigation, Hydrographic Dept.	BD005,BD180
50	British Admiralty Wreck Charts, 1961	BD005,BD180
51	Portugal Hydrographic Office	BD005,BD180
52	Italian Navy Survey	BD005,BD180
53	State of Shipping Casualties (Resulting in total loss in St. Lawrence River and Gulf, on the Atlantic Coast from 1896 up to date)	BD005,BD180
54	Italian Naval Surveys Charts and Lists	BD005,BD180
55	ONI	BD005,BD180
57	R.C.N. Wreck List (RCN Pub. 272)	BD005,BD180
58	Dutch Wreck List	BD005,BD180
59	North Sea Fishing Charts	BD005,BD180
60	Photographs of Pinnacles and Miscellaneous Metals	BD005,BD180
61	Coast and Geodetic Survey (National Ocean Survey) Charts	BD005,BD180
62	Radio Navigation Warning	BD005,BD180
63	OMAN National Hydrographic Office	BD005,BD180
998	Not Applicable	BD005,BD180

MIL-PRF-89049/13

APPENDIX C

TABLE C-16. Non-submarine Contacts Feature Class Attribute Table.

Thematic Layer: Non-submarine Contacts
 Coverage Name: nsc
 Feature Table Description: Non-submarine Contacts Feature Class Attribute Table
 Table Name: fca

```
{Header length}L;
Non-submarine Contacts Feature Class Attribute Table;-;
id=I,1,P,Row Identifier,-,-,-,:
fclass=T,8,U,Feature Class Name,-,-,-,:
type=T,1,N,Feature Type,char.vdt,-,-,-,:
descr=T,*N,Description,-,-,-,;
```

Column	Description	Value	Value Meaning	Applicable f_code for Each Attribute Value
id	Row Identifier		Sequential beginning with 1	
fclass	Feature Class Name	contactp		
type	Feature Type	P	Point/Node Feature	contactp
descr	Description	Non-submarine Contacts Point Feature		contactp

MIL-PRF-89049/13

APPENDIX C

TABLE C-17. Content and Format for Non-submarine Contacts Feature Class Schema Table.

Thematic Layer: Non-submarine Contacts
 Coverage Name: nsc
 Feature Table Description: Non-submarine Contacts Feature Class Schema Table
 Table Name: fcs

<pre>{Header length}L; Non-submarine Contacts Feature Class Schema Table;-; id=I,1,P,Row Identifier,-,-,-,: feature_class=T,8,N,Name of Feature Class,-,-,-,: table1=T,12,N,First Table,-,-,-,: table1_key=T,16,N,Column Name in First Table,-,-,-,: table2=T,12,N,Second Table,-,-,-,: table2_key=T,16,N,Column Name in Second Table,-,-,-,;</pre>					
1	contactp	contactp.pft	end_id	end	id
2	contactp	end	id	contactp.pft	end_id
3	contactp	contactp.pft	id	contactp.njt	contactp.pft_id
4	contactp	contactp.njt	notes.rat_id	notes.rat	id
5	contactp	notes.rat	id	contactp.njt	notes.rat_id
6	contactp	contactp.njt	contactp.pft_id	contactp.pft	id

MIL-PRF-89049/13

APPENDIX C

C.3.5 Survey Information Coverage.

This coverage contains survey information in the form of track swaths and track lines. This coverage is tiled.

TABLE C-18. Survey Information Character Value Description Table.

Thematic Layer: Survey Information
 Coverage Name: sur
 Feature Table Description: Survey Information Character Value Description Table
 Table Name: char.vdt

<pre>{Header length}L; Survey Information Character Value Description Table;-; id=I,1,P,Row Identifier,-,-,-,: table=T,12,N,Name of the Feature Table,-,-,-,: attribute=T,6,N,Column Name,-,-,-,: value=T,5,N,Unique Value of Attribute,-,-,-,: description=T,*,N,Description of Value,-,-,-,;;</pre>				
1	trackl.lft	f_code	BE040	Track Line
2	swatha.aft	f_code	BE030	Track Swath
3	fca	type	L	Line Feature
4	fca	type	A	Area Feature

MIL-PRF-89049/13

APPENDIX C

TABLE C-19. Track Line Feature Table.

Thematic Layer: Survey Information
 Coverage Name: sur
 Feature Table Description: Track Line Feature Table
 Table Name: trackl.lft
 Thematic Index ID Number: 1

```
{Header length}L;
Track Line Feature Table;-;
id=I,1,P,Row Identifier,-,-,-,:
f_code=T,5,N,FACC Feature Code,char.vdt,-,-,:;
```

Column	Description	Value	Value Meaning	Applicable f_code for Each Attribute Value
id	Row Identifier		Sequential beginning with 1	
f_code	FACC Feature Code	BE040	Track Line	

MIL-PRF-89049/13

APPENDIX C

TABLE C-20. Track Swath Area Feature Table.

Thematic Layer: Survey Information
 Coverage Name: sur
 Feature Table Description: Track Swath Area Feature Table
 Table Name: swatha.aft
 Thematic Index ID Number: 2

```
{Header length}L;
Track Swath Area Feature Table;-;
id=I,1,P,Row Identifier,-,-,-,:
f_code=T,5,N,FACC Feature Code,char.vdt,-,-,:;
```

Column	Description	Value	Value Meaning	Applicable f_code for Each Attribute Value
id	Row Identifier		Sequential beginning with 1	
f_code	FACC Feature Code	BE030	Track Swath	

MIL-PRF-89049/13

APPENDIX C

TABLE C-21. Survey Information Feature Class Attribute Table.

Thematic Layer: Survey Information
 Coverage Name: sur
 Feature Table Description: Survey Information Feature Class Attribute Table
 Table Name: fca

```
{Header length}L;
Survey Information Feature Class Attribute Table;-;
id=I,1,P,Row Identifier,-,-,-,:
fclass=T,8,U,Feature Class Name,-,-,-,:
type=T,1,N,Feature Type,char.vdt,-,-,-,:
descr=T,*N,Description,-,-,-,;
```

Column	Description	Value	Value Meaning	Applicable f_code for Each Attribute Value
id	Row Identifier		Sequential beginning with 1	
fclass	Feature Class Name	trackl swatha		
type	Feature Type	L A	Line Feature Area Feature	trackl swatha
descr	Description	Track Line Feature Track Swath Area Feature		trackl swatha

MIL-PRF-89049/13

APPENDIX C

TABLE C-22. Content and Format for Survey Information Feature Class Schema Table.

Thematic Layer: Survey Information
 Coverage Name: sur
 Feature Table Description: Survey Information Feature Class Schema Table
 Table Name: fcs

{Header length}L; Survey Information Feature Class Schema Table;-; id=I,1,P,Row Identifier,-,-,-,; feature_class=T,8,N,Name of Feature Class,-,-,-,; table1=T,12,N,First Table,-,-,-,; table1_key=T,16,N,Column Name in First Table,-,-,-,; table2=T,12,N,Second Table,-,-,-,; table2_key=T,16,N,Column Name in Second Table,-,-,-,;					
1	trackl	trackl.lft	id	trackl.ljt	trackl.lft_id
2	trackl	trackl.ljt	edg_id	edg	id
3	trackl	edg	id	trackl.ljt	edg_id
4	trackl	trackl.ljt	trackl.lft_id	trackl.lft	id
5	trackl	trackl.lft	id	trackl.njt	trackl.lft_id
6	trackl	trackl.njt	notes.rat_id	notes.rat	id
7	trackl	notes.rat	id	trackl.njt	notes.rat_id
8	trackl	trackl.njt	trackl.lft_id	trackl.lft	id
9	swatha	swatha.aft	id	swatha.ajt	swatha.aft_id
10	swatha	swatha.ajt	fac_id	fac	id
11	swatha	fac	id	swatha.ajt	fac_id
12	swatha	swatha.ajt	swatha.aft_id	swatha.aft	id
13	swatha	swatha.aft	id	swatha.njt	swatha.aft_id
14	swatha	swatha.njt	notes.rat_id	notes.rat	id
15	swatha	notes.rat	id	swatha.njt	notes.rat_id
16	swatha	swatha.njt	swatha.aft_id	swatha.aft	id

MIL-PRF-89049/13

APPENDIX C

C.3.6 Library Reference Coverage.

This coverage contains a representation of the TOD3 depth contour features for use in determining a reference position (see section 3.11.3.2). This coverage is untiled.

TABLE C-23. Library Reference Character Value Description Table.

Thematic Layer: Library Reference
 Coverage Name: libref
 Feature Table Description: Library Reference Character Value Description Table
 Table Name: char.vdt

<code>{Header length}L;</code>				
<code>Library Reference Character Value Description Table;-;</code>				
<code>id=I,1,P,Row Identifier,-,-,-,;</code>				
<code>table=T,12,N,Name of the Feature Table,-,-,-,;</code>				
<code>attribute=T,6,N,Column Name,-,-,-,;</code>				
<code>value=T,5,N,Unique Value of Attribute,-,-,-,;</code>				
<code>description=T,*,N,Description of Value,-,-,-,;</code>				
1	libref.lft	f_code	BE015	Depth Contour

TABLE C-24. Library Reference Line Feature Table.

Thematic Layer: Library Reference
 Coverage Name: libref
 Feature Table Description: Library Reference Line Feature Table
 Table Name: libref.lft
 Thematic Index ID Number: 1

<code>{Header length}L;</code>				
<code>Library Reference Line Feature Table;-;</code>				
<code>id=I,1,P,Row Identifier,-,-,-,;</code>				
<code>f_code=T,5,N,FACC Feature Code,char.vdt,-,-,-,;</code>				
<code>edg_id=I,1,N,Edge Primitive ID,-,-,-,;</code>				

MIL-PRF-89049/13
APPENDIX CTABLE C-25. Content and Format for Library Reference Feature Class Schema Table.

Thematic Layer: Library Reference
 Coverage Name: libref
 Feature Table Description: Library Reference Feature Class Schema Table
 Table Name: fcs

<pre>{Header length}L; Library Reference Feature Class Schema Table;-; id=I,1,P,Row Identifier,-,-,-,: feature_class=T,8,N,Name of Feature Class,-,-,-,: table1=T,12,N,First Table,-,-,-,: table1_key=T,16,N,Column Name in First Table,-,-,-,: table2=T,12,N,Second Table,-,-,-,: table2_key=T,16,N,Column Name in Second Table,-,-,-,;</pre>					
1	libref	libref.lft	edg_id	edg	id
2	libref	edg	libref.lft_id	libref.lft	id

MIL-PRF-89049/13

APPENDIX D

TOD3 FEATURE AND ATTRIBUTE GLOSSARY

D.1 SCOPE

D.1.1 Scope. This appendix contains the feature and attribute content for TOD3 data. It is a mandatory part of this specification sheet. The information contained herein is intended for compliance.

D.2 APPLICABLE DOCUMENTS

This section is not applicable to this appendix.

D.3 FEATURE CODES BY COVERAGE AND FEATURE TYPE

D.3.1 TOD3 feature and attribute data dictionary organization.

a. This appendix provides two tables detailing the location and types of features and attributes found in the TOD3 data dictionary. For a coverage there is a series of tables that describe the data in that coverage.

b. The first table is an index list sorted by coverage of the feature names and codes, their associated attribute names and codes, and table types.

c. The second table is a similar consolidated index sorted by feature code, of the feature names and codes, their associated attribute names and codes, their associated coverages and primitive feature table type.

d. In addition, this appendix contains the definitions of the feature codes and the attributes that are contained in TOD3.

MIL-PRF-89049/13

APPENDIX D

Table D-1 TOD3 FACC Feature and Attribute Codes Sorted by Coverage

Feature	Attribute	Attribute Value	END	CND	EDG	FAC	TXT
<i>dq Data Quality</i>							
N/A	Featureless Feature Table						
	aha	Absolute Horizontal Accuracy in Meters	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	ava	Absolute Vertical Accuracy in Meters	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	dqd	Data Quality Description	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	mcd	Map Compilation Date	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	mpd	Map Print Date	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	mrd	Map Revision Date	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	mse	Map Sheet Edition	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	sdp	Source Description	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	sin	Source Identification	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	ss1	First Source Sheet or Data Identifier	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	ss2	Second Source Sheet or Data Identifier	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	thl	Data Quality Thematic Layer	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ZD020	Void Collection Area						
	vca	Void Collection Attribute					
		000 Unknown	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
		001 Data Not Requested By User	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
		002 Area Too Rough to Collect	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
		003 No Available Imagery	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
		006 No Available Map Source	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
		007 No Suitable Imagery	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	vct	Void Collection Type					
		000 Unknown	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
		001 Relief	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
		999 Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ZD045	Text Description						
	n/a	No Attributes Required	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<i>ecr Earth Cover</i>							
ZD040	Named Location						
	n/a	No Attributes Required	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<i>hyd Hydrography</i>							
BE015	Depth Contour						
	acc	Accuracy Category					
		001 Accurate	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		002 Approximate	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	crv	Depth Curve or Contour Value	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	hqc	Hypsography Portrayal Category					
		000 Unknown	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		001 Index	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		002 Intermediate	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		003 Supplementary (1/2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		014 Supplementary (1/4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

MIL-PRF-89049/13

APPENDIX D

Table D-1 TOD3 FACC Feature and Attribute Codes Sorted by Coverage

Feature	Attribute	Attribute Value	END	CND	EDG	FAC	TXT
<i>hyd Hydrography</i>							
BE019 Depth Area							
acc	Accuracy Category						
	001	Accurate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	002	Approximate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
cvh	Depth Curve or Contour Value High		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
cvl	Depth Curve or Contour Value Low		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
BE020 Sounding							
acc	Accuracy Category						
	001	Accurate	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	002	Approximate	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	003	Doubtful	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
cdv	Calendar Date Value		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
coe	Certainty of Existence						
	001	Definite	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	002	Doubtful	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	003	Reported	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
hdp	Hydrographic Depth		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
snd	Sounding Category						
	002	No Bottom Found	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	009	Slant	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	010	Ordinary	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	999	Other	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
sou	Exposition of Sounding						
	001	Within the range of depth of the surrounding depth area	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	002	Shallower than the range of depth of the surrounding depth area	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	003	Deeper than the range of depth of the surrounding depth area	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
svc	Sounding Velocity						
	000	Unknown	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	001	Echo Sounder Calibrated at 4800 ft/sec Uncorrected	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	002	Echo Sounder Calibrated at 1500 m/sec Uncorrected	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	005	Corrected by other means of calibration	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>nsc Non-submarine Contacts</i>							
BD005 Miscellaneous Underwater Feature							
acc	Accuracy Category						
	001	Accurate	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	002	Approximate	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	003	Doubtful	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
cdv	Calendar Date Value		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

MIL-PRF-89049/13

APPENDIX D

Table D-1 TOD3 FACC Feature and Attribute Codes Sorted by Coverage

Feature	Attribute	Attribute Value	END	CND	EDG	FAC	TXT
<i>nsc Non-submarine Contacts</i>							
BD005 Miscellaneous Underwater Feature							
coe	Certainty of Existence						
	001	Definite	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	002	Doubtful	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	003	Reported	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
exs	Existence Category						
	057	Sonar Confirmed	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	058	Sonar Not Confirmed	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
hdp	Hydrographic Depth		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
na4	Country Code (FIPS Pub 10-4)		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
nam	Name		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
pev	Position Evaluation						
	001	Accuracy <= 1 nautical mile	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	002	Accuracy > 1 nautical mile and <= 3 nautical miles	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	003	Accuracy > 3 nautical miles and <= 5 nautical miles	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	004	Accuracy > 5 nautical miles and <= 10 nautical miles	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	005	Accuracy uncertain	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
rag	Non-submarine Contact Reporting Agency Type						
	000	Unknown	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	001	Survivor Report	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	002	Salvage Report	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	003	Casualty Report	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	004	Action Report	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	005	Photograph Report	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	006	US Coast & Geodetic Survey/National Ocean Service Report	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	007	US Naval Headquarters/Commands Report	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	008	Hydrographic/Admiralty Office	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	009	Wreck List	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	010	Chart Records	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	011	Coast Guard Records	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	012	Notice to Mariners	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	013	North Sea Fishing Charts	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	014	Chart	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	015	Minesweeper	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	016	Survey	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	017	Position Accurate Field Check	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	018	Sonar Report	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	019	MAD Report	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

MIL-PRF-89049/13

APPENDIX D

Table D-1 TOD3 FACC Feature and Attribute Codes Sorted by Coverage

Feature	Attribute	Attribute Value	END	CND	EDG	FAC	TXT
<i>nsc Non-submarine Contacts</i>							
BD005 Miscellaneous Underwater Feature							
rag	Non-submarine Contact Reporting Agency Type						
	020	Undifferentiated Sonar or MAD Report	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	997	Unpopulated	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	998	Not Applicable	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	999	Other	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
sfc	Sea Floor Feature Category						
	000	Unknown (Obstruction)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	003	Fish Haven	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	004	Well	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	005	Submerged Production Platform	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	006	Wreckage	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	007	Shoaling	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	008	Less Water Reported	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	009	Unexploded Ordnance	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	010	Unspecified Non-submarine Contact	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	011	Pinnacle	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	999	Other	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
txt	Text Attribute		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
wkt	Wreck Type						
	000	Unknown	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	001	Anomalies	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	006	Buoy	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	007	Caisson	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	017	Explosives	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	019	Fishing Reef	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	035	Obstruction	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	038	Pinnacle Rock	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	042	Submarine Float	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	047	Target	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	053	Well Head	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	998	Not Applicable	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
wsr	Source of report						
	000	Unknown	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	008	Report SONAR verified	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	009	Report MAD verified	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	010	Japanese Naval and Merchant Losses during WW II By All Causes NAVEXOS P-468	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	011	US Losses - Director, Fleet Operations	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	012	H.O. Files	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	013	COMNAVPAC	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

MIL-PRF-89049/13**APPENDIX D****Table D-1 TOD3 FACC Feature and Attribute Codes Sorted by Coverage**

Feature	Attribute	Attribute Value	END	CND	EDG	FAC	TXT
<i>nsc Non-submarine Contacts</i>							
BD005	Miscellaneous Underwater Feature						
wsr	Source of report						
	014	COMNAVFE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	015	H.O. Chart Reports and Charts	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	016	H.O. Notice to Mariners	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	017	Lloyds and Marine Underwriter's Reports	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	018	The Imperial Japanese Navy in WW II	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	019	U.S. Navy at War 1941-1945	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	020	German, Japanese, and Italian Submarine Losses in WW II	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	021	Swedish Merchant Losses 1914-1920	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	022	H.O. Wreck Information List and Supplement dated 10 MAR 1945 and 30 SEP 1946	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	023	American Ship Casualties of WW I	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	024	U.S. Coast Guard and Geodetic Survey Records	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	025	Tenth Fleet Records (OP-374)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	026	Naval Losses of All Nations 9/3/39 - 8/15/45	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	027	Italian Naval and Merchant Losses, WW II	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	028	List of Danish War Losses 1914 - 1918	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	029	British Merchant Vessels Captured or Destroyed by Enemy Action 1914 - 1918	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	030	Abstracts of Losses 1914 - 1918	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	031	British and Foreign Merchant Ships Lost During WW II	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	032	A List of Neutral Ships Sunk by Germany	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	033	Greek Losses WW II	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	034	Italian Naval Losses - WW I	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	035	Spanish Merchant Losses - WW I	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	036	Netherlands Merchant Losses - WW I	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	037	Italian Merchant Losses - WW I	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	038	Maritime Declarations for Norwegian Ships for War Losses 1914 - 1918	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	039	Reports of Known Wrecks by U.S. Coast Guard Districts 1950	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	040	France - Naval and Merchant Losses during WW I	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	041	Sonar Reports and MAD Reports, U.S. Navy	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	042	Maritime Commission also ONI List WW I	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	043	Smaling Soforklaringer - Danish Ship War Losses 1914 - 1918	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

MIL-PRF-89049/13

APPENDIX D

Table D-1 TOD3 FACC Feature and Attribute Codes Sorted by Coverage

Feature	Attribute	Attribute Value	END	CND	EDG	FAC	TXT
<i>nsc Non-submarine Contacts</i>							
BD005 Miscellaneous Underwater Feature							
	wsr	Source of report					
		044 Merchant Vessels of the U.S. Lost (Commerce Department)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		045 Naval Chronology WW II	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		046 Ship Visit Reports	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		047 Spanish Hydrographic Office	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		048 British Admiralty Wreck Charts 1921	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		049 Swedish Board of Shipping and Navigation, Hydrographic Dept.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		050 British Admiralty Wreck Charts, 1961	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		051 Portugal Hydrographic Office	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		052 Italian Navy Survey	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		053 State of Shipping Casualties (Resulting in total loss in St. Lawrence River and Gulf, on the Atlantic Coast from 1896 up to date)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		054 Italian Naval Surveys Charts and Lists	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		055 ONI	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		057 R.C.N. Wreck List (RCN Pub. 272)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		058 Dutch Wreck List	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		059 North Sea Fishing Charts	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		060 Photographs of Pinnacles and Miscellaneous Metals	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		061 Coast and Geodetic Survey (National Ocean Survey) Charts	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		062 Radio Navigation Warning	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		063 OMAN National Hydrographic Office	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		998 Not Applicable	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BD180 Wreck							
	acc	Accuracy Category					
		001 Accurate	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		002 Approximate	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		003 Doubtful	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	cdv	Calendar Date Value	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	coe	Certainty of Existence					
		001 Definite	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		002 Doubtful	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		003 Reported	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	exs	Existence Category					
		057 Sonar Confirmed	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		058 Sonar Not Confirmed	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	hdp	Hydrographic Depth	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

MIL-PRF-89049/13

APPENDIX D

Table D-1 TOD3 FACC Feature and Attribute Codes Sorted by Coverage

Feature	Attribute	Attribute Value	END	CND	EDG	FAC	TXT
<i>nsc Non-submarine Contacts</i>							
BD180 Wreck							
na4	Country Code (FIPS Pub 10-4)		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
nam	Name		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
pev	Position Evaluation						
	001	Accuracy <= 1 nautical mile	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	002	Accuracy > 1 nautical mile and <= 3 nautical miles	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	003	Accuracy > 3 nautical miles and <= 5 nautical miles	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	004	Accuracy > 5 nautical miles and <= 10 nautical miles	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	005	Accuracy uncertain	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
rag	Non-submarine Contact Reporting Agency Type						
	000	Unknown	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	001	Survivor Report	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	002	Salvage Report	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	003	Casualty Report	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	004	Action Report	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	005	Photograph Report	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	006	US Coast & Geodetic Survey/National Ocean Service Report	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	007	US Naval Headquarters/Commands Report	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	008	Hydrographic/Admiralty Office	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	009	Wreck List	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	010	Chart Records	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	011	Coast Guard Records	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	012	Notice to Mariners	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	013	North Sea Fishing Charts	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	014	Chart	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	015	Minesweeper	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	016	Survey	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	017	Position Accurate Field Check	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	018	Sonar Report	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	019	MAD Report	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	020	Undifferentiated Sonar or MAD Report	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	997	Unpopulated	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	998	Not Applicable	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	999	Other	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
tng	Tonnage		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
txt	Text Attribute		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
wkt	Wreck Type						
	000	Unknown	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

MIL-PRF-89049/13

APPENDIX D

Table D-1 TOD3 FACC Feature and Attribute Codes Sorted by Coverage

Feature	Attribute	Attribute Value	END	CND	EDG	FAC	TXT
<i>nsc Non-submarine Contacts</i>							
BD180	Wreck						
	wkt	Wreck Type					
	002	Aircraft	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	003	Auxiliary	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	004	Battleship	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	005	Barge	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	008	Aircraft Carrier	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	009	Cargo	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	010	Subchaser	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	011	Coaster	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	012	Cruiser	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	013	Ship Debris (plates, misc. metal)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	014	Destroyer, Destroyer Escort, Corvette	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	015	Dredge	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	016	Drill Vessel or Drill Rig	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	018	Fishing Vessel	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	020	Ferry	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	021	Frigate	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	022	Gunboat	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	023	Hospital Ship	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	024	Hydrographic Survey, Air Cushion, Hydrofoil	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	025	Junk	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	026	Lash Vessel	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	027	Landing Craft, Infantry (LCI)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	028	Gas Carrier, Natural Petroleum	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	029	Landing Ship, Infantry (LSI)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	030	Landing Ship, Tank (LST)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	031	Lightship	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	032	Minesweeper, Minelayer	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	033	Net Tender	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	034	Bulk Carrier	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	036	Passenger Cargo	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	037	Patrol Boat	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	039	Roll On - Roll Off	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	040	Sailing Ship	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	041	Sea Bee, Lash Barge	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	043	Submarine	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	044	Survey Vessel	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	045	Tanker	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	046	Tender, Submarine, Airplane, Oil Rig	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

MIL-PRF-89049/13

APPENDIX D

Table D-1 TOD3 FACC Feature and Attribute Codes Sorted by Coverage

Feature	Attribute	Attribute Value	END	CND	EDG	FAC	TXT
<i>nsc Non-submarine Contacts</i>							
BD180 Wreck							
	wkt	Wreck Type					
		048 Torpedo Boat	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		049 Transport	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		050 Tug	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		051 Trawler	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		052 Very Large Container	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		054 Yacht	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		998 Not Applicable	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	wsr	Source of report					
		000 Unknown	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		008 Report SONAR verified	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		009 Report MAD verified	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		010 Japanese Naval and Merchant Losses during WW II By All Causes NAVEXOS P-468	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		011 US Losses - Director, Fleet Operations	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		012 H.O. Files	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		013 COMNAVPAC	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		014 COMNAVFE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		015 H.O. Chart Reports and Charts	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		016 H.O. Notice to Mariners	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		017 Lloyds and Marine Underwriter's Reports	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		018 The Imperial Japanese Navy in WW II	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		019 U.S. Navy at War 1941-1945	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		020 German, Japanese, and Italian Submarine Losses in WW II	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		021 Swedish Merchant Losses 1914-1920	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		022 H.O. Wreck Information List and Supplement dated 10 MAR 1945 and 30 SEP 1946	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		023 American Ship Casualties of WW I	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		024 U.S. Coast Guard and Geodetic Survey Records	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		025 Tenth Fleet Records (OP-374)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		026 Naval Losses of All Nations 9/3/39 - 8/15/45	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		027 Italian Naval and Merchant Losses, WW II	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		028 List of Danish War Losses 1914 - 1918	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		029 British Merchant Vessels Captured or Destroyed by Enemy Action 1914 - 1918	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		030 Abstracts of Losses 1914 - 1918	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

MIL-PRF-89049/13

APPENDIX D

Table D-1 TOD3 FACC Feature and Attribute Codes Sorted by Coverage

Feature	Attribute	Attribute Value	END	CND	EDG	FAC	TXT
<i>nsc Non-submarine Contacts</i>							
BD180 Wreck							
	wsr	Source of report					
		031 British and Foreign Merchant Ships Lost During WW II	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		032 A List of Neutral Ships Sunk by Germany	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		033 Greek Losses WW II	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		034 Italian Naval Losses - WW I	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		035 Spanish Merchant Losses - WW I	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		036 Netherlands Merchant Losses - WW I	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		037 Italian Merchant Losses - WW I	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		038 Maritime Declarations for Norwegian Ships for War Losses 1914 - 1918	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		039 Reports of Known Wrecks by U.S. Coast Guard Districts 1950	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		040 France - Naval and Merchant Losses during WW I	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		041 Sonar Reports and MAD Reports, U.S. Navy	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		042 Maritime Commission also ONI List WW I	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		043 Smaling Soforklaringer - Danish Ship War Losses 1914 - 1918	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		044 Merchant Vessels of the U.S. Lost (Commerce Department)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		045 Naval Chronology WW II	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		046 Ship Visit Reports	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		047 Spanish Hydrographic Office	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		048 British Admiralty Wreck Charts 1921	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		049 Swedish Board of Shipping and Navigation, Hydrographic Dept.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		050 British Admiralty Wreck Charts, 1961	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		051 Portugal Hydrographic Office	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		052 Italian Navy Survey	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		053 State of Shipping Casualties (Resulting in total loss in St. Lawrence River and Gulf, on the Atlantic Coast from 1896 up to date)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		054 Italian Naval Surveys Charts and Lists	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		055 ONI	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		057 R.C.N. Wreck List (RCN Pub. 272)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		058 Dutch Wreck List	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		059 North Sea Fishing Charts	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		060 Photographs of Pinnacles and Miscellaneous Metals	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

MIL-PRF-89049/13**APPENDIX D****Table D-1 TOD3 FACC Feature and Attribute Codes Sorted by Coverage**

Feature	Attribute	Attribute Value	END	CND	EDG	FAC	TXT
<i>nsc Non-submarine Contacts</i>							
BD180	Wreck						
	wsr	Source of report					
		061 Coast and Geodetic Survey (National Ocean Survey) Charts	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		062 Radio Navigation Warning	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		063 OMAN National Hydrographic Office	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		998 Not Applicable	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>sur Survey Information</i>							
BE030	Track Swath						
	n/a	No Attributes Required	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
BE040	Track Line						
	n/a	No Attributes Required	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

MIL-PRF-89049/13

APPENDIX D

Table D-2 TOD3 FACC Feature and Attribute Codes Sorted by Feature

Feature	Attribute	Attribute Value	Coverage	END	CND	EDG	FAC	TXT
BD005 Miscellaneous Underwater Feature								
acc	Accuracy Category							
	001	Accurate	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	002	Approximate	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	003	Doubtful	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
cdv	Calendar Date Value		nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
coe	Certainty of Existence							
	001	Definite	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	002	Doubtful	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	003	Reported	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
exs	Existence Category							
	057	Sonar Confirmed	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	058	Sonar Not Confirmed	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
hdp	Hydrographic Depth		nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
na4	Country Code (FIPS Pub 10-4)		nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
nam	Name		nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
pev	Position Evaluation							
	001	Accuracy <= 1 nautical mile	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	002	Accuracy > 1 nautical mile and <= 3 nautical miles	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	003	Accuracy > 3 nautical miles and <= 5 nautical miles	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	004	Accuracy > 5 nautical miles and <= 10 nautical miles	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	005	Accuracy uncertain	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
rag	Non-submarine Contact Reporting Agency Type							
	000	Unknown	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	001	Survivor Report	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	002	Salvage Report	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	003	Casualty Report	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	004	Action Report	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	005	Photograph Report	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	006	US Coast & Geodetic Survey/National Ocean Service Report	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	007	US Naval Headquarters/Commands Report	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	008	Hydrographic/Admiralty Office	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	009	Wreck List	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	010	Chart Records	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	011	Coast Guard Records	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	012	Notice to Mariners	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	013	North Sea Fishing Charts	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	014	Chart	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	015	Minesweeper	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

MIL-PRF-89049/13

APPENDIX D

Table D-2 TOD3 FACC Feature and Attribute Codes Sorted by Feature (Continued)

Feature	Attribute	Attribute Value	Coverage	END	CND	EDG	FAC	TXT
BD005 Miscellaneous Underwater Feature								
rag	Non-submarine Contact Reporting Agency Type							
	016	Survey	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	017	Position Accurate Field Check	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	018	Sonar Report	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	019	MAD Report	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	020	Undifferentiated Sonar or MAD Report	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	997	Unpopulated	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	998	Not Applicable	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	999	Other	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
sfc	Sea Floor Feature Category							
	000	Unknown (Obstruction)	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	003	Fish Haven	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	004	Well	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	005	Submerged Production Platform	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	006	Wreckage	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	007	Shoaling	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	008	Less Water Reported	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	009	Unexploded Ordnance	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	010	Unspecified Non-submarine Contact	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	011	Pinnacle	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	999	Other	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
txt	Text Attribute		nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
wkt	Wreck Type							
	000	Unknown	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	001	Anomalies	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	006	Buoy	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	007	Caisson	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	017	Explosives	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	019	Fishing Reef	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	035	Obstruction	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	038	Pinnacle Rock	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	042	Submarine Float	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	047	Target	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	053	Well Head	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	998	Not Applicable	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
wsr	Source of report							
	000	Unknown	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	008	Report SONAR verified	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	009	Report MAD verified	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	010	Japanese Naval and Merchant Losses during WW II By All Causes NAVEXOS P-468	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

MIL-PRF-89049/13

APPENDIX D

Table D-2 TOD3 FACC Feature and Attribute Codes Sorted by Feature (Continued)

Feature	Attribute	Attribute Value	Coverage	END	CND	EDG	FAC	TXT
BD005	Miscellaneous Underwater Feature							
wsr	Source of report							
	011	US Losses - Director, Fleet Operations	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	012	H.O. Files	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	013	COMNAVPAC	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	014	COMNAVFE	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	015	H.O. Chart Reports and Charts	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	016	H.O. Notice to Mariners	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	017	Lloyds and Marine Underwriter's Reports	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	018	The Imperial Japanese Navy in WW II	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	019	U.S. Navy at War 1941-1945	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	020	German, Japanese, and Italian Submarine Losses in WW II	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	021	Swedish Merchant Losses 1914-1920	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	022	H.O. Wreck Information List and Supplement dated 10 MAR 1945 and 30 SEP 1946	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	023	American Ship Casualties of WW I	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	024	U.S. Coast Guard and Geodetic Survey Records	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	025	Tenth Fleet Records (OP-374)	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	026	Naval Losses of All Nations 9/3/39 - 8/15/45	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	027	Italian Naval and Merchant Losses, WW II	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	028	List of Danish War Losses 1914 - 1918	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	029	British Merchant Vessels Captured or Destroyed by Enemy Action 1914 - 1918	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	030	Abstracts of Losses 1914 - 1918	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	031	British and Foreign Merchant Ships Lost During WW II	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	032	A List of Neutral Ships Sunk by Germany	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	033	Greek Losses WW II	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	034	Italian Naval Losses - WW I	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	035	Spanish Merchant Losses - WW I	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	036	Netherlands Merchant Losses - WW I	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	037	Italian Merchant Losses - WW I	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	038	Maritime Declarations for Norwegian Ships for War Losses 1914 - 1918	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	039	Reports of Known Wrecks by U.S. Coast Guard Districts 1950	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	040	France - Naval and Merchant Losses during WW I	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

MIL-PRF-89049/13

APPENDIX D

Table D-2 TOD3 FACC Feature and Attribute Codes Sorted by Feature (Continued)

Feature	Attribute	Attribute Value	Coverage	END	CND	EDG	FAC	TXT
BD005 Miscellaneous Underwater Feature								
wsr	Source of report							
	041	Sonar Reports and MAD Reports, U.S. Navy	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	042	Maritime Commission also ONI List WW I	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	043	Smaling Soforklaringer - Danish Ship War Losses 1914 - 1918	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	044	Merchant Vessels of the U.S. Lost (Commerce Department)	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	045	Naval Chronology WW II	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	046	Ship Visit Reports	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	047	Spanish Hydrographic Office	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	048	British Admiralty Wreck Charts 1921	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	049	Swedish Board of Shipping and Navigation, Hydrographic Dept.	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	050	British Admiralty Wreck Charts, 1961	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	051	Portugal Hydrographic Office	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	052	Italian Navy Survey	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	053	State of Shipping Casualties (Resulting in total loss in St. Lawrence River and Gulf, on the Atlantic Coast from 1896 up to date)	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	054	Italian Naval Surveys Charts and Lists	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	055	ONI	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	057	R.C.N. Wreck List (RCN Pub. 272)	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	058	Dutch Wreck List	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	059	North Sea Fishing Charts	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	060	Photographs of Pinnacles and Miscellaneous Metals	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	061	Coast and Geodetic Survey (National Ocean Survey) Charts	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	062	Radio Navigation Warning	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	063	OMAN National Hydrographic Office	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	998	Not Applicable	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BD180 Wreck								
acc	Accuracy Category							
	001	Accurate	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	002	Approximate	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	003	Doubtful	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
cdv	Calendar Date Value		nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
coe	Certainty of Existence							
	001	Definite	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	002	Doubtful	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	003	Reported	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

MIL-PRF-89049/13
APPENDIX D

Table D-2 TOD3 FACC Feature and Attribute Codes Sorted by Feature (Continued)

Feature	Attribute	Attribute Value	Coverage	END	CND	EDG	FAC	TXT
BD180 Wreck								
exs	Existence Category							
	057	Sonar Confirmed	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	058	Sonar Not Confirmed	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
hdp	Hydrographic Depth		nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
na4	Country Code (FIPS Pub 10-4)		nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
nam	Name		nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
pev	Position Evaluation							
	001	Accuracy <= 1 nautical mile	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	002	Accuracy > 1 nautical mile and <= 3 nautical miles	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	003	Accuracy > 3 nautical miles and <= 5 nautical miles	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	004	Accuracy > 5 nautical miles and <= 10 nautical miles	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	005	Accuracy uncertain	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
rag	Non-submarine Contact Reporting Agency Type							
	000	Unknown	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	001	Survivor Report	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	002	Salvage Report	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	003	Casualty Report	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	004	Action Report	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	005	Photograph Report	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	006	US Coast & Geodetic Survey/National Ocean Service Report	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	007	US Naval Headquarters/Commands Report	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	008	Hydrographic/Admiralty Office	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	009	Wreck List	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	010	Chart Records	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	011	Coast Guard Records	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	012	Notice to Mariners	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	013	North Sea Fishing Charts	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	014	Chart	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	015	Minesweeper	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	016	Survey	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	017	Position Accurate Field Check	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	018	Sonar Report	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	019	MAD Report	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	020	Undifferentiated Sonar or MAD Report	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	997	Unpopulated	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	998	Not Applicable	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	999	Other	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
tng	Tonnage		nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

MIL-PRF-89049/13

APPENDIX D

Table D-2 TOD3 FACC Feature and Attribute Codes Sorted by Feature (Continued)

Feature	Attribute	Attribute Value	Coverage	END	CND	EDG	FAC	TXT
BD180	Wreck							
	txt	Text Attribute	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	wkt	Wreck Type						
		000 Unknown	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		002 Aircraft	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		003 Auxiliary	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		004 Battleship	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		005 Barge	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		008 Aircraft Carrier	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		009 Cargo	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		010 Subchaser	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		011 Coaster	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		012 Cruiser	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		013 Ship Debris (plates, misc. metal)	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		014 Destroyer, Destroyer Escort, Corvette	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		015 Dredge	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		016 Drill Vessel or Drill Rig	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		018 Fishing Vessel	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		020 Ferry	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		021 Frigate	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		022 Gunboat	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		023 Hospital Ship	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		024 Hydrographic Survey, Air Cushion, Hydrofoil	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		025 Junk	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		026 Lash Vessel	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		027 Landing Craft, Infantry (LCI)	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		028 Gas Carrier, Natural Petroleum	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		029 Landing Ship, Infantry (LSI)	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		030 Landing Ship, Tank (LST)	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		031 Lightship	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		032 Minesweeper, Minelayer	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		033 Net Tender	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		034 Bulk Carrier	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		036 Passenger Cargo	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		037 Patrol Boat	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		039 Roll On - Roll Off	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		040 Sailing Ship	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		041 Sea Bee, Lash Barge	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		043 Submarine	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		044 Survey Vessel	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		045 Tanker	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

MIL-PRF-89049/13

APPENDIX D

Table D-2 TOD3 FACC Feature and Attribute Codes Sorted by Feature (Continued)

Feature	Attribute	Attribute Value	Coverage	END	CND	EDG	FAC	TXT
BD180	Wreck							
	wkt	Wreck Type						
		046 Tender, Submarine, Airplane, Oil Rig	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		048 Torpedo Boat	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		049 Transport	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		050 Tug	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		051 Trawler	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		052 Very Large Container	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		054 Yacht	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		998 Not Applicable	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	wsr	Source of report						
		000 Unknown	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		008 Report SONAR verified	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		009 Report MAD verified	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		010 Japanese Naval and Merchant Losses during WW II By All Causes NAVEXOS P-468	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		011 US Losses - Director, Fleet Operations	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		012 H.O. Files	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		013 COMNAVPAC	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		014 COMNAVFE	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		015 H.O. Chart Reports and Charts	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		016 H.O. Notice to Mariners	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		017 Lloyds and Marine Underwriter's Reports	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		018 The Imperial Japanese Navy in WW II	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		019 U.S. Navy at War 1941-1945	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		020 German, Japanese, and Italian Submarine Losses in WW II	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		021 Swedish Merchant Losses 1914-1920	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		022 H.O. Wreck Information List and Supplement dated 10 MAR 1945 and 30 SEP 1946	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		023 American Ship Casualties of WW I	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		024 U.S. Coast Guard and Geodetic Survey Records	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		025 Tenth Fleet Records (OP-374)	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		026 Naval Losses of All Nations 9/3/39 - 8/15/45	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		027 Italian Naval and Merchant Losses, WW II	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		028 List of Danish War Losses 1914 - 1918	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		029 British Merchant Vessels Captured or Destroyed by Enemy Action 1914 - 1918	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

MIL-PRF-89049/13

APPENDIX D

Table D-2 TOD3 FACC Feature and Attribute Codes Sorted by Feature (Continued)

Feature	Attribute	Attribute Value	Coverage	END	CND	EDG	FAC	TXT
BD180	Wreck							
	wsr	Source of report						
		030 Abstracts of Losses 1914 - 1918	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		031 British and Foreign Merchant Ships Lost During WW II	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		032 A List of Neutral Ships Sunk by Germany	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		033 Greek Losses WW II	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		034 Italian Naval Losses - WW I	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		035 Spanish Merchant Losses - WW I	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		036 Netherlands Merchant Losses - WW I	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		037 Italian Merchant Losses - WW I	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		038 Maritime Declarations for Norwegian Ships for War Losses 1914 - 1918	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		039 Reports of Known Wrecks by U.S. Coast Guard Districts 1950	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		040 France - Naval and Merchant Losses during WW I	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		041 Sonar Reports and MAD Reports, U.S. Navy	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		042 Maritime Commission also ONI List WW I	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		043 Smaling Soforklaringer - Danish Ship War Losses 1914 - 1918	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		044 Merchant Vessels of the U.S. Lost (Commerce Department)	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		045 Naval Chronology WW II	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		046 Ship Visit Reports	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		047 Spanish Hydrographic Office	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		048 British Admiralty Wreck Charts 1921	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		049 Swedish Board of Shipping and Navigation, Hydrographic Dept.	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		050 British Admiralty Wreck Charts, 1961	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		051 Portugal Hydrographic Office	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		052 Italian Navy Survey	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		053 State of Shipping Casualties (Resulting in total loss in St. Lawrence River and Gulf, on the Atlantic Coast from 1896 up to date)	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		054 Italian Naval Surveys Charts and Lists	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		055 ONI	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		057 R.C.N. Wreck List (RCN Pub. 272)	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		058 Dutch Wreck List	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		059 North Sea Fishing Charts	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		060 Photographs of Pinnacles and Miscellaneous Metals	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

MIL-PRF-89049/13

APPENDIX D

Table D-2 TOD3 FACC Feature and Attribute Codes Sorted by Feature (Continued)

Feature	Attribute	Attribute Value	Coverage	END	CND	EDG	FAC	TXT
BD180 Wreck								
wsr		Source of report						
	061	Coast and Geodetic Survey (National Ocean Survey) Charts	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	062	Radio Navigation Warning	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	063	OMAN National Hydrographic Office	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	998	Not Applicable	nsc	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BE015 Depth Contour								
acc		Accuracy Category						
	001	Accurate	hyd	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	002	Approximate	hyd	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
crv		Depth Curve or Contour Value	hyd	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
hqc		Hypsography Portrayal Category						
	000	Unknown	hyd	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	001	Index	hyd	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	002	Intermediate	hyd	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	003	Supplementary (1/2)	hyd	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	014	Supplementary (1/4)	hyd	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BE019 Depth Area								
acc		Accuracy Category						
	001	Accurate	hyd	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	002	Approximate	hyd	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
cvh		Depth Curve or Contour Value High	hyd	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
cvl		Depth Curve or Contour Value Low	hyd	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
BE020 Sounding								
acc		Accuracy Category						
	001	Accurate	hyd	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	002	Approximate	hyd	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	003	Doubtful	hyd	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
cdv		Calendar Date Value	hyd	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
coe		Certainty of Existence						
	001	Definite	hyd	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	002	Doubtful	hyd	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	003	Reported	hyd	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
hdp		Hydrographic Depth	hyd	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
snd		Sounding Category						
	002	No Bottom Found	hyd	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	009	Slant	hyd	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	010	Ordinary	hyd	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	999	Other	hyd	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
sou		Exposition of Sounding						
	001	Within the range of depth of the surrounding depth area	hyd	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

MIL-PRF-89049/13

APPENDIX D

Table D-2 TOD3 FACC Feature and Attribute Codes Sorted by Feature (Continued)

Feature	Attribute	Attribute Value	Coverage	END	CND	EDG	FAC	TXT
BE020 Sounding								
sou		Exposition of Sounding						
	002	Shallower than the range of depth of the surrounding depth area	hyd	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	003	Deeper than the range of depth of the surrounding depth area	hyd	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
svc		Sounding Velocity						
	000	Unknown	hyd	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	001	Echo Sounder Calibrated at 4800 ft/sec Uncorrected	hyd	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	002	Echo Sounder Calibrated at 1500 m/sec Uncorrected	hyd	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	005	Corrected by other means of calibration	hyd	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BE030 Track Swath								
n/a		No Attributes Required	sur	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
BE040 Track Line								
n/a		No Attributes Required	sur	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
N/A Featureless Feature Table								
aha		Absolute Horizontal Accuracy in Meters	dq	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ava		Absolute Vertical Accuracy in Meters	dq	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
dqd		Data Quality Description	dq	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
mcd		Map Compilation Date	dq	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
mpd		Map Print Date	dq	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
mrđ		Map Revision Date	dq	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
mse		Map Sheet Edition	dq	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
sdp		Source Description	dq	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
sin		Source Identification	dq	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ss1		First Source Sheet or Data Identifier	dq	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ss2		Second Source Sheet or Data Identifier	dq	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
thl		Data Quality Thematic Layer	dq	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ZD020 Void Collection Area								
vca		Void Collection Attribute						
	000	Unknown	dq	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	001	Data Not Requested By User	dq	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	002	Area Too Rough to Collect	dq	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	003	No Available Imagery	dq	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	006	No Available Map Source	dq	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	007	No Suitable Imagery	dq	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
vct		Void Collection Type						
	000	Unknown	dq	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	001	Relief	dq	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	999	Other	dq	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ZD040 Named Location								
n/a		No Attributes Required	ecr	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

MIL-PRF-89049/13**APPENDIX D**Table D-2 TOD3 FACC Feature and Attribute Codes Sorted by Feature (Continued)

Feature	Attribute	Attribute Value	Coverage	END	CND	EDG	FAC	TXT
ZD045	Text Description							
	n/a	No Attributes Required	dq	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

MIL-PRF-89049/13
APPENDIX D

D.3.2 TOD3 FACC Feature Glossary

B - Hydrography

BD - Hydrography-Dangers/Hazards

BD005 Miscellaneous Underwater Feature (DIGEST Status: Published FACC)

An object or area on the sea floor or underwater that is not identified by any other code in this specification. (Also see BD000)

BD180 Wreck (DIGEST Status: Published FACC)

The ruined remains of a vessel.

BE - Hydrography-Depth Information

BE015 Depth Contour (DIGEST Status: Published FACC)

A line connecting points of equal depth at and below the hydrographic datum.

BE019 Depth Area (DIGEST Status: Published FACC)

Water area containing soundings within a defined range of values permanently at or below sounding datum.

BE020 Sounding (DIGEST Status: Published FACC)

A measured water depth or spot depth which has been reduced to chart datum.

BE030 Track Swath (DIGEST Status: Published FACC)

Area of horizontal depth coverage recorded by SONAR array systems.

BE040 Track Line (DIGEST Status: Published FACC)

The path of travel with respect to the earth as drawn on the chart and including the sounding information collected along the line.

Z - General

ZD - General-Miscellaneous

ZD020 Void Collection Area (DIGEST Status: Published FACC)

An area lacking suitable source coverage, or where data is not required.

ZD040 Named Location (DIGEST Status: Published FACC)

A geographic place on the earth, not normally appearing as a feature on a map, but having a name that is required to be placed on a map.

ZD045 Text Description (DIGEST Status: Published FACC)

An area in which a characteristic or an activity pertaining to the area can be described and possibly labeled on a product if deemed important at the time the product is being produced.

MIL-PRF-89049/13
APPENDIX D

D.3.3 TOD3 FACC Attribute Glossary

ACC Accuracy Category (DIGEST Status: Published FACC)

Accuracy of geographic position.

- 001 Accurate (Published FACC)
- 002 Approximate (Published FACC)
- 003 Doubtful (Published FACC)

AHA Absolute Horizontal Accuracy in Meters (DIGEST Status: Published FACC)

The difference between the recorded horizontal coordinates of features and their true positions expressed as a circular error at 90% probability.

- 0 Actual Value

Units	Format	Range	Increment	Maximum Characters
Metres	Floating Point	N/A	m	N/A

AVA Absolute Vertical Accuracy in Meters (DIGEST Status: Published FACC)

The difference between the recorded elevations of features and their true elevations at a specific point referenced to the same vertical datum at 90% probability.

- 0 Actual Value

Units	Format	Range	Increment	Maximum Characters
Metres	Floating Point	N/A	m	N/A

CDV Calendar Date Value (DIGEST Status: Published FACC)

The calendar date as specified by ISO 8601.

- 0 Actual Value

Units	Format	Range	Increment	Maximum Characters
Date	ASCII Text	N/A	N/A	See Appendix C

COE Certainty of Existence (DIGEST Status: Published FACC)

Indicates knowledge of the feature's existence.

- 001 Definite (Published FACC)
- 002 Doubtful (Published FACC)
- 003 Reported (Published FACC)

CRV Depth Curve or Contour Value (DIGEST Status: Published FACC)

A specified value assigned to a particular depth curve or contour.

- 0 Actual Value

Units	Format	Range	Increment	Maximum Characters
Metres	Floating Point	N/A	m	N/A

CVH Depth Curve or Contour Value High (DIGEST Status: Published FACC)

The maximum value of a depth curve polygon.

- 0 Actual Value

Units	Format	Range	Increment	Maximum Characters
Metres	Floating Point	N/A	m	N/A

CVL Depth Curve or Contour Value Low (DIGEST Status: Published FACC)

The minimum value of a depth curve polygon.

- 0 Actual Value

Units	Format	Range	Increment	Maximum Characters
Metres	Floating Point	N/A	m	N/A

DQD Data Quality Description (DIGEST Status: Published FACC)

Contains a text string describing specific conditions occurring within a coverage at the location

MIL-PRF-89049/13
APPENDIX D

D.3.3 TOD3 FACC Attribute Glossary (Continued)

identified by the dq feature. Typically this refers to edgematch problems observed between two source maps and identifies any steps taken to ameliorate the problem.

0 Actual Value

Units	Format	Range	Increment	Maximum Characters
Text	ASCII Text	N/A	N/A	See Appendix C

EXS Existence Category (DIGEST Status: Published FACC)

The state or condition of the feature.

057 Sonar Confirmed (Published FACC)

058 Sonar Not Confirmed (Published FACC)

HDP Hydrographic Depth (DIGEST Status: Published FACC)

The depth of the feature below water, measured from the top or surface of the feature, referenced to a specified vertical datum. Recorded values are positive numbers.

0 Actual Value

Units	Format	Range	Increment	Maximum Characters
Metres	Floating Point	N/A	m	N/A

HQC Hypsography Portrayal Category (DIGEST Status: Published FACC)

Type of line shown.

000 Unknown (Published FACC)

001 Index (Published FACC)

002 Intermediate (Published FACC)

003 Supplementary (1/2) (Published FACC)

014 Supplementary (1/4) (Published FACC)

MCD Map Compilation Date (DIGEST Status: Published FACC)

Appropriate date of compilation of map or dataset. Coded YYYYMMDD.

0 Actual Value

Units	Format	Range	Increment	Maximum Characters
Date	ASCII Text	N/A	N/A	See Appendix C

MPD Map Print Date (DIGEST Status: Withdrawn/Rejected)

Print date of map or dataset.

0 Actual Value

Units	Format	Range	Increment	Maximum Characters
Date	Date	N/A	N/A	See Appendix C

MRD Map Revision Date (DIGEST Status: Withdrawn/Rejected)

Revision date of map or dataset.

0 Actual Value

Units	Format	Range	Increment	Maximum Characters
Date	Date	N/A	N/A	See Appendix C

MSE Map Sheet Edition (DIGEST Status: Published FACC)

Alphanumeric String containing the edition of the map sheet.

0 Actual Value

Units	Format	Range	Increment	Maximum Characters
Text	ASCII Text	N/A	N/A	See Appendix C

N/A No Attributes Required (DIGEST Status: No Attributes Required)

No attributes are required for this feature.

MIL-PRF-89049/13
APPENDIX D

D.3.3 TOD3 FACC Attribute Glossary (Continued)

N/A No Attributes Required (DIGEST Status: No Attributes Required)

No attributes are required for this feature.

NA4 Country Code (FIPS Pub 10-4) (DIGEST Status: Published FACC)

A four character country identification code as designated in Federal Information Processing Standard (FIPS) Pub 10-4, Countries, Dependencies, Areas of Special Sovereignty, and their Principal Administrative Divisions, identifying the country and the principal administrative division in which the feature is located. The last two characters will be blank filled if principal administrative division information is not required.

0 Actual Value

Units	Format	Range	Increment	Maximum Characters
Text	Lexical	N/A	N/A	See Appendix C

NAM Name (DIGEST Status: Published FACC)

Any identifier or code.

0 Actual Value

Units	Format	Range	Increment	Maximum Characters
Text	Lexical	N/A	N/A	See Appendix C

PEV Position Evaluation (DIGEST Status: Published FACC)

Evaluation of the position accuracy of a Non-submarine contact. Reference STANAG 3715.

- 001 Accuracy <= 1 nautical mile (Published FACC)
- 002 Accuracy > 1 nautical mile and <= 3 nautical miles (Published FACC)
- 003 Accuracy > 3 nautical miles and <= 5 nautical miles (Published FACC)
- 004 Accuracy > 5 nautical miles and <= 10 nautical miles (Published FACC)
- 005 Accuracy uncertain (Published FACC)

RAG Non-submarine Contact Reporting Agency Type (DIGEST Status: Published FACC)

Classification of Non-submarine contact reporting source based on US Wreck List and NATO STANAG 3715. Replicates attribute RAG in the Wreck List.

- 000 Unknown (Published FACC)
- 001 Survivor Report (Published FACC)
- 002 Salvage Report (Published FACC)
- 003 Casualty Report (Published FACC)
- 004 Action Report (Published FACC)
- 005 Photograph Report (Published FACC)
- 006 US Coast & Geodetic Survey/National Ocean Service Report (Published FACC)
- 007 US Naval Headquarters/Commands Report (Published FACC)
- 008 Hydrographic/Admiralty Office (Published FACC)
- 009 Wreck List (Published FACC)
- 010 Chart Records (Published FACC)
- 011 Coast Guard Records (Published FACC)
- 012 Notice to Mariners (Published FACC)
- 013 North Sea Fishing Charts (Published FACC)
- 014 Chart (Published FACC)
- 015 Minesweeper (Published FACC)
- 016 Survey (Published FACC)
- 017 Position Accurate Field Check (Published FACC)
- 018 Sonar Report (Published FACC)
- 019 MAD Report (Published FACC)
- 020 Undifferentiated Sonar or MAD Report (Published FACC)
- 997 Unpopulated (Published FACC)

MIL-PRF-89049/13
APPENDIX D

D.3.3 TOD3 FACC Attribute Glossary (Continued)

RAG Non-submarine Contact Reporting Agency Type (DIGEST Status: Published FACC)

Classification of Non-submarine contact reporting source based on US Wreck List and NATO STANAG 3715. Replicates attribute RAG in the Wreck List.

998 Not Applicable (Published FACC)

999 Other (Published FACC)

SDP Source Description (DIGEST Status: Published FACC)

Title or description of source.

0 Actual Value

Units	Format	Range	Increment	Maximum Characters
Text	ASCII Text	N/A	N/A	See Appendix C

SFC Sea Floor Feature Category (DIGEST Status: Published FACC)

Type of object or area on the sea floor or below the water surface.

000 Unknown (Obstruction) (Published FACC)

003 Fish Haven (Published FACC)

004 Well (Published FACC)

005 Submerged Production Platform (Published FACC)

006 Wreckage (Published FACC)

007 Shoaling (Published FACC)

008 Less Water Reported (Published FACC)

009 Unexploded Ordnance (Published FACC)

010 Unspecified Non-submarine Contact (Published FACC)

011 Pinnacle (Published FACC)

999 Other (Published FACC)

SIN Source Identification (DIGEST Status: Published FACC)

Alphanumeric string containing the map sheet, source name or source identification number.

0 Actual Value

Units	Format	Range	Increment	Maximum Characters
Text	ASCII Text	N/A	N/A	See Appendix C

SND Sounding Category (DIGEST Status: Published FACC)

Condition of depth.

002 No Bottom Found (Published FACC)

009 Slant (Published FACC)

010 Ordinary (Published FACC)

999 Other (Published FACC)

SOU Exposition of Sounding (DIGEST Status: Published FACC)

Indicated whether the value of a sounding is shallower than, deeper than, or within the range depth of the surrounding depth area.

001 Within the range of depth of the surrounding depth area (Published FACC)

002 Shallower than the range of depth of the surrounding depth area (Published FACC)

003 Deeper than the range of depth of the surrounding depth area (Published FACC)

SS1 First Source Sheet or Data Identifier (DIGEST Status: Withdrawn/Rejected)

This item contains the name of the first map sheet number or other source where a line feature crosses or runs along the source boundary, and requires a data quality description.

0 Actual Value

Units	Format	Range	Increment	Maximum Characters
Text	ASCII Text	N/A	N/A	See Appendix C

MIL-PRF-89049/13
APPENDIX D

D.3.3 TOD3 FACC Attribute Glossary (Continued)

SS2 Second Source Sheet or Data Identifier (DIGEST Status: Withdrawn/Rejected)

This item contains the name of the second map sheet number or other source where a line feature crosses or runs along the source boundary, and requires a data quality description.

0 Actual Value

Units	Format	Range	Increment	Maximum Characters
Text	ASCII Text	N/A	N/A	See Appendix C

SVC Sounding Velocity (DIGEST Status: Published FACC)

Indicates type of correction that has been added to, or subtracted from instrument reading to obtain correct depth.

- 000 Unknown (Published FACC)
- 001 Echo Sounder Calibrated at 4800 ft/sec Uncorrected (Published FACC)
- 002 Echo Sounder Calibrated at 1500 m/sec Uncorrected (Published FACC)
- 005 Corrected by other means of calibration (Published FACC)

THL Data Quality Thematic Layer (DIGEST Status: Published FACC)

The thematic layer identifier for each layer in the database.

0 Actual Value

Units	Format	Range	Increment	Maximum Characters
Text	ASCII Text	N/A	N/A	See Appendix C

TNG Tonnage (DIGEST Status: Published FACC)

Tonnage of a sunken or stranded wreck, a hulk, or other vessel. Reference STANAG 3715.

0 Actual Value

Units	Format	Range	Increment	Maximum Characters
Tons	Long Integer	N/A	1 tn	N/A

TXT Text Attribute (DIGEST Status: Published FACC)

Narrative or other description.

0 Actual Value

Units	Format	Range	Increment	Maximum Characters
Text	Lexical	N/A	N/A	See Appendix C

VCA Void Collection Attribute (DIGEST Status: Published FACC)

Reason data is not collected.

- 000 Unknown (Published FACC)
- 001 Data Not Requested By User (Published FACC)
- 002 Area Too Rough to Collect (Published FACC)
- 003 No Available Imagery (Published FACC)
- 006 No Available Map Source (Published FACC)
- 007 No Suitable Imagery (Published FACC)

VCT Void Collection Type (DIGEST Status: Published FACC)

Identifies type of missing information.

- 000 Unknown (Published FACC)
- 001 Relief (Published FACC)
- 999 Other (Published FACC)

WKT Wreck Type (DIGEST Status: Published FACC)

Type of wreck as listed in Non Submarine Contacts list. Reference STANAG 3715.

- 000 Unknown (Published FACC)
- 001 Anomalies (Published FACC)
- 002 Aircraft (Published FACC)

MIL-PRF-89049/13**APPENDIX D****D.3.3 TOD3 FACC Attribute Glossary (Continued)****WKT Wreck Type (DIGEST Status: Published FACC)**

Type of wreck as listed in Non Submarine Contacts list. Reference STANAG 3715.

- 003 Auxiliary (Published FACC)
- 004 Battleship (Published FACC)
- 005 Barge (Published FACC)
- 006 Buoy (Published FACC)
- 007 Caisson (Published FACC)
- 008 Aircraft Carrier (Published FACC)
- 009 Cargo (Published FACC)
- 010 Subchaser (Published FACC)
- 011 Coaster (Published FACC)
- 012 Cruiser (Published FACC)
- 013 Ship Debris (plates, misc. metal) (Published FACC)
- 014 Destroyer, Destroyer Escort, Corvette (Published FACC)
- 015 Dredge (Published FACC)
- 016 Drill Vessel or Drill Rig (Published FACC)
- 017 Explosives (Published FACC)
- 018 Fishing Vessel (Published FACC)
- 019 Fishing Reef (Published FACC)
- 020 Ferry (Published FACC)
- 021 Frigate (Published FACC)
- 022 Gunboat (Published FACC)
- 023 Hospital Ship (Published FACC)
- 024 Hydrographic Survey, Air Cushion, Hydrofoil (Published FACC)
- 025 Junk (Published FACC)
- 026 Lash Vessel (Published FACC)
- 027 Landing Craft, Infantry (LCI) (Published FACC)
- 028 Gas Carrier, Natural Petroleum (Published FACC)
- 029 Landing Ship, Infantry (LSI) (Published FACC)
- 030 Landing Ship, Tank (LST) (Published FACC)
- 031 Lightship (Published FACC)
- 032 Minesweeper, Minelayer (Published FACC)
- 033 Net Tender (Published FACC)
- 034 Bulk Carrier (Published FACC)
- 035 Obstruction (Published FACC)
- 036 Passenger Cargo (Published FACC)
- 037 Patrol Boat (Published FACC)
- 038 Pinnacle Rock (Published FACC)
- 039 Roll On - Roll Off (Published FACC)
- 040 Sailing Ship (Published FACC)
- 041 Sea Bee, Lash Barge (Published FACC)
- 042 Submarine Float (Published FACC)
- 043 Submarine (Published FACC)
- 044 Survey Vessel (Published FACC)
- 045 Tanker (Published FACC)
- 046 Tender, Submarine, Airplane, Oil Rig (Published FACC)
- 047 Target (Published FACC)
- 048 Torpedo Boat (Published FACC)
- 049 Transport (Published FACC)
- 050 Tug (Published FACC)

MIL-PRF-89049/13
APPENDIX D

D.3.3 TOD3 FACC Attribute Glossary (Continued)

WKT Wreck Type (DIGEST Status: Published FACC)

Type of wreck as listed in Non Submarine Contacts list. Reference STANAG 3715.

- 051 Trawler (Published FACC)
- 052 Very Large Container (Published FACC)
- 053 Well Head (Published FACC)
- 054 Yacht (Published FACC)
- 998 Not Applicable (Published FACC)

WSR Source of report (DIGEST Status: Published FACC)

The source of a reported non-submarine contact. Reference STANAG 3715.

- 000 Unknown (Published FACC)
- 008 Report SONAR verified (Published FACC)
- 009 Report MAD verified (Published FACC)
- 010 Japanese Naval and Merchant Losses during WW II By All Causes NAVEXOS P-468 (Published FACC)
- 011 US Losses - Director, Fleet Operations (Published FACC)
- 012 H.O. Files (Published FACC)
- 013 COMNAVPAC (Published FACC)
- 014 COMNAVFE (Published FACC)
- 015 H.O. Chart Reports and Charts (Published FACC)
- 016 H.O. Notice to Mariners (Published FACC)
- 017 Lloyds and Marine Underwriter's Reports (Published FACC)
- 018 The Imperial Japanese Navy in WW II (Published FACC)
- 019 U.S. Navy at War 1941-1945 (Published FACC)
- 020 German, Japanese, and Italian Submarine Losses in WW II (Published FACC)
- 021 Swedish Merchant Losses 1914-1920 (Published FACC)
- 022 H.O. Wreck Information List and Supplement dated 10 MAR 1945 and 30 SEP 1946 (Published FACC)
- 023 American Ship Casualties of WW I (Published FACC)
- 024 U.S. Coast Guard and Geodetic Survey Records (Published FACC)
- 025 Tenth Fleet Records (OP-374) (Published FACC)
- 026 Naval Losses of All Nations 9/3/39 - 8/15/45 (Published FACC)
- 027 Italian Naval and Merchant Losses, WW II (Published FACC)
- 028 List of Danish War Losses 1914 - 1918 (Published FACC)
- 029 British Merchant Vessels Captured or Destroyed by Enemy Action 1914 - 1918 (Published FACC)
- 030 Abstracts of Losses 1914 - 1918 (Published FACC)
- 031 British and Foreign Merchant Ships Lost During WW II (Published FACC)
- 032 A List of Neutral Ships Sunk by Germany (Published FACC)
- 033 Greek Losses WW II (Published FACC)
- 034 Italian Naval Losses - WW I (Published FACC)
- 035 Spanish Merchant Losses - WW I (Published FACC)
- 036 Netherlands Merchant Losses - WW I (Published FACC)
- 037 Italian Merchant Losses - WW I (Published FACC)
- 038 Maritime Declarations for Norwegian Ships for War Losses 1914 - 1918 (Published FACC)
- 039 Reports of Known Wrecks by U.S. Coast Guard Districts 1950 (Published FACC)
- 040 France - Naval and Merchant Losses during WW I (Published FACC)
- 041 Sonar Reports and MAD Reports, U.S. Navy (Published FACC)
- 042 Maritime Commission also ONI List WW I (Published FACC)
- 043 Smaling Soforklaringer - Danish Ship War Losses 1914 - 1918 (Published FACC)

MIL-PRF-89049/13

APPENDIX D

D.3.3 TOD3 FACC Attribute Glossary (Continued)

WSR Source of report (DIGEST Status: Published FACC)

The source of a reported non-submarine contact. Reference STANAG 3715.

- 044 Merchant Vessels of the U.S. Lost (Commerce Department) (Published FACC)
- 045 Naval Chronology WW II (Published FACC)
- 046 Ship Visit Reports (Published FACC)
- 047 Spanish Hydrographic Office (Published FACC)
- 048 British Admiralty Wreck Charts 1921 (Published FACC)
- 049 Swedish Board of Shipping and Navigation, Hydrographic Dept. (Published FACC)
- 050 British Admiralty Wreck Charts, 1961 (Published FACC)
- 051 Portugal Hydrographic Office (Published FACC)
- 052 Italian Navy Survey (Published FACC)
- 053 State of Shipping Casualties (Resulting in total loss in St. Lawrence River and Gulf, on the Atlantic Coast from 1896 up to date) (Published FACC)
- 054 Italian Naval Surveys Charts and Lists (Published FACC)
- 055 ONI (Published FACC)
- 057 R.C.N. Wreck List (RCN Pub. 272) (Published FACC)
- 058 Dutch Wreck List (Published FACC)
- 059 North Sea Fishing Charts (Published FACC)
- 060 Photographs of Pinnacles and Miscellaneous Metals (Published FACC)
- 061 Coast and Geodetic Survey (National Ocean Survey) Charts (Published FACC)
- 062 Radio Navigation Warning (Published FACC)
- 063 OMAN National Hydrographic Office (Published FACC)
- 998 Not Applicable (Published FACC)

MIL-PRF-89049/13

INDEX

<u>Paragraph</u>	<u>Section</u>	<u>Page</u>
Absolute horizontal accuracy	3.2.1	2
Absolute vertical accuracy	3.2.2	2
Accuracy	3.2	2
Acquisition requirements	6.2	11
Analysis limitation	6.1.1	11
Applicable Documents	2.	1
Applicable Documents	A.2	13
Applicable Documents	B.2	14
Applicable Documents	C.2	20
Applicable Documents	D.2	55
Bathymetry	3.14.4	9
Cartographic considerations for TOD3 database	3.14	9
CD labeling	3.16.1	9
CD ROM labeling and packaging	3.16	9
Classification	3.15.1	9
Compilation scale	3.14.2	9
Continuity	3.5	3
Coordinate system	3.4	3
Coverage attribute table	B.3.2.3	18
Coverage directory files	3.11.4	6
Coverage metadata	3.11.4.1	6
Coverage topology	3.11.4.3	7
Cross-tile topology	3.12.2	8
Data coverages	3.11.4.2	6
Data dictionary organization	A.3.1	13
Data Quality Coverage	C.3.1.1	20
Data Quality Table	B.3.2.4	19
Database and library naming conventions	3.11.2	6
Database directory files	3.11.1	4
Database header table	B.3.1.1	14
Database size	3.13.2	8
Database-level record layout	B.3.1	14
Databases	3.10.1	4
Datums	3.3	3
Definitions	6.4	11
Dimensions	3.7	4
Distribution medium	3.13	8
Earth Cover Coverage	C.3.2	21
Feature and attribute coding scheme	3.8	4
Feature class structure level	3.11.5	7
Feature Codes by Coverage and Feature Type	D.3	55
Feature table structure and contents	3.11.5.1	7
First article	3.1	2
General	2.1	1
General	C.3.1	20
Geographic organization	3.13.1	8

MIL-PRF-89049/13

INDEX

<u>Paragraph</u>	<u>Section</u>	<u>Page</u>
Geographic reference table	B.3.2.2	18
Government Documents	2.2	1
Horizontal datum	3.3.1	3
Hydrographic accuracy	3.2.4	3
Hydrography Coverage	C.3.3	25
Information booklet	3.16.2	10
Information booklet text	3.16.2.2	10
Information booklet TOD3 specific items	3.16.2.1	10
Intended use	6.1	11
Library attribute table	B.3.1.2	16
Library directory files	3.11.3	6
Library metadata	3.11.3.1	6
Library Reference Coverage	C.3.6	53
Library reference coverages	3.11.3.2	6
Library-level record layout	B.3.2	16
Mean Sea Level (MSL)	6.4.1	11
Minimum polygon size	3.14.3	9
NGA operational help desk	6.6	12
Non-submarine Contacts Coverage	C.3.4	33
Notes	6.	11
Notes related attribute table	3.11.5.2.1	7
Order of precedence	2.3	2
Other government documents	2.2.2	2
Packaging	5.	11
Packaging	5.1	11
Primitive Tables and associated files	3.11.6	8
Product specific items	3.16.1.1	10
Purpose	1.2	1
Related attribute tables	3.11.5.2	7
Relative accuracy	3.2.3	3
Requirements	3.	2
Scope	1.	1
Scope	1.1	1
Scope	A.1	13
Scope	A.1.1	13
Scope	B.1	14
Scope	B.1.1	14
Scope	C.1	20
Scope	C.1.1	20
Scope	D.1	55
Scope	D.1.1	55
Security	3.15	9
Source	3.14.1	9
Specifications, standards, and handbooks	2.2.1	1

MIL-PRF-89049/13

INDEX

<u>Paragraph</u>	<u>Section</u>	<u>Page</u>
Subject term (key word) listing	6.5	11
Supersession data	6.3	11
Survey Information Coverage	C.3.5	48
Symbol related attribute table	3.11.5.2.2	8
Text feature class	3.11.5.3	8
Thematic layer organization	3.6	3
TOD3	C.3	20
TOD3 tile sizes	3.12.1	8
TOD3 Data Dictionary Organization	A.3	13
TOD3 Database and Library VPF Table Contents	B.3	14
TOD3 directory organization	3.10	4
TOD3 feature and attribute data dictionary organization	D.3.1	55
TOD3 library header table	B.3.2.1	16
TOD3 tiling scheme	3.12	8
Units of measure	3.9	4
Use of TOD3 in conjunction with DNC, TOD1, and TOD2	3.11.3.3	6
Verification	4.	11
Vertical datum	3.3.2	3
VPF structure levels, tables, and files	3.11	4

MIL-PRF-89049/13
CONCLUDING MATERIAL

Custodian:
Navy - NO

Preparing Activity
NGA - MP
(Project GINT-0361)

NOTE: The activities listed above were interested in this document as of the date of this document. Since organizations and responsibilities can change, you should verify the currency of the information above by using the ASSIST Online database at <http://assist.daps.dla.mil/>.