Update 71 Gary Whitmire

## Government/DoD Engineering Drawing Practices Technical Data Package (MIL-DTL-31000)

Section 1.4.7 Page 1 November, 2004

#### 1.0 General

Based on MIL-DTL-31000, this section reviews the requirements for the preparation of a Technical Data Package (TDP). TDP elements and related TDP data management products make up a TDP and must be based on Government needs for technical data required to support the acquisition and life cycle support strategies for the product being documented. Government activities acquiring technical data are required to carefully review their respective needs for technical data and TDP data management products. Each TDP element and each TDP data management product shall be ordered as a separate entry on the DD Form 1423, Contract Data Requirements List (CDRL) included in the contract or purchase order. For some TDP elements, standard ordering forms, identified as Tailoring Forms, have been developed.

**1.1 Basic Engineering Drawing Practices** - The inclusion of Appendices in ASME Y14.100 has resulted in the cancellation of MIL-STD-100. Basic engineering drawing practices for commercial applications are invoked through reference to ASME Y14.100, and for other than strictly commercial applications (for example, DoD design activities) reference is made to ASME Y14.100 and associated Appendices B through E, as applicable. Application of ASME Y14.100, with or without Appendices, for contractual purposes will necessitate extensive tailoring to exclude unnecessary requirements. Such tailoring should carefully consider the contractual objectives and the logistics intent. Appendices are as follows:

ASME Y14.100 Appendix A

ASME Y14.100 Appendix B

ASME Y14.100 Appendix C

ASME Y14.100 Appendix C

ASME Y14.100 Appendix D

Numbering, Coding and Identification

ASME Y14.100 Appendix E

Marking on Engineering Drawings

*1.1.1 Other Documents* - Y14.100 should not be considered the only standard for addressing basic engineering drawing practices. For the purpose of addressing basic engineering drawing practices, ASME Y14.100, ASME Y14.24, ASME Y14.34M and, Y14.35M should be regarded as a closely interdependent set of ASME standards.

**1.2 TDP Elements -** TDP elements procurable under MIL-DTL-31000 are intended for use in a wide variety of functions in the life cycle of material developed or procured by or for the Department of Defense. Some examples of these functions are design evaluation, design development, provisioning, procurement (competitive and non-competitive), manufacture, transportation, installation, maintenance, modification, and engineering and logistics support. TDP data management products are intended for use by the acquiring activity in ensuring that TDP elements acquired under this specification conform to contractual requirements. Typical elements are:

- (a) Conceptual design drawings
- (b) Developmental design drawings and associated lists
- (c) Product drawings and associated lists based on ASME Y14.100
- (d) Commercial drawings and associated list based on ASME Y14.100
- (e) Special inspection equipment (SIE) drawings and associated lists based on ASME Y14.100
- (f) Special tooling (ST) drawings and associated lists based on ASME Y14.100
- (g) Specifications
- (h) Software documentation



Update 71 Gary Whitmire

## Government/DoD Engineering Drawing Practices Technical Data Package (MIL-DTL-31000)

Section 1.4.7 Page 2 November, 2004

#### 1.3 TDP Data Management Products

- (a) Source control drawing approval request
- (b) Drawing number assignment report
- (c) Proposed critical manufacturing process description
- (d) Any others that may apply

#### 2.0 Tailoring

Department of Defense (DoD) activity shall evaluate the cost of data items in relation to their value in the design, production, management, reprocurement, logistics support, and cost of the product. The DD Form 1423, Block 18, Established Total Price, is the means for establishing the cost of each data item. In addition, activities acquiring data shall tailor the requirements for each data product to ensure that only the minimum essential data necessary to meet the Government's needs is acquired. MIL-HDBK-148 provides guidance on acquisition streamlining. The Government, prior to release of the solicitation, should tailor requirements for specific TDP elements and TDP data management products selected for inclusion in the TDP. This includes:

- (a) Requirements stated in data item descriptions
- (b) Government and non-Government standards
- (c) Requirements for the media and methods of delivery
- (d) Additional tailoring requested by the contractor of TDP requirements as specified in a solicitation or contract using the guidelines of MIL-HDBK-248

#### 3.0 Reference Documents

In the event of a conflict between the text of MIL-DTL-31000 and the references cited therein, the text of MIL-DTL-31000 should take precedence. Nothing in MIL-DTL- 31000 shall supersede applicable laws and regulations unless a specific exemption has been obtained.

ASME Y14.100	Engineering Drawing Practices				
ASME Y14.24	Types and Application of Engineering Drawings				
ASME Y14.34M	Associated Lists				
ASME Y14.35M	Revisions of Engineering Drawings and Associated Lists				
IEEE/EIA 12207	Software Development and Documentation				
FED-STD-376	Preferred Metric Units for General Use by the Federal Government				
Federal Cataloging Handbook H4/H8 Commercial and Government Entity (CAGE) Publicate					
MIL-STD-498	Overview and Tailoring Guidelines				
MIL-STD-961	Department of Defense Standard Practice Defense Specifications				



## Government/DoD Engineering Drawing Practices Technical Data Package (MIL-DTL-31000)

Section 1.4.7 Page 3 November, 2004

MIL-STD 974	Contractor Integrated Technical Information Service (CITIS)
MIL-STD-2073-1	DoD Material Procedures for Development and Application of Packaging Requirements
MIL-PRF-5480	Data, Engineering and Technical Reproduction, Performance Specification
MIL-HDBK-248	Acquisition Streamlining
DoD Manual 5220.22-M	Department of Defense Industrial Security Manual for Safeguarding Classified Information
DoD Directive 5230.24	Distribution Statements on Technical Documents DODISS DoD Index of Specifications and Standards
Public Law 98-525	

3.1 Superseded or Being Superseded (This list is always changing)

MIL-T-31000, dated 15 December 1989 replaced DOD-D-100013 dated 28 October 1977

MIL-T-47500(MI) dated 24 March 1989

Update 71

Gary Whitmire

MIL-T-47500/1(MI) dated 24 March 1989

MIL-T-47500/2(MI) dated 24 March 1989

MIL-T 47500/3(MI) dated 24 March 1989

MIL-T-47500/4(MI) dated 24 March 1989

MIL-T-47500/5(MI) dated 24 March 1989

MIL-T-47500/6(MI) dated 24 March 1989

- **3.1.1 Follow-on procurements for existing programs -** Programs which passed acquisition Milestone 1 (or an equivalent point) prior to 1 July 1990 (See DOD 5000.2) may continue to use DOD-D-100013 or the MIL-T-47500 series documents for follow-on procurements, if doing so is cost effective. However, acquiring activities should consider an orderly transition to MIL-DTL-31000 for those programs that are still in the early phases of the acquisition cycle.
- 3.1.2 Transition considerations The decision whether or not to transition an existing program to MIL-DTL-31000 requirements must consider the impact on the contractor. Changes to existing contracts require negotiation with the contractor. Follow-on procurements awarded to the same contractor may also result in cost impacts to the program. However, continuing to use obsolete specifications will have cost impacts later in the acquisition cycle. Follow-on procurements that are awarded competitively or placed with a new contractor should cite MIL-DTL-31000.
- 3.1.3 Reference to non-Government standards MIL-STD-100 has been canceled and has been incorporated into the non-Government standard ASME Y14.100. Every effort was made to harmonize the technical content and availability of the applicable NGSs to the requirements of the various TDP elements obtainable through MIL-DTL-31000. However, users of this specification may find that some needed NGSs are not available or fail to



Update 71 Gary Whitmire

## Government/DoD Engineering Drawing Practices Technical Data Package (MIL-DTL-31000)

Section 1.4.7 Page 4 November, 2004

support basic document preparation requirements. In order to overcome this condition, the user should be prepared to detail the needed documentation practice directly in the statement of work. Past issues of documents, such as the various revisions to MIL-STD-100, may be used in attempting to establish the needed detail for entry in to the statement of work.

#### 4.0 Definitions and Acronyms

- AMSDL Acquisition Management Systems and Data Requirements Control List
- ANSI American National Standards Institute
- **ASME** American Society of Mechanical Engineers
- **Associated List** (ASME Y15.34M) (parts list, data list, index list) A tabulation of engineering data listed on engineer drawings.
- CAGEC Commercial and Government Entity Code A five-character code listed in the Cataloging Handbook H4/H8. This code identifies by name, address, and etc. commercial or Government activities that manufacture or develop items, or provide services or supplies for the Government.
- CALS Computer-Aided Acquisition and Logistic Support
- CDRL Contract Data Requirements List
- **CID** Commercial Item Description
- **CITIS** Contractor Integrated Technical Information Service
- **CLIN** Contract Line Item Number
- **Commercial Drawings** Drawings prepared by a commercial design activity to support the development and manufacture of a commercially-developed product acquired by the Government.
- **Commercial Item** A product, material, code, component, subsystem, or system sold or traded to the general public at established catalog or market prices (Federal Acquisition Regulation FAR 11.001).
- **Company Standard** A company standard is not considered to be a non-Government standard. A company standard is a document that establishes engineering and technical limitations and applications for items, materials, processes, methods, designs, and engineering practices unique to that company.
- **Competent Manufacturer** A manufacturer that has demonstrated the capability to produce similar products at the same state of the art in the same or similar lines of technology.
- **COTS** Commercial Off The Shelf
- Conceptual Design Drawings Drawings that describe the engineering concepts.
- **Critical Manufacturing Process** A critical process is the only known method that will result in the production of an acceptable item.
- **DD Form XXXX** Department of Defense form number
- **Design Maturity** A design that has proven to meet the engineering requirements versus a design that must be adjusted to meet the engineering requirements.
- **Detail Design Data** Technical data with sufficient detail to reproduce an item or component that will be essentially identical for all future items or components (DFARS, Part 227).



Update 71 Gary Whitmire

## Government/DoD Engineering Drawing Practices Technical Data Package (MIL-DTL-31000)

Section 1.4.7 Page 5 November, 2004

**Detail Specification** - A specification that specifies design, performance, how a requirement is to be achieved, or how an item is to be fabricated or constructed (MIL-STD-961).

**Developmental Design Drawings** - Drawings that describe the physical and functional characteristics of a specific design approach to the extent necessary to permit the analytical evaluation of the ability of the design approach to meet specified requirements and enable the development, manufacture and testing of prototype or experimental material.

**DFARS** - Department of Defense Federal Acquisition Regulation Supplement

DI-XXXXXXX - Data Item number

**DID** - Data Item Description

DL - Data List

**DoD** - Department of Defense

**DoDISS** - Department of Defense Index of Specifications and Standards

**Drawing Form** - A drafting format that features a title block, general tolerance block and margins in accordance with ASME Y14.1 or ASME Y14.1M.

**Drawing Format** - The arrangement and organization of information within a drawing. This includes such features as the size and arrangement of blocks, notes, lists, revision information, and the use of optional or supplemental blocks.

**Elements, Technical Data Package** - A data product that is an actual component of the TDP. The Technical Data Product Element provides all or part of the information necessary to define the item being documented by the TDP.

**End Product or Item** - An end product or end item is an item, such as an individual part or assembly, in its final or completed state.

**FAR** - Federal Acquisition Regulation

**FSCM** - Federal Supply Class for Manufacturers

IEEE/EIA - Institute of Electrical and Electronics Engineers/Electronic Industries Alliance

IL - Index List

ISO/IEC - International Standardization Organization/ International Electrotechnical Commission

MIL-DTL-XXXX - Detail Military specification

MIL-PRF-XXXX – Military Performance specification

**MIPR** - Military Interdepartmental Procurement Requests

**Non-Government Standardization Document** - A standardization document developed by a private sector association, organization, or technical society that plans, develops, establishes or coordinates standards, specifications, handbooks or related documents. Company standards are not considered non-Government standardization documents. Non-Government standards adopted by the DoD are listed in the DODISS (MIL-STD-962).

PCA - Physical Configuration Audit



#### Update 71 Gary Whitmire

## Government/DoD Engineering Drawing Practices Technical Data Package (MIL-DTL-31000)

Section 1.4.7 Page 6 November, 2004

- **Performance Specification** A document that states requirements in terms of the desired results with criteria for verifying compliance, but without stating the methods for achieving the required results. A performance specification defines the functional requirements for the item, the environment in which it must operate, and interface and interchangeability characteristics (MIL-STD-961).
- **Physical Configuration Audit (PCA)** The formal examination of the "as-built" configuration of a configuration item against its technical documentation to establish or verify the configuration item's product baseline (MIL-STD-973).
- PIN Part Identification Number
- PL Parts List
- **Product Drawings** Engineering drawings which provide the design, engineering, manufacturing and quality support information necessary to permit a competent manufacturer to produce an interchangeable item which duplicates the physical and performance characteristics of the original design, without additional design engineering or recourse to the design activity.
- **Product, Technical Data Package Data Management -** A data product that is used to monitor and control the development and maintenance of the TDP. A TDP data management product contains information about the TDP rather than the item being documented.
- **OML** Oualified Manufacturers List
- **QPL** Qualified Products List
- **Reference Documents -** Documents referred to in a TDP element, which contain information necessary to meet the information content requirements of that TDP element.
- SI International System of Units
- **SOCD** Source Control Drawing
- **Special Inspection Equipment (SIE)** Either single or multi-purpose integrated test units engineered, designed, fabricated or modified to perform special purpose testing of an item in the manufacturing process. It consists of items or assemblies of equipment that are interconnected and interdependent so as to become a new functional entity for inspection or testing purposes. SIE is also known as special test equipment.
- **Special Tooling (ST)** Unique tooling which is mandatory to the manufacture of an acceptable item, must be used in order to produce that item, and cannot be duplicated through other generally available manufacturing methods. Examples of special tooling would be jigs, dies, fixtures, molds, patterns, and other equipment or manufacturing aids.
- **Specification** A document to support acquisition that accurately describes essential technical requirements for material and the criteria for determining whether those requirements are met (MIL-STD-961).
- **Standardization Document -** A document, such as a specification, standard or handbook, developed for the purpose of standardizing items, materials, processes or procedures.
- **Standardized Microcircuit Drawing** A Government drawing used to define the physical and performance characteristics of commercial microcircuits in Federal Supply Class 5962 used in military applications.



Update 71 Gary Whitmire

## Government/DoD Engineering Drawing Practices Technical Data Package (MIL-DTL-31000)

Section 1.4.7 Page 7 November, 2004

- **Tailoring** Actions done by the procuring activity to eliminate unnecessary cost, data, and factors that do not add value to the product. It is the method for identifying, discarding, changing or adding to the required tasks. Tailoring is also done to Data Item Descriptions (DIDs).
- **Technical Data** Recorded information, regardless of the method of the recording, of a technical nature (including computer software documentation). The term does not include computer software or data incidental to contract administration, such as financial or management information. (DFARS Part 227).
- **Technical Data Package (TDP)** A technical description of an item adequate for supporting an acquisition strategy, production, engineering and logistics support. The description defines the required design configuration and procedures required to ensure adequacy of item performance. It consists of all applicable technical data such as drawings and associated lists, specifications, standards, performance requirements, quality assurance requirements, software and packaging details.
- **Technical Data Package Document -** A document that is part of a TDP element or TDP data management product.
- **Verification** All examinations, tests and inspections necessary to verify that: an item meets the physical and functional requirements for which it was designed; a component, part or subassembly will perform satisfactorily in its intended application; or, an item conforms to specified requirements.

#### 5.0 Requirements

**5.1 General** - The TDP elements and TDP data management products shall be identified in accordance with MIL-DTL-31000 and applicable data item descriptions, as tailored and imposed through TDP tailoring forms and contract data requirements lists (CDRL) in contracts, purchase orders, and Military Interdepartmental Procurement Requests (MIPR). TDPs, except conceptual design and developmental design drawings, shall define the physical and functional characteristics of the approved, tested, and accepted configuration of the item and its subordinate assemblies, subassemblies, and parts thereof. These requirements apply to data prepared by either manual or automated methods, such as Computer-Aided Design and Computer-Aided Manufacturing systems, or combinations thereof. Furthermore, these requirements apply to data using U. S. customary units of measurement, the International System of Units (SI), or a combination thereof.

#### **5.2 Preparation and Management**

- **5.2.1** Use of Government and non-Government standardization documents TDP documents shall not be prepared or submitted for requirements that are defined by existing Government or non-Government standardization documents of the United States, or international standardization documents listed in the DODISS. These requirements shall be specified by reference to the appropriate standardization document. When the requirements in such standardization documents do not completely fulfill the design or performance requirements of an item, TDP documents for the item may invoke the requirements of the standardization document and specify the variations necessary to fulfill the design or performance requirements.
- 5.2.1.1 Use of international and foreign standardization documents International Standardization Organization/International Electrotechnical Commission (ISO/IEC) standardization documents adopted for use in the United States may be used to define requirements on TDP documents. National standardization documents of foreign countries and European Standards (NORMEs) (EN) shall not be used without the approval of the



Update 71 Gary Whitmire

## Government/DoD Engineering Drawing Practices Technical Data Package (MIL-DTL-31000)

Section 1.4.7 Page 8 November, 2004

Government procuring activity. The use of international and foreign standardization documents in multinational programs subject to a memorandum of understanding between governments shall be governed by the terms of that agreement.

- **5.2.2 Reference documents** Except as specified in 5.2.2.1, documents referenced in a TDP element shall be furnished as an integral part of that element, when essential to meet the information content requirements of the TDP element. Technical manuals, procedural manuals, maintenance manuals, company drafting manuals, and management plans shall not be considered as reference documents. When information essential to meeting the information content requirements of a TDP element (such as default surface texture values) are contained in such documents, that information shall be delineated on the applicable TDP document or incorporated into a document acceptable for inclusion in the TDP element.
- 5.2.2.1 DODISS and non-Government standardization documents Referenced documents listed in the DODISS and non-Government standardization documents available from the issuing non-Government standards body, such as the American Society of Mechanical Engineers (ASME), shall not be submitted as part of a TDP or TDP element.
- **5.2.3** Existing data When existing data meets the following criteria, or can be modified or revised to meet the following criteria, it shall be used in lieu of preparing new data:
  - (a) It is furnished with rights-in-data consistent with the contract stipulations regarding data rights;
  - (b) It is furnished at a cost to the Government equal to or less than the cost of preparing new data;
  - (c) It meets the legibility and reproducibility requirements for the TDP element of which it is to be a part;
  - (d) It meets the information content requirements of the TDP element of which it is to be a part;
  - (e) It is identified by a Commercial and Government Entity (CAGE) Code, document number, title, and applicable contract number(s).
  - (f) Any nonstandard symbols, drawing or documentation practices used are explained in the document or in a document referenced on the document containing the nonstandard symbol or practice.
  - (g) It meets the language and clarity requirements of 5.2.4.
  - (h) Any revisions to the existing data are made in accordance with one of the following:
    - (1) The revisions are made using the same preparation guidelines as were used in preparing the existing data or
    - (2) All existing characteristics of the existing data are updated to the new preparation guidelines used in making the revisions.
- 5.2.3.1 Company standards When the use of company standards is permitted by the contract or purchase order, company standards shall meet the requirements of 5.2.3 for existing data plus the following:
  - (a) If the company standard defines a vendor item, the standard shall provide the same information as a vendor item control drawing (or specification control drawing) for the identification and procurement of an interchangeable item, and



Update 71 Gary Whitmire

## Government/DoD Engineering Drawing Practices Technical Data Package (MIL-DTL-31000)

Section 1.4.7 Page 9 November, 2004

- (b) All documents referenced in the standard shall also be supplied as required by 5.2.1 and 5.2.2, and shall meet the same requirements as a company standard.
- 5.2.3.2 Exemption for commercial drawings Commercial drawings and associated lists are exempt from the requirements of 5.2.3 and 5.2.3.1.
- **5.2.4 Language and clarity -** Unless otherwise specified by a multinational agreement, TDP documents shall be in the English language. People knowledgeable in the subject matter shall delineate requirements, including explanations of non-standard practices or symbols, clearly, concisely, and without ambiguity so that their correct interpretation is readily discernible.
- **5.2.5** Automated document preparation TDP documentation, regardless of the method of preparation (for example computer, plotter, or photosetter), shall satisfy the format and content requirements of specifications and standards controlling those documents as invoked and tailored in the contract or purchase order. Hard copy deliverables of such documents shall be human readable without additional interpretation. Digital deliverables shall be human readable when processed by appropriate digital interpretation programs. Variations from the controlling specifications and standards that do not adversely affect the legibility and reproducibility of deliverable media or the integrity of the data content are permitted, unless otherwise prohibited by the contract or purchase order.
- **5.2.6 Database access** When electronic, on-line access to contractor-generated data is preferred to actual delivery of hard copy data, such access shall be through a Contractor Integrated Technical Information Service (CITIS) and the contractual application of MIL-STD-974 or commercial equivalent.
- **5.3 Protecting classified information -** TDPs, or parts thereof, containing classified information shall be protected and marked in accordance with the Department of Defense Industrial Security Manual for Safeguarding Classified Information, DOD Manual 5220.22-M.
- **5.4 Distribution statements** All TDP documents prepared by or for the DoD will cite the appropriate distribution statement and, if applicable, export control notice, in accordance with DoD Directive 5230.24.
- **5.5** Contract numbers and contractor identification When required by the contract, purchase order or applicable data item description, TDP documents shall identify the contractor and contract number under which the document is prepared and/or delivered.
- **5.5.1** Application of contract numbers When contract numbers are required on TDP documents, they shall be applied to document originals. The contract numbers shall meet the legibility and reproducibility requirements applicable to the document and be within the prescribed borders or margins of the document.
- **5.5.2** Contract numbers in data rights legends The requirements of 5.5 and 5.5.1 do not alter current Defense Federal Acquisition Regulation (DFAR) requirements for identifying contractors and prime contract numbers in rights-in-data legends. Furthermore, contractor identifications and contract numbers in rights-in-data legends do not satisfy the requirements of 5.5 and 5.5.1.



Update 71 Gary Whitmire

## Government/DoD Engineering Drawing Practices Technical Data Package (MIL-DTL-31000)

Section 1.4.7 Page 10 November, 2004

- **5.6 TDP elements** TDPs shall consist of one or more of the following TDP elements as specified in the contract or purchase order. Only the TDP elements that are listed on the DD Form 1423, Contract Data Requirements List of the contract or purchase order are required to be delivered to the Government.
- **5.6.1** Conceptual design drawings Conceptual design drawings shall be prepared to define design concepts in graphic form, and include appropriate textual information required for analysis and evaluation of those concepts. Conceptual design drawings should only be ordered under contracts containing concept exploration and research tasks. When ordering, a TDP must be generated containing conceptual design drawings in the SOW. Cite DI-DRPR-81001 and reference an Option Selection Work Sheet in the CDRL. Complete a tailored Selection Work Sheet and include it in the solicitation, contract or purchase order.
- **5.6.2** Developmental design drawings and associated lists Developmental design drawings and associated lists shall be prepared to provide sufficient data to support the analysis of a specific design approach and the fabrication of prototype material for test or experimentation. Drawings and lists required to present a design approach may vary from simple sketches to complex drawings. When ordering, a TDP must be generated containing developmental design drawings in the SOW. Cite DI-DRPR-81002 and reference a Selection Work Sheet in the CDRL. Complete a tailored Selection Work Sheet and include it in the solicitation, contract or purchase order.
- 5.6.3 Product drawings and associated lists Product drawings and associated lists shall be prepared to provide the design, engineering, manufacturing, and quality assurance requirements information necessary to enable the procurement or manufacture of the equipment, components, or spares and repair parts from either the original manufacturer or an alternate source. The product shall be defined to the extent necessary for a competent manufacturer to produce an item which duplicates the physical, interface, and functional characteristics of the original product, without additional design engineering effort or recourse to the original design activity. Product drawings shall reflect the level of design maturity that the item has attained. Product drawings should be ordered only under contracts containing engineering and manufacturing development or production tasks. When product drawings are ordered for large, complex items such as major weapons systems, tailoring decisions should include consideration of ordering commercial drawings for selected commercial items used as subassemblies. ASME Y14.100 and applicable appendices must be invoked where DoD peculiar drawing practices requirements, such as the DoD system of numbering, coding and identification are not fully justified. The use of the appendices to ASME Y14.100 will usually be associated with product drawings indicating a DoD activity as design activity and an end item requiring Government logistics support. When ordering, a TDP must be generated containing product drawings and associated lists in the SOW. Cite DI-DRPR-81000 and reference the TDP option Selection Work Sheet in the CDRL. Complete a tailored Selection Work Sheet and include it in the solicitation, contract or purchase order.
- **5.6.4 Commercial drawings and associated lists -** Commercial drawings and associated lists provide engineering and technical information in support of end products, or designated portions thereof, which are commercially-developed items, commercial off-the-shelf items (COTS), or items not developed at Government expense. These drawings and lists shall be in accordance with the commercial design documentation practices of the contractor or supplier of the item. They are not to be used for documenting vendor items in a product drawing package. The acquisition of technical data must conform to the requirements of DFARS Subpart 211. Prior to contracting for commercial drawings, the acquiring activity should review the drawings for their adequacy for the Government's intended uses for the drawings. Commercial drawings and associated lists should not be acquired as a substitute



Update 71 Gary Whitmire

## Government/DoD Engineering Drawing Practices Technical Data Package (MIL-DTL-31000)

Section 1.4.7 Page 11 November, 2004

for product drawings and associated lists when the item is developed at Government expense. Commercial drawings will most often be ordered under contracts for engineering and manufacturing development or production (including commercial item acquisition).

- 5.6.5 Special inspection equipment (SIE) drawings and associated lists SIE drawings and associated lists are used for the limited production of SIE required to inspect and test a specific hardware system. SIE drawings are not adequate to produce and maintain logistic support of standard military inspection systems and test equipment which are deployed throughout the maintenance and user communities. These drawings are only intended for use in alternate manufacturing or inspection environments. If SIE is required for the maintenance and logistics support of the item when deployed, the same types of drawings should be ordered for that SIE as is ordered for the item the SIE supports. SIE drawings should only be ordered under contracts containing tasks for engineering and manufacturing development or production. The SIE shall be defined in detail to the extent necessary for a competent manufacturer to produce or assemble SIE that duplicates the performance characteristics of the original SIE. SIE is also known as special test equipment. When ordering SIE, a TDP must be generated containing SIE drawings and associated lists in the SOW. Cite DI-DRPR-81004 and reference the TDP option Selection Work Sheet in the CDRL. Complete a tailored Selection Work Sheet and include it in the solicitation, contract or purchase order.
- 5.6.6 Special tooling drawings and associated lists Special tooling drawings are used to permit the Government or an alternate source to duplicate the functional requirements of tooling that are mandatory for the manufacture of the item. These drawings are intended for limited production of tooling used in a manufacturing environment. ST drawings may not be adequate to procure and maintain logistic support of tooling which is deployed throughout the maintenance and user communities. If ST is required for the maintenance and logistics support of the item when deployed, the same types of drawings should be ordered for the ST as is ordered for the item the ST supports. ST drawings should be ordered only under contracts containing tasks for engineering and manufacturing development or production. Special tooling drawings and associated lists shall be prepared to provide the data required to manufacture special tooling which is mandatory to successfully produce the item. The special tooling shall be defined in detail to the extent necessary for a competent manufacturer to produce tooling which duplicates the performance characteristics of the original tooling. When ordering ST, a TDP must be generated containing special tooling drawings and associated lists in the SOW. Cite DI-DRPR-81008 and reference the option Selection Work Sheet in the CDRL. Complete a tailored Selection Work Sheet and include it in the solicitation, contract or purchase order.
- **5.6.7 Specifications** Specifications shall be prepared as performance specifications or detail specifications as required in the contract or purchase order.
- 5.6.7.1 Selection Refer to MIL-STD-961 for guidance in determining the types of specifications to be acquired, or the Federal Standardization Manual for guidance on composing Commercial Item Descriptions. For specifications related to software documentation see 5.6.9.
- 5.6.7.2 Ordering Requires the generation of a TDP containing specifications in the Statement of Work. Cite the appropriate DID as listed in MIL-STD-961 in the CDRL. Reference the completed Option Selection Work Sheets in the CDRL. Complete an Option Selection Work Sheet (including tailoring) and include it in the solicitation, contract, or purchase order. Additional documentation associated with specifications must be ordered as separate data items on the CDRL.



#### Update 71 Gary Whitmire

## Government/DoD Engineering Drawing Practices Technical Data Package (MIL-DTL-31000)

Section 1.4.7 Page 12 November, 2004

- 5.6.7.3 Defense specifications Defense specifications, performance or detail, shall be prepared in accordance with MIL-STD-961 as coordinated, limited coordinated or "USED IN LIEU OF" limited coordinated specifications.
- 5.6.7.4 Program-unique specifications Program-unique specifications, performance or detail, shall be prepared in accordance with MIL-STD-961 as item, material, process, software, or system specifications.
- 5.6.7.5 Commercial item descriptions (CIDs) CIDs shall be prepared in accordance with the Federal Standardization Manual to describe, by functional, performance, or essential physical requirements, available commercial products or services.
- 5.6.8 Packaging data Packaging requirements shall be as specified in the contract or order.
- 5.6.8.1 Selection Prior to ordering packaging data, an engineering task to develop packaging requirements must be included in the contract or purchase order. For additional information on the use and selection of packaging data products refer to MIL-STD-2073-1.
- 5.6.8.2 Ordering Requires the generation of a TDP containing packaging data in the Statement of Work. Cite the appropriate DID as listed in MIL-STD-2073-1 in the CDRL and enter the tailoring in Block 16 of the CDRL.

#### 5.6.9 Software Documentation

- 5.6.9.1 Selection Software documentation is required to support software products necessary for the operation of the end item, component systems thereof, or special inspection equipment covered by the TDP. Refer to IEEE/EIA 12207 for information on selecting and tailoring software documentation for inclusion in TDPs.
- 5.6.9.2 Ordering Requires the generation of a TDP including software documentation for each software product in the Statement of Work.
- **5.7 TDP data management products -** When specified in the contract or purchase order, the following data products related to the management and control of TDPs shall be prepared. Only the TDP data management products that are listed on the DD Form 1423, Contract Data Requirements List (CDRL) of the contract or purchase order are required to be delivered to the Government.
- **5.7.1 Source control drawing approval request -** Source control drawing approval requests shall be prepared and submitted to the Government activity specified in the contract or purchase order as having approval authority. Each potential source control item shall be approved by the Government activity having source control drawing approval authority prior to inclusion of the source control drawing in the TDP.
- 5.7.1.1 Selection Source control drawing (SOCD) approval requests are used to ensure that only valid source qualification requirements are included in the TDP. Under Public Law 98-525, the Defense Procurement Reform Act of 1984, the Government must actively seek multiple sources for any item for which source qualification is a



Update 71 Gary Whitmire

## Government/DoD Engineering Drawing Practices Technical Data Package (MIL-DTL-31000)

Section 1.4.7 Page 13 November, 2004

requirement. This obligation applies to source control items as well as qualified products list (QPL) and qualified manufacturers list (QML) items. However, Government personnel should take into consideration the adverse impacts of such approval processes on contract costs and schedules, especially when such approval processes are extended throughout the subcontract chain. SOCD approval requests should not be selected when MIL-E-5007 or MIL-E-8593 are invoked in the contract or purchase order.

- 5.7.1.2 Ordering Requires the generation of source control drawing approval requests in the Statement of Work. Cite Dl-DRPR-81010 in the CDRL. Identify the Government activity having source control drawing approval authority and any tailoring in Block 16 of the CDRL.
- **5.7.2 Drawing number assignment report** A drawing number assignment report shall be prepared to identify and describe the use of Government drawing numbers by the contractor.
- 5.7.2.1 Selection A drawing number assignment report provides the information necessary to complete Government design activity records on the use of specific Government drawing numbers. This report should be acquired only when drawings and associated lists are to be identified with Government CAGE Codes and document numbers.
- 5.7.2.2 Ordering Requires the generation of drawing number assignment reports in the Statement of Work. Cite DI-DRPR-81011B in the CDRL and enter the tailoring in Block 16 of the CDRL.
- **5.7.3 Proposed critical manufacturing process description** Proposed critical manufacturing process descriptions shall be prepared to describe manufacturing processes which are critical to meeting the design requirements of the item. The process shall be approved as critical by the Government activity cited in the contract or purchase order as having approval authority before it is designated as mandatory in TDP documents.
- 5.7.3.1 Selection The proposed critical manufacturing process description is used to provide the Government design activity with the opportunity to approve or disapprove the documentation of a manufacturing process as critical in the TDP. However, Government personnel should take into consideration the adverse impacts of such approval processes on competitive procurement, contract costs and schedules, especially when such approval processes are extended throughout the subcontract chain.
- 5.7.3.2 Ordering Requires the generation of proposed critical manufacturing process description in the Statement of Work. Cite DI-DRPR-81012 in the CDRL and enter the tailoring in Block 16 of the CDRL.
- **5.8 Legibility and reproducibility** All documents prepared or submitted shall meet the legibility and reproducibility requirements of the specification or standard controlling the media in which the data is to be delivered. As a minimum, all lines, symbols, letters, and numerals shall be readable even if no other legibility or reproducibility requirements are specified in the contract or purchase order.
- **5.9** Commercial and Government Entity (CAGE) Codes When CAGE Codes are to be applied to documents used in TDPs and TDP elements, the valid codes identified in Federal Cataloging Handbook H4/H8 shall be used.



#### Update 71 Gary Whitmire

## Government/DoD Engineering Drawing Practices Technical Data Package (MIL-DTL-31000)

Section 1.4.7 Page 14 November, 2004

- **5.9.1 Sources of supply -** Type "A" codes shall be used to identify manufacturers' part or identifying numbers and sources of supply except when industry marketing customs dictate otherwise. When the manufacturer of a specific item customarily licenses a distributor to perform the final steps of manufacture exclusively, the Type F code for the distributor may be used.
- **5.9.2 Old terms for CAGE Code** References on existing documents or preprinted document forms using the terms "FSCM" or "Code Ident." do not need to be revised for the sole purpose of conversion to "CAGEC" or "CAGE Code." Such conversion may be made concurrently with other needed changes.
- **5.10 Metric documents -** When the contract or purchase order specifies the metric system (SI), TDP documents shall be identified as metric documents and conform to FED-STD-376.
- **5.11 Software and Software Documentation -** Software and software documentation required for the operation of the hardware or special inspection equipment related to the hardware defined in the TDP, shall be prepared in accordance with IEEE/EIA 12207.

#### 6.0 Verification

- **6.1 Inspection of TDP elements -** TDP elements including TDP documents prepared by subcontractors, shall be inspected for the following:
  - (a) Compliance with the requirements of this specification and applicable data item descriptions as tailored in the contract or purchase order.
  - (b) Inclusion of all documents, including sub-tier references, required to meet the information content requirements of the TDP element, except those identified in 5.2.2.1.
  - (c) Accuracy of the assignment and identification of security markings, distribution statements, export control notices, rights-in-data legends, and other special markings.
  - (d) Inclusion of contract numbers and contractor identifications.
  - (e) Legibility and reproducibility.
  - (f) TDP components have not been prepared for requirements that could be met by existing standardization documents, except as permitted for commercial drawings and associated lists.
  - (g) References to other standardization documents are in compliance with 5.2.1.
  - (h) Completeness and accuracy of the TDP documents, including required quality assurance information, in describing the design of the item, its subassemblies, and component parts. When the Government has approved, tested or accepted a configuration of the item, which is the design to be described by the TDP documents.
- **6.2 Inspection of TDP data management products -** TDP data management products and the components thereof, including documents prepared by subcontractors, shall be inspected for the following:
  - (a) Compliance with the requirements of this specification and applicable data item descriptions as tailored in the contract or purchase order.



Update 71 Gary Whitmire

# Government/DoD Engineering Drawing Practices Technical Data Package (MIL-DTL-31000)

Section 1.4.7 Page 15 November, 2004

- (b) Inclusion of all documents, including sub-tier references, required to meet the information disclosure requirements of the TDP data management product.
- (c) Accuracy of the assignment and identification of security markings, distribution statements, export control notices, rights-in-data legends, and other special markings.
- (d) Inclusion of contract numbers and contractor identifications, when applicable.
- (e) Legibility and reproducibility.

#### 7.0 Packaging

**7.1 Packaging of the TDP** - Packaging of TDP elements and TDP data management products shall be as required by the contract or purchase order.

#### 8.0 Notes

This section contains information of a general or explanatory nature that may be helpful.

- **8.1 Acquisition Requirements -** Acquisition documents must specify the following:
  - (a) Title, number, and date of this specification.
  - (b) Issue of DODISS to be cited in the solicitation, and, if required, the specific issue of individual documents referenced.
  - (c) The TDP elements to be supplied. (See paragraphs 1.0.2 and 5.6.)
  - (d) The TDP data management products to be supplied. (See paragraphs 1.0.3 and 5.7.)
  - (e) Whether or not company standards are permitted. (See paragraph 5.2.3.1.)
  - (f) A completed TDP Option Selection Worksheet for drawings and associated lists (conceptual, developmental, product, commercial, special inspection equipment and special tooling) and specifications. The TDP Option Selection Worksheets are used to specify options and tailoring for drawings and specifications being acquired as TDP elements.
  - (g) Whether or not subcontractor identifications and subcontract numbers are required in accordance with paragraph 5.5; and if so, the location and method of application.
  - (h) Any restrictions on the use of variations allowed by paragraph 5.2.5.
- **8.2 Data Requirements** The following data item descriptions (DIDs) must be listed, as applicable, on the Contract Data Requirements List (DD Form 1423) when this specification is applied on a contract, in order to obtain the data, except where DOD FAR Supplement 27.475-1 exempts the requirement for a DD Form 1423. The DIDs listed below have been cleared. The current issue of DOD 5010.12, Acquisition Management Systems and Data Requirements Control List (AMSDL) must be researched to ensure that only current, cleared DIDs are cited on the DD Form 1423.

DI-DRPR-81000 Product Drawings and Associated Lists



# Update 71 Government/DoD Engineering Drawing Practices Technical Data Package (MIL-DTL-31000)

Section 1.4.7 Page 16 November, 2004

DI-DRPR-81001	Conceptual Design Drawings						
DI-DRPR-81002	Development Design Drawings and Associated Lists						
DI-DRPR-81003	Commercial Drawings and Associated Lists						
DI-DRPR-81004	Special Inspection Equipment Drawings and Associated Lists						
DI-DRPR-81008	Special Tooling Drawings and Associated Lists						
DI-DRPR-81010	Source Control Drawing Approval Request						
DI-DRPR-81011	Drawing Number Assignment Report						
DI-DRPR-81012	Proposed Critical Manufacturing Process Description						
DIDs for specification	ons (See paragraph 8.2.1.)						
DIDs for packaging data (See paragraph 8.2.2.)							

- **8.2.1 DIDs for specifications** Applicable DIDs and tailoring instructions for acquiring performance, detailed, and program-unique specifications are specified in MIL-STD-961.
- **8.2.2 DIDs for packaging data** Applicable DIDs and tailoring instructions for acquiring packaging data are specified in MIL-STD-2073-1.
- **8.3** Commercial Drawings The acquisition of commercial drawings almost always involves rights in data and intellectual property issues. These issues must be clearly defined in the contract or purchase order in accordance with DFARS Part 211 and Part 227. MIL-DTL-31000 and its related data item descriptions shall not be used to circumvent the DFARS requirements.
- **8.4 Special Inspection Equipment (SIE)** To be considered mandatory to the manufacture of an item, the SIE must be the only known inspection equipment that can be used to test or inspect parameters that cannot be inspected effectively with commercially available equipment.
- **8.5 Contractor Specifications** A contractor's specifications for such things as materials or processes are considered company standards.
- **8.6 FSCM and Code Identification -** Although it is not mandatory to update the terms "FSCM" or "Code Identification", it is recommended that the new terminology be integrated into the TDP document and pre-printed forms when practical.
- **8.7 Changes from Previous Issue -** Marginal notations are not used in MIL-DTL-31000 to identify changes with respect to the previous issue due to the extensiveness of the changes.

#### 9.0 TDP Tailoring Forms

Work sheet forms (Figures 1 through 7) shall be used to identify selected options and tailoring for engineering drawings and specifications. These work sheets are to be used as an extension of the Remarks blocks (Block 16)



Update 71 Gary Whitmire

## Government/DoD Engineering Drawing Practices Technical Data Package (MIL-DTL-31000)

Section 1.4.7 Page 17 November, 2004

of the CDRL (DD Form 1423) Figure 8. When information to be entered in a block of the TDP tailoring form is too extensive for the space available, it may be continued in the Other Tailoring block of the form. Additional sheets may be attached to the forms as necessary. When a CDRL contains multiple entries for the same data product, such as options, the same tailoring form may be used to cover identical data products.

The applicability of ASME Y14.100 with appropriate appendices to developmental design drawings shall be specified on the applicable Selection Work Sheet. Only those requirements essential to meeting the Government's needs for document preparation, control and format should be specified. In addition, since these drawings are not intended for repository storage or use in logistics support of the item, each selected requirement should be tailored to allow the contractor the maximum permissible freedom. Decisions regarding the applicability of ASME Y14.100, with appropriate appendices, to developmental design drawings must take into account potential future requirements for other TDP elements such as product drawings.

The following provides guidance for completing the TDL forms.

- **Block A, Contract No.** Enter the number of the acquisition document shown in Block E, Contract/PR No., of the DD Form 1423.
- **Block B, Exhibit No.** Enter the number or letter that appears in Block B, Exhibit, of the DD Form 1423.
- Block C, CLIN Enter the Contract Line Item Number (CLIN) from Block A, CLIN, of DD Form 1423.
- **Block D, CDRL Data Item No.** Enter the data item number from Block 1, Data Item No., of DD Form 1423 entry for which the tailoring form is being prepared. If the form applies to more than one CDRL data item, enter all data item numbers.
- **Block 1, Deliverable Product** The options in this block determine the media in which the data product will be delivered. The choices are not exclusive to each other, and the same set of drawings may be acquired in more than one form.
- **Block 1a, Originals** Originals should be ordered only if the Government intends to assume design control authority by taking possession of the drawing masters and responsibility for maintaining the drawing package. If this option is selected, the media on which the drawings are to be prepared must be specified by reference to an applicable specification or standard, including type, grade, class or material thickness, as applicable.
- **Block 1b, Reproductions** Reproductions are the most common form of deliverable product for drawings. They may range from full size paper or sepia copies to microfilm aperture cards. They may not be good for making additional copies. For different types of reproductions, see MIL-PRF-5480 and MIL-M-3876/1. The types and quantities of each type shall be specified by reference to applicable specifications or standards including type, grade, and class.
- **Block 1c, Digital Data** DoD Regulation 5000.2, Part 3 states that all new contracts shall require online access or delivery of their programmatic and technical data in digital form unless analysis shows that lifecycle costs would be increased by doing so. However, caution must be exercised to ensure that the delivered digital data can be received, stored, retrieved and used by the Government. Information and guidance for applying the CALS strategy to the acquisition, management and use of digital data is contained in the Defense Acquisition Deskbook, Section 3.7, Continuous Acquisition and Life-Cycle Support (CALS).
- **Block 2, CAGE Code and Document Numbers -** This choice is exclusive. It determines how the drawings and associated lists will be identified.



#### Update 71 Gary Whitmire

## Government/DoD Engineering Drawing Practices Technical Data Package (MIL-DTL-31000)

Section 1.4.7 Page 18 November, 2004

- **Block 2a, Contractor** When contractor CAGE Code and document numbers are specified, the documents will identify the CAGE Code and document numbers of the contractor or subcontractor having design activity responsibility. Usually the Government will not be able to assume control of the drawing originals (masters), except through a subsequent data acquisition action.
- **Block 2b, Government** If the Government intends to take delivery of the drawing originals and to assume design activity responsibility at some time in the future, then the documents should be identified with a Government CAGE Code and Government document numbers. If this option is selected, additional information must be specified as follows:
  - (a) If the acquiring activity has already determined the CAGE Code and Government document numbers to be used, the CAGE Code should be entered in the "USE CAGE CODE" block and the range of document numbers entered in the "USE DOCUMENT NUMBERS" block.
  - (b) If the acquiring activity has not determined the Government CAGE Code and Government document numbers which are to be used, then the Government activity that will specify this information should be identified in the "TO BE ASSIGNED BY:" block.
- **Block 3, Drawing Formats and Drawing Forms** These options specify the drawing format to be used and assign responsibilities for providing the drafting material or media (drawing forms) on which the documents are to be generated.
- **Block 3a, Contractor Formats (Forms to be supplied by contractor)** This option should be selected if the documents are to be identified with the contractor's CAGE Code and contractor document numbers. This option may also be used when Government CAGE Code and document numbers are to be used for document identification if the exact format is optional.
- **Block 3b, Government Formats (Forms to be supplied by contractor)** This option requires the contractor to acquire and use drawing media in the Government's specified format. If selected, the Government activity responsible for providing sample drawing forms must be specified. Usually this option is not cost effective because the contractor must special order drawing forms in several different sizes. At best it should be used only on acquisitions which will require the delivery of a very large number of original drawings.
- **Block 3c, Government Formats (Forms to be supplied as Government Furnished Material)** This is the most cost effective option when the Government is acquiring drawings with Government CAGE Codes and Government document numbers, and requires the use of a specific drawing format. If selected, the Government activity that will supply the drawing forms shall be specified.
- **Block 4, Types Drawings Selection -** This option assigns the responsibility for determining the details of the use of various types of drawings to fulfill the design disclosure requirements of the TDP element to be delivered.
- **Block 4a, Contractor Selects** This choice permits the contractor to use its own judgment as to how to structure the drawing package to provide the required design disclosure for the TDP element. It does not diminish the contract requirements for design disclosure.
- **Block 4b, Government Selects** This option gives the Government the authority to direct the contractor as to which types of drawings to use for each component, subassembly or part. If selected, the types of drawings to be used must be specified. When selected, this option should be tailored to permit the contractor the maximum freedom in the use of various drawing types.



Update 71 Gary Whitmire

## Government/DoD Engineering Drawing Practices Technical Data Package (MIL-DTL-31000)

Section 1.4.7 Page 19 November, 2004

- **Block 5, Associated Lists** These choices shall be completed to define the Government's requirements for associated lists as defined in ASME Y14.34M.
- **Block 5a, Parts Lists** Unless there is a specific Government requirement for integral or separate parts lists, "CONTRACTOR'S OPTION" should be selected. This option allows the contractor to use either an integral or separate parts list as best suits the specific item or part being documented, as well as the contractor's normal documentation practices and manufacturing procedures.
- **Block 5b, Data lists** Either "REQUIRED" or "NOT REQUIRED" must be selected. Data lists aid in assembling larger sets of drawings. Therefore, data lists should be required on most acquisitions of complex items. When data lists are required, the contractor must be given guidance regarding the required levels of assembly. For example, an electronic system with input and output sections made up of equipment racks containing replaceable drawers may require data lists at the drawer, rack, section and system (or end-item) level. Other terms for the required levels may be used.
- **Block 5c, Index Lists** Select either "REQUIRED" or "NOT REQUIRED." Index lists are not normally needed for moderate sized drawing packages of items that are not complex. However, they help in assembling the larger drawing packages required for major equipment, systems and subsystems. The assembly level at which index lists are required shall be specified.
- **Block 5d, Wire Lists** Select either "REQUIRED" or "NOT REQUIRED." A wire list is prepared to provide information necessary for making wire connections. A wire list may be prepared for one or more related assemblies.
- **Block 5e, Indentured Data Lists** Select either "REQUIRED" or "NOT REQUIRED." An indentured data list is prepared to show all the documents for a complete system or end item in a top down, generation tree order.
- **Block 5F, Application Lists** Select either "REQUIRED" or "NOT REQUIRED." Application lists are prepared when data such as "Next Assembly" and "Used On" are required in a separate list.
- **Block 6 Details** These options address the use of multi-detail and detail assembly drawings in the drawing package. These choices have an impact on the number of drawings to be prepared, and, subsequently, the cost of the data. For additional information on drawing types and applications see ASME Y14.24.
- **Block 6a, Multi-detail Drawings Permitted** This option permits the contractor to use multi-detail drawings and to determine whether or not to use a detail assembly drawing or a combination of an assembly drawing and a detail drawing to document a specific item or part. This option does not prohibit the use of mono-detail drawings where practical.
- **Block 6b, Mono-detail Drawings Mandatory** This option prohibits the use of multi-detail and detail assembly drawings. This increases the number of drawings and the cost of the data package. Mono-detail drawings are generally considered more suitable to large-scale manufacturing environments than multi-detail drawings; however, both can be used. Tabulated drawings and inseparable assembly drawings are still permitted when mono-detail drawings are specified as mandatory.
- **Block 7, Vendor Substantiation Data -** This requirement applies only to aerospace propulsion systems acquisitions and is used primarily by Air Force organizations.
- **Block 8, Applicability of Standards Mark "X"** for all applicable standards.



Update 71 Gary Whitmire

## Government/DoD Engineering Drawing Practices Technical Data Package (MIL-DTL-31000)

Section 1.4.7 Page 20 November, 2004

- **Block 9, Other Tailoring** This block may be used to tailor any requirement of MIL-DTL-31000, ASME Y14.100 with appropriate appendices, a DID, or any other document affecting the content, format, or media of the data product.
- **9.1 Tailoring Forms for Specifications -** The following choices are required to complete the tailoring forms for Department of Defense and program-unique specifications:
- 9.1.1 Specification Type See MIL-STD-961.
- **9.1.2** Coordination Range (Department of Defense only) If either LIMITED COORDINATION or "USED IN LIEU OF" LIMITED COORDINATION specifications are selected, specify the required degree or range of coordination. For example, Navy-wide or Army Tank-Automotive Command and Army Missile Command.
  - **Block A, Contract No.** Enter the number of the acquisition document shown in Block E, Contract/PR No., of the DD Form 1423.
  - **Block B, Exhibit No.** Enter the number or letter that appears in Block B, Exhibit, of the DD Form 1423.
  - Block C, CLIN Enter the Contract Line Item Number (CLIN) from Block A, CLIN, of DD Form 1423.
  - **Block D, CDRL Data Item No.** Enter the data item number from Block 1, Data Item No., of DD Form 1423 entry for which the tailoring form is being prepared. If the form applies to more than one CDRL, data item, enter all data item numbers.
  - **Block 1, Item, Process or Material** Identify the item, the process, or the material for which the specification is to be prepared. More than one item, process or material may be specified if the same type of specification is prepared for each. If additional space is required, the listing may be continued in the "Other Tailoring" block. When the listing is continued in "Other Tailoring", Block 1 shall contain an appropriate cross-reference.
  - **Block 2, Commercial Item Descriptions -** List if applicable.
  - **Block 3, Defense Specifications -** X one and complete as applicable.
  - **Block 4, Associated Documents per MIL-STD 961** This block is for reference only. Identify the documents associated with specifications that are also required under the contract or purchase order. Each type of associated document to be delivered shall be ordered as a separate data item on the DD Form 1423. MIL-STD-961 identifies the types of documents associated with specifications and specifies the characteristics of each.
  - **Block 4b, CDRL Data Item Number** Enter the data item number from Block 1 of the entry on the DD Form 1423 which places the associated document on order.
  - **Block 5, Deliverable Product** The options in this block determine the form in which the data product will be delivered. The choices are not exclusive to each other, and the same specification may be delivered in more than one form.
  - **Block 5a, Originals** Originals should be ordered if the Government intends to assume responsibility for maintaining the specification. If this option is selected, the media on which the document is to be delivered must be specified.



Update 71 Gary Whitmire

## Government/DoD Engineering Drawing Practices Technical Data Package (MIL-DTL-31000)

Section 1.4.7 Page 21 November, 2004

- **Block 5a1, Reproductions** The required numbers and kinds of reproductions must be specified by reference to applicable specifications or standards including type, grade and class, as applicable.
- **Block 5a2, Digital Data** Digital data is the preferred delivery method for data. However, caution must be exercised to ensure that the digital data is delivered in an electronic format that can be received, stored, retrieved and used by the Government. Information and guidance for applying the CALS strategy to the acquisition, management and use of digital data is contained in the Defense Acquisition Deskbook, section 3.7, Continuous Acquisition and Life-Cycle Support (CALS) Implementation Guide. The following paragraphs provide guidance for acquiring data products in digital form:
  - (a) Department of Defense Policy DoD Instruction 5000.2 states that technical data will be prepared, delivered and used in digital form unless it is not cost-effective for the Government. In addition, maximum use should be made of available contractor automated databases.
  - (b) Implementation Defense Acquisition Deskbook, Continuous Acquisition and Life-Cycle Support (CALS) Program Implementation Guide provides information and guidance to personnel responsible for the acquisition and use of weapon system technical data. Its purpose is to assist in the transition from paper-intensive processes to digital data delivery and access. In addition to the Defense Acquisition Deskbook, Government personnel acquiring data should consult Service or Agency and Command regulations, directives and instructions for additional information on specifying the delivery of data in digital form.
  - (c) Data Requirements Versus Work Tasks Contractual data requirements cannot be used to impose design requirements on the item being procured or engineering work tasks on the contractor. Such tasks shall be identified in the Statement of Work of the contract or purchase order or in a design requirements specification.
  - (d) Previous Submission Government activities acquiring technical data shall tailor the delivery and submission requirements for TDPs to avoid unnecessary charges to the Government resulting from duplicate delivery of data products.

Update 71 Gary Whitmire

# Government/DoD Engineering Drawing Practices Technical Data Package (MIL-DTL-31000)

Section 1.4.7 Page 22 November, 2004

TDP OPTION SELECTION WORKSHEET PRODUCT DRAWINGS AND ASSOCIATED LISTS									
A. CONTRACT NO.		B. EXHIBIT/ATTACHME	ENT NO.		C. CLIN	D. CDRL DAT	A ITEM NO.		
1. DELIVERABLE PRODU	CT (X and comp	lete as applicable.)				l			
	a. ORIGINALS (Specify current design activity's full size reproducible drawing or digital data file(s) on which is kept the revision record recognized as offical) (Identify specification, type, grade and class, etc.)								
b. REPRODUCTIONS	b. REPRODUCTIONS (Identify specifications, type, grade and class, etc., and quantity of each)								
c. DIGITAL DATA ( Ide	c. DIGITAL DATA ( Identify specification, exchange media, etc. and specify original (master) or copy)								
2. CAGE CODE AND DOC	JMENT NUMBE	RS (X one)							
a. CONTRACTOR									
b. GOVERNMENT Co	mplete (1) and (	2) or (3)							
(1) Use CAGE Code	(2) Use Doc	ument Numbers			(3) To Be Assigned By:				
3. DRAWING FORMATS AI	ND DRAWING F	ORMS (X one and comp	lete as ap	oplical	ble)				
a. CONTRACTOR FO	RMATS. Forms	to be supplied by contract	tor.						
b. GOVERNMENT FO Samples supplied b		to be supplied by contrac	tor.						
c. GOVERNMENT FO		to be supplied as							
Government Furnis									
4. TYPES OF DRAWINGS	SECTION (X one	9)							
a. CONTRACTOR SE	LECTS			b. GC	OVERNMENT SELECTS (	Specify in item 9	9)		
5. ASSOCIATED LIST (X as	nd complete as	applicable)							
a. PARTS LISTS (X or	,	(1) Integral	(2) Separate						
b. DATA LISTS (X one		(1) Not Required	(2) Required (Specify levels of assembly)						
c. INDEX LISTS (X or	′	(1) Not Required		` '	equired (Specify levels of a	- ,,			
d. WIRING LISTS (X		(1) Not Required		(2) Required (Specify levels of assembly)					
e. INDENTURED DAT	` '	(1) Not Required		` '	equired (Specify levels of a				
f. APPLICATION LIST	S (X one)	(1) Not Required		(2) Re	equired (Specify levels of a	issembly)			
6. DETAILS (X one)	MANAGO DEDMI	TED.	1	L 140	ONODETAIL DRAWINGS	MANDATODY			
a. MULTIDETAIL DRA	WINGS PERMI	TED		b. MONODETAIL DRAWINGS MANDATORY					
7. VENDOR SUBSTANTIAT	ION DATA (X or	ne)	'						
a. NOT REQUIRED				b	. REQUIRED				
8. APPLICABILITY OF STA	NDARDS. The	ollowing standards app	ly: (X as	applic	able)				
a. ASME Y14.100 ENGINEER DRAW	ING B.	b. ASME Y14.100, WIT APPENDICES B,C,D		C	:. ASME Y14.34 ASSOCIATED LISTS		TING STANDARDS OT APPLY		
PRACTICES (COMMERCIAL)	C.	1					l		
	D.	-							
	E.	-							
9. OTHER TAILORING (Att	ach additional s	heets as necessary)							
							l		

Figure 1. Production Drawings and Associated Lists TDP Option Selection Worksheet

Update 71 Gary Whitmire

# Government/DoD Engineering Drawing Practices Technical Data Package (MIL-DTL-31000)

Section 1.4.7 Page 23 November, 2004

	TDP OPTION SELECTION WORKSHEET CONCEPTUAL DESIGN DRAWINGS								
A. CC	A. CONTRACT NO. B. EXHIBIT/ATTACHMENT NO. C. CLIN D. CDRL DATA ITEM NO.								
1. DE	LIVERABLE PRODUCT ()								
	ORIGINALS (Specify curecognized as offical) (Iden				g or	digital data file(s) on whic	h is ke	ept the revision record	
	b. REPRODUCTIONS (Ide	ntify specific	cations, type, grade and c	lass, etc., ar	ıd qı	uantity of each)			
	c. DIGITAL DATA ( Identify			and specify o	rigin	al (master) or copy)			
2. CA	GE CODE AND DOCUME	NT NUMBE	RS (X one)						
	a. CONTRACTOR								
	b. GOVERNMENT Comple	ete (1) and (2	2) or (3)						
(1) Us	e CAGE Code (	2) Use Docı	ument Numbers			(3) To Be Assigned By:			
3. DR	AWING FORMATS AND D	RAWING F	ORMS (X one and comp	lete as appl	icab	le)			
	a. CONTRACTOR FORMA	TS. Forms t	to be supplied by contract	tor.					
	<ul> <li>b. GOVERNMENT FORMA Samples supplied by (Sp</li> </ul>		to be supplied by contract	tor.					
	c. GOVERNMENT FORMA Government Furnished I								
4. TY	PES OF DRAWINGS SECT	TION (X one	e)						
	a. CONTRACTOR SELEC	TS		b.	GO'	VERNMENT SELECTS (S	Specify	/ in item 6)	
5. AP	PLICABILITY OF STANDA	RDS. The f			olica	ible)			
	a. ASME Y14.100 ENGINEER DRAWING PRACTICES (COMMERCIAL)	B. C.	b. ASME Y14.100, WITI APPENDICES B,C,D		C.	ASME Y14.34 ASSOCIATED LISTS		d. EXISTING STANDARDS DO NOT APPLY	
	(002)	· · ·	_						
		D.							
		E.							
6. OT	HER TAILORING (Attach a	additional s	heets as necessary)				•		

Figure 2. Conceptual Design Drawings TDP Option Selection Worksheet

Update 71 Gary Whitmire

# Government/DoD Engineering Drawing Practices Technical Data Package (MIL-DTL-31000)

Section 1.4.7 Page 24 November, 2004

TDP OPTION SELECTION WORKSHEET DEVELOPMENTAL DESIGN DRAWINGS AND ASSOCIATED LISTS									
A. CONTRACT NO.		B. EXHIBIT/ATTACHMEN			C. CLIN	D. C	DRL DATA ITEM NO.		
1. DELIVERABLE PRODUCT (X and o		4!:							
,									
	a. ORIGINALS (Specify current design activity's full size reproducible drawing or digital data file(s) on which is kept the revision record recognized as offical) (Identify specification, type, grade and class, etc.)								
b. REPRODUCTIONS (Identify specifications, type, grade and class, etc., and quantity of each)									
c. DIGITAL DATA ( Identify specification, exchange media, etc. and specify original (master) or copy)									
2. CAGE CODE AND DOCUMENT NU	MBERS	S (X one)							
a. CONTRACTOR									
b. GOVERNMENT Complete (1)	and (2)	or (3)							
(1) Use CAGE Code (2) Use	Docum	nent Numbers			(3) To Be Assigned By:				
3. DRAWING FORMATS AND DRAWI	NG FOF	RMS (X one and complet	te as an	plicab	le)				
				рпоць	no,				
a. CONTRACTOR FORMATS. Fo		**							
<ul> <li>b. GOVERNMENT FORMATS. For Samples supplied by (Specify)</li> </ul>	orms to	be supplied by contractor	:						
c. GOVERNMENT FORMATS. For	orms to	be supplied as							
Government Furnished Materia									
4. TYPES OF DRAWINGS SECTION (	K one)								
a. CONTRACTOR SELECTS			b. G	OVER	NMENT SELECTS (Spec	cify in it	em 8)		
5. ASSOCIATED LIST (X and complete	e as ap	<del></del>			I la a				
a. PARTS LISTS (X one)		(1) Integral	(2) Separate (3) Contractor's Option						
b. DATA LISTS (X one)		(1) Not Required	· /	(2) Required (Specify levels of assembly)					
c. INDEX LISTS (X one)		(1) Not Required			ed (Specify levels of asse	- ,			
d. WIRING LISTS (X one)		(1) Not Required	. ,		ed (Specify levels of asse				
e. INDENTURED DATA LIST (X o	ne)	(1) Not Required	(2) Required (Specify levels of assembly)						
f. APPLICATION LISTS (X one)		(1) Not Required	(2) F	Require	ed (Specify levels of asse	mbly)			
6. DETAILS (X one)									
a. MULTIDETAIL DRAWINGS PE	RMITTE	ED	b. N	IONOE	DETAIL DRAWINGS MAN	IDATOI	RY		
7. APPLICABILITY OF STANDARDS.	The fol	lowing standards apply:	(X as a	applica	able)				
a. ASME Y14.100		D. ASME Y14.100, WITH APPENDICES B,C,D,E			ASME Y14.34 ASSOCIATED LISTS		d. EXISTING STANDARDS DO NOT APPLY		
PRACTICES (COMMERCIAL)	C.								
	D.								
	E.								
8. OTHER TAILORING (Attach addition	nal she	eets as necessary)							

Figure 3. Developmental Design Drawings and Associated Lists TDP Option Selection Worksheet

Update 71 Gary Whitmire

# Government/DoD Engineering Drawing Practices Technical Data Package (MIL-DTL-31000)

Section 1.4.7 Page 25 November, 2004

	COMMERCIAL DRAWINGS		
CONTRACT NO.	B. EXHIBIT/ATTACHMENT N		D. CDRL DATA ITEM NO.
ELIVERABLE PRODUCT (X	( and complete as applicable.)		
a. ORIGINALS (Specify cur	rrent design activity's full size reproducible	drawing or digital data file(s	) on which is kept the revision record
recognized as offical) (Iden	tify specification, type, grade and class, etc	c.)	
b. REPRODUCTIONS (Ide	ntify specifications, type, grade and class, e	etc., and quantity of each)	
c. DIGITAL DATA ( Identify	specification, exchange media, etc. and sp	ecify original (master) or co	py)
THER TAILORING (Attach a	additional sheets as necessary)		

Figure 4. Commercial Drawings and Associated Lists TDP Option Selection Worksheet

Update 71 Gary Whitmire

# Government/DoD Engineering Drawing Practices Technical Data Package (MIL-DTL-31000)

Section 1.4.7 Page 26 November, 2004

ODECIA	TDP OPTION SELECTION WORKSHEET SPECIAL INSPECTION EQUIPMENT DRAWINGS AND ASSOCIATED LISTS							
A. CONTRACT NO.		ATTACHMENT		C. CLI		D. CDRL DATA ITEM NO.		
A. CONTRACT NO.	B. EXHIBIT	ATTACHIVIENT	I NO.	C. CLI	N	D. CDRL DATATIEM NO.		
1. DELIVERABLE PRODUCT (X and com	olete as appli	cable.)						
a. ORIGINALS (Specify current design recognized as offical) (Identify specific				g or digita	l data file(s) on whic	h is kept the revision record		
recognized as officar) (identify specific	alion, type, gr	aue anu ciass,	eic.)					
b. REPRODUCTIONS (Identify specification)	b. REPRODUCTIONS (Identify specifications, type, grade and class, etc., and quantity of each)							
c. DIGITAL DATA ( Identify specification, exchange media, etc. and specify original (master) or copy)								
2. CAGE CODE AND DOCUMENT NUMBER	RS (X one)							
a. CONTRACTOR								
b. GOVERNMENT Complete (1) and	2) or (3)							
(1) Use CAGE Code (2) Use Doo	ument Numbe	ers		(3)	To Be Assigned By:			
3. DRAWING FORMATS AND DRAWING F	ORMS (X one	and complete	e as appli	cable)				
a. CONTRACTOR FORMATS. Forms	to be supplied	by contractor.						
b. GOVERNMENT FORMATS. Forms Samples supplied by (Specify)	to be supplied	by contractor.						
c. GOVERNMENT FORMATS. Forms Government Furnished Material (Sp		las						
4. TYPES OF DRAWINGS SECTION (X on								
a. CONTRACTOR SELECTS			b. G0	VERNM	ENT SELECTS (Spe	ecify in item 7)		
5. ASSOCIATED LIST (X and complete as	applicable)	-						
a. PARTS LISTS (X one)	(1) Integ	gral	(2) S	eparate	(3) Cont	tractor's Option		
b. DATA LISTS (X one)	(1) Not	Required	(2) Required (Specify levels of assembly)					
c. INDEX LISTS (X one)	(1) Not	Required	(2) R	equired (	Specify levels of ass	embly)		
d. WIRING LISTS (X one)	(1) Not	Required			Specify levels of ass	• /		
e. INDENTURED DATA LIST (X one)	(1) Not	Required	- ' '		Specify levels of ass	• ,		
f. APPLICATION LISTS (X one)	(1) Not	Required	(2) R	equired (	Specify levels of ass	embly)		
6. APPLICABILITY OF STANDARDS. The	· /		1 . ,	<u> </u>	, ,	•		
a. ASME Y14.100 ENGINEER DRAWING PRACTICES	b. ASME Y1	4.100, WITH ICES B,C,D,E		c. ASM	E Y14.34 OCIATED LISTS	d. EXISTING STANDARDS DO NOT APPLY		
(COMMERCIAL) C.								
D.								
E.								
7. OTHER TAILORING (Attach additional	sheets as nec	essary)				•		

Figure 5. Special Inspection Equipment Drawings and Associated Lists TDP Option Selection Worksheet

Update 71 Gary Whitmire

# Government/DoD Engineering Drawing Practices Technical Data Package (MIL-DTL-31000)

Section 1.4.7 Page 27 November, 2004

	TDP OPTION SELECTION WORKSHEET SPECIAL TOOLING DRAWINGS AND ASSOCIATED LISTS								
A. CONTRACT NO.	B. EXHIBIT/ATTACHMEN		C. CLIN	D. CDRL DATA ITEM NO.					
4 DELIVERABLE PROBLICE (V.									
1. DELIVERABLE PRODUCT (X and co									
	a. ORIGINALS (Specify current design activity's full size reproducible drawing or digital data file(s) on which is kept the revision record recognized as offical) (Identify specification, type, grade and class, etc.)								
b. REPRODUCTIONS (Identify spe	b. REPRODUCTIONS (Identify specifications, type, grade and class, etc., and quantity of each)								
c. DIGITAL DATA ( Identify specification, exchange media, etc. and specify original (master) or copy)									
2. CAGE CODE AND DOCUMENT NUM	BERS (X one)								
a. CONTRACTOR									
b. GOVERNMENT Complete (1) an	nd (2) or (3)								
` '	Occument Numbers		(3) To Be Assigned By:						
3. DRAWING FORMATS AND DRAWING	G FORMS (X one and comple	te as applica	ble)						
a. CONTRACTOR FORMATS. Forr									
b. GOVERNMENT FORMATS. Form Samples supplied by (Specify)	ms to be supplied by contractor	:							
c. GOVERNMENT FORMATS. Form	ms to be supplied as								
Government Furnished Material (									
4. TYPES OF DRAWINGS SECTION (X	one)								
a. CONTRACTOR SELECTS		b. Go	OVERNMENT SELECTS (S	Specify in item 7)					
5. ASSOCIATED LIST (X and complete	as applicable)								
a. PARTS LISTS (X one)	(1) Integral	(2) Separate (3) Contractor's Option							
b. DATA LISTS (X one)	(1) Not Required	(2) Required (Specify levels of assembly)							
c. INDEX LISTS (X one)	(1) Not Required	(2) Required (Specify levels of assembly)							
d. WIRING LISTS (X one)	(1) Not Required	(2) R	(2) Required (Specify levels of assembly)						
e. INDENTURED DATA LIST (X one	e) (1) Not Required	(2) R	(2) Required (Specify levels of assembly)						
f. APPLICATION LISTS (X one)	(1) Not Required	(2) R	equired (Specify levels of a	ssembly)					
8. APPLICABILITY OF STANDARDS. TI	ne following standards apply	: (X as applic	cable)						
a. ASME Y14.100 ENGINEER DRAWING PRACTICES	b. ASME Y14.100, WITH APPENDICES B,C,D,E		c. ASME Y14.34 ASSOCIATED LISTS	d. EXISTING STANDARDS DO NOT APPLY					
(COMMERCIAL)									
D.									
E.									
9. OTHER TAILORING (Attach additional	al sheets as necessary)								
	I								

Figure 6. Special Tooling Drawings and Associated Lists TDP Option Selection Worksheet

Update 71 Gary Whitmire

# Government/DoD Engineering Drawing Practices Technical Data Package (MIL-DTL-31000)

Section 1.4.7 Page 28 November, 2004

	TDP OPTION SEL	ECTION V	VORKSHEET S	
A. CONTRACT NO.  1. ITEM PROCESS OR MATERIAL	B. EXHIBIT/ATTACHMEN		C. CLIN	D. CDRL DATA ITEM NO.
1. ITEM PROCESS OR MATERIAL	1			
2. COMMERCIAL ITEM DESCRIPT	TIONS			
3. DEFENSE SPECIFICATIONS. (X	one and complete as applic	cable)		
a. MIL-PRF	b. MIL-DTL		c. PROGRAM UNIQUE	
(1) Coordinated	(1) Coordinated		(1) PERFORMANCE	(2) DETAIL
(2) Limited Coordinated	(2) Limited Coordinated		a. System	a. System
(3) Interim	(3) Interim		b. Item	b. Item
(3) interim	(3) IIIteriiii		b. item	b. item
				<del>                                     </del>
				<del>                                     </del>
4. ASSOCIATED DOCUMENTS PER MIL- CDRL data item number referenced here			ssociated with defense sp	ecifications are required under the
	· · · · · · · · · · · · · · · · · · ·	<del></del>		T
	b. CDRL DATA ITEM NO.		a. DOCUMENT	b. CDRL DATA ITEM NO.
(1) Supplements		(5) Canc	ellation Notice	
(2) Amendments		(6) Reins	statement Notice	
(3) Validation Notice		(7) Milita	ry Specification Sheets	
(4) Inactive for New Design Notice				
5.DELIVERABLE PRODUCT (X and com	plete as applicable)			
a. ORIGINALS				
(1) Camera Ready Master				
(2) 5: 11 5 4 (5 4 11 11 11 2)				
(2) Digital Data (Detail in Item 6, inc Word Processing Program.	luding requirement for diskette	es with Por	table Document Format or	Printed Description Language, and
6. OTHER TAILORING (Attach additional	I sheets as necessary)			

Figure 7. Specifications TDP Option Selection Worksheet

Update 71 Gary Whitmire

# Government/DoD Engineering Drawing Practices Technical Data Package (MIL-DTL-31000)

Section 1.4.7 Page 29 November, 2004

	CONTRACT	DATA RE (1 data		NTS LIST			Form Approved OMB No. 0704-0188			
data sources, gather any other aspect of Directorate (0704-0	ering and maintaining the d this collection of information 188). Respondents should	of information lata needed, a on, including s I be aware tha	is estimated to and completing an uggestions for red to notwithstanding	d reviewing the co ducing the burder any other provision	ollection of information, to the Department on of law, no person	ling the time for reviewing ins on. Send comments regarding of Defense, Executive Servic shall be subject to any penalt to the above organization. Se	this burde es and Cor v for failing	en estima mmunicat to comp	te or tions Iv with a	
	LINE ITEM NO.	B. EXHIB		C. CATEG	ORY:					
D. SYSTEM/ITE	EM		E. CONTRAC		TM G	ITRACTOR			_	
1. DATA ITEM NO.	2. TITLE OF DATA ITEM	И			3. SUBTI	ITLE				17. PRICE GROUP
4. AUTHORITY (Dat	ta Acquisition Document No.	.)	5. CONTRACT F	EFERENCE		6. REQUIRING OFFICE				18. ESTIMATED TOTAL PRICE
7. DD 250 REQ	9. DIST STATEMENT REQUIRED	10. FREQUI	ENCY	12. DATE OF	FIRST SUBMISSION	14. DISTRI	BUTION			
8. APP CODE	-	11. AS OF D	ATE	13. DATE OF	SUNSEQUENT	a. ADDRESSEE		b. COPIE		
				SUBMISS	ION		Draft	Reg	Repro	
								+		
								1		
							+	+		
							+	-		
							+			
							+	-		
							+	1		
							+	+		
							+			
								-		
							+	1	$\vdash$	
							+			
							+	-	$\vdash$	
									$\vdash$	
							+	+	$\vdash$	
							+	+		
							_	+	$\vdash$	
							+	+	$\vdash$	
G. PREPARED	BY		H. DATE	I. AP	PROVED BY	15. TOTAL	- 0 J. DA	O ATE	0	
<u></u>				""						
										I
DD FORM 1	423-1, FEB 200	1	PREV	IOUS EDITIO	N MAY BE USED	). Page _	of	f	Pages	

Figure 8. Contract Data Requirements List (CDRL)



# Government/DoD Engineering Drawing Practices Technical Data Package (MIL-DTL-31000)

Section 1.4.7 Page 30 November, 2004

#### 10.0 Instructions For Completing DD FORM 1423

For detail instructions See DoD 5010.12-M.

#### 10.1 For Government Personnel

- **Block A, Contract Line Item No. -** Self-explanatory.
- Block B, Exhibit Self-explanatory.
- **Block C, Category** Mark (X) in the appropriate category: TDP Technical Data Package; TM Technical Manual; Other other Category of data, such as Provisioning, Configuration Management, etc.
- **Block D, System/item** Enter name of system/item being acquired that data will support.
- Block E, Contract/PR No. To be filled in after award of contract.
- **Block F, Contractor** To be filled in after award of contract.
- **Block G, Prepared By -** CDRL prepared by signature.
- **Block H, Date** Date CDRL was prepared.
- **Block I, Approved By -** Signature of CDRL approval authority.
- Block J, Date Date CDRL was approved.
- **Block 1, Data Item No. -** See DoD FAR Supplement Subpart 4.71 for proper numbering.
- Block 2, Title of Data Item Enter the title as it appears on the data acquisition document cited in block 4.
- **Block 3, Subtitle** Optional entry. Enter subtitle of data item for further definition of data item.
- **Block 4, Authority (Data acquisition document no.)** Enter Data Item Description (DID) number, military specification number, or military standard number listed in DoD 5010.12-L (AMSDL), or one-time DID number, that defines data content and format requirements.
- **Block 5, Contract Reference** Enter reference to tasking in contract that generates requirement for the data item, such as SOW paragraph number.
- **Block 6, Requiring Office** Enter technical office responsible for ensuring adequacy of the data item.
- Block 7, DD 250 REQ Specify requirement for inspection/acceptance of the data item by the Government.
- **Block 8, App Code** Specify requirement for approval of a draft before preparation of the final data item.
- Block 9, Dist Statement Required For technical data, specify requirement for contractor to mark the appropriate distribution statement on the data (ref. DoD 5230.24).
- **Block 10, Frequency Specify number of times data item is to be delivered.**
- **Block 11, As of Date -** Specify as-of-date of data item, when applicable.
- Block 12, Date of First Submission Specify when first submittal is required.



Update 71 Gary Whitmire

# Government/DoD Engineering Drawing Practices Technical Data Package (MIL-DTL-31000)

Section 1.4.7 Page 31 November, 2004

- **Block 13, Date of subsequent Submission -** Specify when subsequent submittals are required, when applicable.
- **Block 14, Distribution** Enter total number of draft/final copies to be distributed.
- Block 15, Total Enter total number of draft/final copies to be delivered.
- **Block 16, Remarks** Use for additional/clarifying information for items 1 through 15. Examples are: Tailoring of documents cited in block 4; Clarification of submittal dates in blocks 12 and 13; Explanation of reproducible copies in block 14; Desired medium for delivery of the data item.

#### 10.2 For The Contractor

**Block 17, Price Group** - Specify the appropriate price group from one of the following groups of effort in developing estimated prices for each data item listed on the DD Form 1423.

#### (a) Group I

- **Definition** Data which is not otherwise essential to the contracted effort (production, development, testing, and administration, but which is required by DD Form 1423.
- **Estimated Price** Costs to be included under Group I are those applicable to preparing and assembling the data item in conformance to Government requirements, and the administrative and other expenses related to reproducing and delivering such data item to the Government.

#### (b) Group II

- **Definition** Data that is essential to the performance of the primary contracted effort, but the contractor is required to perform additional work to conform to Government requirements with regard to depth of content, format, frequency of submittal, preparation, control, or quality of the data item.
- **Estimated Price** Costs to be included under Group II are those incurred over and above the cost of the essential data item without conforming to Government requirements, and the administrative and other expenses related to reproducing and delivering such data item to the Government.

#### (c) Group III

- **Definition** Data that the contractor must develop for internal use in performance of the primary contracted effort and does not require any substantial change to conform to Government requirements with regard to depth of content, format, frequency of submittal, preparation, control, and quality of the data item.
- **Estimated Price** Costs to be included under Group III are the administrative and other expenses related to reproducing and delivering such data item to the Government.

#### (d) Group IV

- **Definition** Data that is developed by the contractor as part of the normal operating procedures and the effort in supplying the data to the Government is minimal.
- Estimated Price Group IV items should normally be shown on the DD Form 1423 at no cost.
- **Block 18, Estimated Total Price** For each data item, enter an amount equal to that portion of the total price that is estimated to be attributable to the production or development of that item of data. The estimated



Update 71 Gary Whitmire

## Government/DoD Engineering Drawing Practices Technical Data Package (MIL-DTL-31000)

Section 1.4.7 Page 32 November, 2004

data prices shall be developed only from those costs that will be incurred as a direct result of the requirement to supply the data, over and above those costs that would otherwise be incurred in performance of the contract if no data were required.

**Estimated Price** - The estimated data price shall not include any amount for rights to use the data. The Government's right to use the data shall be governed by the pertinent provisions of the contract.