



DEPARTMENT OF THE NAVY
NAVAL AIR SYSTEMS COMMAND
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IN REPLY REFER TO

5000
Ser AIR-3.3/005
1 May 03

From: Assistant Commander for Logistics, Naval Air Systems Command, AIR-3.0
To: Distribution

Subj: DIGITAL FILE FORMATS REQUIRED FOR TECHNICAL DATA REPOSITORY
AND DISTRIBUTION MANAGEMENT

Ref: (a) DEPSECDEF Memo of 2 Jul 97, "Policy for the Transition to a Digital
Environment for Acquisition Programs"
(b) USD(A&T) memo of 15 Jul 97, "Guidance for the Transition to a Digital
Environment for Acquisition Programs"
(c) DON memo of 02 Nov 99, "DON Policy on Digital Logistics Technical Data"

Encl: (1) Digital Format Requirements for Repository Storage and Distribution Management of
Technical Manuals/Directives and Technical Data Packages

1. Use of digital methodologies and products offer many benefits in the form of cost savings, efficiencies, and capabilities for interoperability. References (a) through (c) established the goal of digital operations as the method of choice for all acquisition management and life cycle support information by the end of 2002. It further directed Program Managers to establish data management systems and appropriate digital environments that allow every activity involved with a program throughout its total life cycle to exchange data digitally. We have made substantial progress in moving to digital data for many programs. To achieve greater efficiencies in weapon system life cycle support we must take additional steps in the management of Technical Manuals (TM's), Technical Directives (TD's) and Technical Data Packages (TDP's).
2. Effective 31 December 2003, the Naval Air Technical Data Engineering Service Command (NATEC), will only accept digital data in accordance with the formats identified in enclosure (1) for repository storage. Programs are requested to review existing contracts acquiring non-digital data and modify as appropriate to acceptable formats, and quality assurance thereof, prior to submission to NATEC. Conversion services are also available under the NAVAIR 3.3 Technical Data National Contract. Programs requesting exception to the "digital delivery policy" are required to submit plans for migration to digital delivery. Plans should be presented to the Program Technical Data Liaisons, identified in paragraph 5, for approval by NAVAIR 3.3.
3. The above policy applies to repository management and does not preclude initial printing and distribution of hardcopy TM's when paper is a required end product for fleet customers. Paper is the presentation medium of choice for legacy technical manuals not reformatted/optimized for

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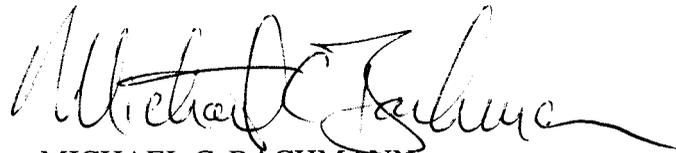
digital presentation. Plans for elimination of hard copy deliverables of legacy technical manuals require Type Commander concurrence with approach to ensure that all logistics are in place, including appropriate technical manual format. In addition, notwithstanding the above, hardcopy is an acceptable storage solution when it is not feasible to meet the format requirements for digital Print on Demand; in these instances, initial warehouse stock is also required to support replenishment requirements. Further, digital repository format requirements do not obviate the need to acquire editable copy in appropriate file types to facilitate authoring/editing.

4. The formats identified in enclosure (1) are those that are compatible with existing NATEC management and repository infrastructure. Efforts are underway to deploy capability for storage of Extensible Markup Language (XML), with distribution through the Joint Knowledge Caching Servers (JKCS). In addition, capability is also in work for NAVAIR to store and distribute proprietary Interactive Electronic Technical Manuals (IETMs) through the NATEC web site and the Joint Aviation Technical Data Integration (JATDI) top tier server. Links from the NATEC web site for viewing legacy IETMs from a web browser are anticipated to be available by 3rd Qtr CY03.

5. Programs acquiring formats not supported by NATEC are required to contact the NAVAIR 3.3 (HQ) Program Technical Data Liaisons, Barry Dube or Robert Sharrer, to assess requirements, proposed Process Model, and associated Critical Path/Total Ownership Cost (TOC) elements.

6. The NAVAIR Technical Manual Program from the user's perspective is described in technical manual NAVAIR 00-25-100. Programs not operating within the guidelines established by the NAVAIR 00-25-100 must submit a waiver request to NAVAIR 3.3. The request should state the requirement(s) or process(es) for which requesting variance, reason for variance, proposed Process Model to support all customers, and impact if disapproved. While innovations are valuable in achieving more efficient business processes, stovepipes must be avoided as they degrade out ability to provide a reliable and disciplined support system for the fleet customer. Contact the NAVAIR 3.3 (HQ) Program Technical Data Liaisons or NATEC, Stacy Cummings at (619)545-2357, for additional information on waiver requirements.

7. Point of contact for further information is Ms. Mary McGlenn, AIR-3.3, at (301) 757-8810, or DSN 757-8810.



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RDML USN

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Distribution:

PEO (T), PEO (A), PEO (W), APEO (L) A, T, W, 1.0, PMA-201, PMA, 202, PMA-205, PMA-207, PMA-208, PMA-209, PMA-213, PMA-222, PMA-225, PMA-226, PMA-231, PMA-233, PMA-234, PMA-241, PMA-242, PMA-248, PMA-251, PMA-257, PMA-258, PMA-259, PMA-260, PMA-261, PMA-263, PMA-264, PMA-265, PMA-271, PMA-272, PMA-273, PMA-275, PMA-276, PMA-280, PMA-281, PMA-282, PMA-290, PMA-299, NAVAIR-1.0, 3.0, 3.1, 3.2, 3.4, 3.5, 3.6, 3.9, 4.0, 4.1, 4.2, 4.3, 4.4, 4.5, 4.6, 4.7, 4.8, 4.9, 4.10, 4.11, NADEP JAX 3.0, 3.1, 3.3, 4.0, NADEP NORTH ISLAND, 3.0, 3.1, 3.3, 4.0, NADEP CHERRY POINT 3.0, 3.1, 3.3, 4.0, NAWC AD LAKEHURST 3.0, 3.1, 3.3, 4.0, NAWC AD PATUXENT RIVER 3.0, 3.1, 3.3, 4.0, NAWC WD POINT MUGU 3.0, 3.1, 3.3, 4.0, NAWC WD CHINA LAKE 3.0, 3.1, 3.3, 4.0, NAWC TSD ORLANDO 3.0, 3.1, 3.3, 4.0

DIGITAL FORMAT REQUIREMENTS FOR REPOSITORY STORAGE AND DISTRIBUTION MANAGEMENT OF TECHNICAL MANUALS/DIRECTIVES AND TECHNICAL DATA PACKAGES

TECHNICAL MANUALS/TECHNICAL DIRECTIVES

Technical Manuals (TM) and Technical Directives (TD) are stored electronically in the Technical Manual Application System (TMAPS) maintained by NATEC. Acceptable file formats are:

Portable Document Format (PDF) in accordance with the NATEC guidelines available at <https://www.natec.navy.mil>

- TMs and publications shall be delivered with all changes collated to make a complete publication (Pickup Revision/Revision). (The management of a collated digital product in the repository does not replace the need to distribute Change pages where appropriate and when paper is the user's end product.)
- Programs are also responsible for managing the incorporation of IRAC's into their TMs. Each IRAC issuance shall be accompanied by delivery of an update to the TM in the repository, digitally posting the IRAC to the TM. Guidelines for digital posting of IRAC's are available at <https://www.natec.navy.mil>.

Extensible Markup Language (XML) format in accordance with MIL-STD-3001 implementation to be discussed in separate correspondence. Capabilities and processes in support of XML are in development.

For programs developing any digital product in SGML, XML, HTML, or other advanced formats, development of a Process Model and Concept of Operations (CONOPS) are critical to ensuring that the infrastructure and processes support the implementation. CONOPS elements should include all planning, funding, and execution aspects. Elements to be covered should include, but not be limited to:

- Fleet Customer Use, Reporting and Distribution Systems, and associated processes
- Logistics Footprint for deployed, ashore, afloat and contingency operations, commensurate with all defined Levels of Repair/Maintenance
- Training and Supply System Interfaces and Certifications
- Risk Mitigation Plans, Critical Paths, and Total Ownership Cost (TOC)/Life Cycle Costs associated with hardware, software, and authoring infrastructure, acquisition, sustainment, and technology refreshment.

Review of the proposed Process Model and Concept of Operations (CONOPS) are required early in an acquisition and should be coordinated with the NAVAIR 3.3 Program Technical Data Liaisons, Barry Dube and Robert Sharrer, who will facilitate discussion with other stakeholders.

Enclosure (1)

Note: HTML, while not a preferred distribution format, may be stored on the NATEC web site on an exception basis. Programs are required to coordinate formatting requirements with NATEC and obtain waiver from NAVAIR 3.3.

TECHNICAL DATA PACKAGES (Engineering Drawings, Product Definition Data, and associated documents)

Technical Data Packages (TDPs) are stored electronically in the Joint Engineering Data Management Information and Control System (JEDMICS). NATEC's JEDMICS System is the Master Repository for NAVAIR engineering drawings and associated technical data.

Engineering Drawing Images

- CALS Type IV (JEDMICS C4, MIL-PRF-28002) image format is the preferred file format
- CALS Type I is acceptable

Text documents, such as specifications and associated lists

PDF is the preferred file format
DOC (MSWord)

All TDP submittals for storage shall be in accordance with the JEDMICS Compact Disk Engineering Data Exchange (CDEX) File Structure and Format Requirements to facilitate and ensure the loading of the data into JEDMICS, permit output, and ensure interoperability with other JEDMICS sites. The CDEX Specification will be available from <https://www.natec.navy.mil>.

EXCEPTIONS

Request for exceptions to the above requirements should be directed to the NAVAIR 3.3 Program Technical Data Liaisons, Robert Sharrer, (301) 757-8813 and Barry Dube, (301) 757-8817, for coordination with NAVAIR 3.3, NATEC, and JATDI Project Team.