

15 March 2004

MEMORANDUM FOR ALL TECHNICAL ORDER (TO) MANAGERS AND USERS

FROM: HQ AFMC/ENBP
4375 Chidlaw Road
Wright-Patterson AFB OH 45433-5006

SUBJECT: Interim Technical Order Policy & Procedures (ITOP&P) Memorandum #6;
Management and Use of Digital TO Files — FOR IMMEDIATE
IMPLEMENTATION

NOTICE: This memo is available digitally online at:
<http://www.ide.wpafb.af.mil/toprac/interim.htm>

ITOP&P Memoranda #1, #2, and #3, 28 September 2000, are rescinded.

1. GENERAL. This memorandum authorizes use of the following practices and procedures with TOs distributed for use as digital TO files (including TO files distributed on physical media such as CD-ROM/DVDs or accessed as non-physical media, electronic files from an approved repository). The procedures are to be used by the US Air Force, Air Force Reserve Command, Air National Guard, and Government plant representatives assigned to commercial contractor facilities in conjunction with TO procedures published in the 00-5-series TOs and by AFMC personnel in conjunction with 00-5-series TOs and AFMCMAN 21-1.

2. PRACTICES.

a. Routine changes and supplements to digital TOs files must be published using the same software application as the TO, and must be merged with the baseline digital TO file prior to distribution to end users. MAJCOM and base supplements must be merged with the Air Force baseline TO file and hosted on a MAJCOM web server or base LAN. General TO and Methods & Procedures TO (MPTO) MAJCOM supplement OPRs must provide the merged file Uniform Resource Locator (URL) to the Air Force Technical Order Policy and Procedures (TOPP) team at AF.TOPP@wpafb.af.mil.

b. Updates to individual TOs from all sources (AFTO Forms 22, AF Forms 847, Mishap Investigations, Materiel Improvement Projects, etc.) will be consolidated for publication in periodic TO updates (revisions, changes, or supplements). Periodic updates will *not* include modification-related changes if this would delay concurrent release with the prescribing TCTO. When faced with this situation, out of cycle updates may be necessary to support the TCTO. Periodic intervals will be determined by the lead command, in conjunction with the SM, but should not exceed 365 days. Periodic updates may be delayed beyond the normal update interval if no

significant inputs are received. When TO are grouped for publication, for example, a “set” of digital TO files published on a Compact Disk-Read Only Memory (CD-ROM), it may be necessary to publish updates to the distribution media as frequently as monthly to accommodate varying TO publication release dates and cycles. Thought should be given to synchronizing the publication cycle of the TOs included in the set and the distribution media as much as possible to limit the number of media releases due to out-of-sync TO updates.

3. REQUIREMENTS. MAJCOMs are responsible for ensuring TO users have the necessary hardware and software applications to use required digital TOs.

a. TO Managers and Technical Content Managers (TCMs) may require additional software applications to include Adobe® Acrobat™ (full version) for reading and managing Portable Document Format™ (PDF) digital files; and/or the Digital TO (DiTO) Change Management Software application. DiTO automates some of the processes required to update and re-link Indexed PDF (IPDF) files, and is available at <http://www.ide.wpafb.af.mil/software/>.

b. TO Distribution Offices and Accounts (TODO/TODA) will require the Adobe® Reader™ for viewing PDF files; and may require the Technical Order Management And Retrieval Tool (TO.MART) to identify, locate, and access the most current versions of digital TO files. TO.MART is a government indexing and retrieval software application, and is available at <http://www.ide.wpafb.af.mil/software/>. Additional information on the TO.MART application is available in TO 00-5-1 and the User’s Manual provided with the software.

4. TO DIGITIZATION.

a. New-Start Acquisition Programs. TOs for new weapon system and commodity programs will be acquired in digital formats IAW TO 00-5-3.

b. Digitizing Existing (Legacy) TOs. While the distribution medium for most legacy TOs is paper, the Air Force vision is to digitize legacy TOs to enable distribution and use as digital TO files. TO managers must evaluate their legacy TOs to determine the most cost effective digitization strategy to satisfy their user’s needs. To assist the TO managers in making this assessment, a “Digitization Decision Tree” to identify the appropriate digital formats for legacy TO conversion has been posted at <http://www.ide.wpafb.af.mil/toprac/interim.htm>. Once TO managers determine the appropriate level of digitization, they should document their conversion strategy in their annual CAFTOP submission, obtain the requisite funding, and perform the digitization.

5. CREATING RAPID ACTION CHANGES (RACs). RACs are TO page changes distributed electronically (see TO 00-5-1). RACs are used to provide urgent or emergency updates between routine update periods, replacing use of interim operational and safety supplements to the maximum extent possible. RACs are formatted for the TO presentation software to allow merging with the basic TO file. The TCM will develop the RAC content; the TCM, TO manager, or editor will prepare (format) the RAC and create a merged RAC/basic digital baseline TO file for distribution to TODOs. The following steps are involved in RAC creation:

a. The TCM identifies and/or validates an emergency or urgent change requirement, and develops corrective action using the JCALS ‘Recommend a TM Change’ process (JCALS DI

section 15.2), obtains coordination and approval, and submits the recommended change (RC) to the TO manager.

b. The TO manager assigns a TO change number to the RAC.

(1) RACs will be identified using the next sequential TO change number. If the next change number has already been assigned to a routine change currently in the publishing cycle 'no-change window,' then the RAC number will be the next in sequence, and a superseding notice will be added to the title page to specify RAC effectivity. The 'no change window' is the period after preparation of a reproduction package and before publication and distribution when further changes to the package are no longer cost effective.

(2) 'No Change Window' Procedures. Emergency RACs will be provided within 48 hours of TO manager/TCM notification of the problem. The title page supersede notice will specify that the RAC applies to both the current and immediately subsequent TO changes. If an in-work change modifies affected pages or paragraphs, a second RAC may have to be issued concurrently with the in-work update. Urgent RACs will be formatted for and issued concurrently with the in-work change. Urgent RACs 4 will be provided within 40 calendar days of TO manager/TCM notification of the problem.

c. The TCM, TO manager or editorial/production activity responsible for formatting the change obtains the digital baseline TO pages affected by the RAC (including title, LEP ('A' page), data pages, and corresponding backing pages), and converts them (if required) into a changeable digital format:

(1) For Indexed PDF (IPDF) format TOs (changeable source file not available):

(a) Download a copy of the baseline IPDF TO file from the DLDSS or JCALS Reference Library to a PC.

(b) Copy and paste text from baseline IPDF TO pages affected by the RAC to a 'change file' using a changeable format (e.g., Standard Generalized Markup Language [SGML]-tagged, ATOS, Microsoft Word®, WordPerfect®, etc.).

(2) For TO files available in changeable (native) format:

(a) Download the baseline native format TO file to a PC.

(b) Copy and paste pages affected by the RAC from the baseline file to a 'change file'.

(3) For paper/negative-only TO masters:

(a) Obtain negative or paper masters of pages affected by the change.

(b) Convert the content of the pages affected by the RAC to a changeable file by electronically scanning the page using Optical Character Recognition (OCR) software, or by re-typing the page if necessary.

(4) Make necessary changes to affected pages according to the approved recommended change. Title page and LEP format may vary slightly from the current specification or parent TO file format (e.g., column alignment, font size, dot leaders, graphic lines, etc.). The title page superseding notice must identify the change as an EMERGENCY or URGENT RAC and, when necessary, indicate which basic date is affected and which change(s) is/are superseded.

(5) Smaller font (9-point minimum) may be used on RAC data pages to accommodate added information on the affected and/or backing pages without impacting subsequent pages. If page integrity cannot be maintained (e.g., if the new information cannot feasibly be incorporated on the affected pages), then additional pages should be added as required according to current procedure. Color pages may be rendered in 'gray scale' (black and white). Foldouts to update paper TO copies will be managed on the receiving end by either shrinking them to fit an 11 x 17 page (maximum size most printers and copiers will handle), or printing and copying only the affected section of the foldout and overlaying the section on the original. All deviations will be returned to the parent TO format at the next routine update.

(6) The TCM and TO manager review and approve the RAC.

d. Convert the RAC file (title page, LEP, changed pages, and backing pages) to PDF using Adobe® Acrobat Exchange™ or selecting print when the Acrobat PDF Writer driver is installed on the PC used to prepare the changeable format RAC file. Other Page Description Language (PDL) software may be used to convert RAC files to an insert file compatible with baseline TO files not maintained in IPDF.

e. The TCM, TO manager, or editor electronically merges the PDF RAC file with the IPDF baseline TO file to create a new baseline TO, and re-links (indexes) the new file using Acrobat Exchange and Info-Linker software. The merged and re-indexed IPDF TO is returned to digital storage as the new baseline digital TO file, along with the stand-alone PDF RAC file. If applicable, both files are uploaded to an Internet web server to replace the previous version TO file provided via WWW, thereby providing access to the digital baseline TO file and RAC.

OPTION: Merge and upload files in another PDL when required for non-IPDF TO files.

6. TO SUPPLEMENT PROCEDURES. Technical Content Managers (TCMs) will use the procedures on the TO System Information Page (<http://www.ide.wpafb.af.mil/toprac/interim.htm>, "*Supplementing Digital Tech Orders*,") to develop, post and publish supplements to Adobe PDF TO files. TO Managers/TCMs must index the supplement in JCALS, and ensure OC-ALC/ LGLUB is on the distribution list for a copy of the notification.

7. CD-ROM/DVD PROCEDURES.

a. Responsibilities. The TO manager for a CD-ROM/DVD, with coordination from the SM and lead command, is responsible for CD-ROM/DVD content, numbering, indexing, updating,

publication, packaging, labeling, and distribution. Classified and unclassified TOs will not be mixed on a single disk. The TO manager is responsible for developing the standard files required by MIL-HDBK-9660, *DoD Produced CD-ROM Products*, and this memo. The TO manager will determine routine CD/DVD update intervals, in conjunction with the lead command and the TO managers of the individual TOs included on the disk. If a separate content manager is assigned, some of these duties may be delegated to that function.

NOTE 1: The same general rules applicable to CD-ROMs used to publish and distribute digital TO files will apply to DVDs, pending development of a DVD specific publication.

NOTE 2: Detachment 63, ASC/WMO is authorized to develop and implement separate procedures for joint-service management and use of EOD TOs on CD-ROM/DVDs.

b. CD-ROM/DVD Contents. CD-ROM/DVDs containing digital TO files will be labeled according to Attachment 1. The disk must contain a “content.txt” file containing the information required by MIL-HDBK-9660, and an “Index” file (or TO.Mart content file if TO.Mart is used to automatically direct users to the correct TO files). If necessary, the disk will contain a copy of the viewing software and may contain a “readme.txt” file to explain how to use the disk. Additional guidance follows:

(1) Content.txt File. The “content.txt” file will be developed IAW MIL-HDBK-9660. The TO system-specific applications of the required entries are as follows:

- (a) DOCUMENT IDENTIFICATION: (CD-ROM/DVD TO number)
- (b) TITLE: TECHNICAL MANUAL SET; (name)
- (c) EDITION: (First, Second, etc.)
- (d) VOLUME IDENTIFIER: (DoD Activity Address Code [DODAAC – 6 characters] + TO Category [2 numbers] + Index Number [3 numbers]) (11 digits total)
- (e) MAINTENANCE AND UPDATE FREQUENCY: (update period)
- (f) ORIGINATOR COMMENTS: (information on digital application formats, etc.)
- (g) DOCUMENT ABSTRACT: (purpose of the disk)
- (h) POINT OF CONTACT: (CD/DVD TO manager, organization, e-mail address, and DSN phone number)
- (i) ORIGINATOR: (CD/DVD content manager, organization, e-mail address, and DSN phone number)

(j) TO POCs: (For each TO file included on the CD/DVD, list the TO manager and TCM names, organizations, e-mail addresses, and DSN phone numbers)

(2) Index File. A listing of the TOs included on the disk. Each entry would normally include such data as the TO number, date, change number/date, and would include a hyperlink to the TO file.

(3) TO.MART Content File. When TO.MART is included on the CD/DVD for TO file access management, a TO.MART content file may be used in place of the index file. It is a file developed according to the TO.Mart User Guide, to index and link to the most current versions of the TO files when the files are updated between disk updates. TO.MART can create a content file automatically, or it can be created manually with a word processor or spreadsheet program. The content file will automatically direct users to the location of the updated file, not to the original version on the CD/DVD.

(4) Readme.txt file (Optional). Use the same format criteria established by MIL-HDBK-9660 for the content.txt file. The readme.txt file may be included if required to describe access to and use of viewer software, access to and use of any other programs on the disk (such as ATOMS), and/or other helpful information not included in the content.txt file. If used, the readme.txt file should have a table of contents to help the user identify and navigate to needed information.

(5) CD-ROM/DVD and Case Labels. Labels are formatted according to Attachment 1.

c. Numbering and Indexing CD-ROM/DVDs.

(1) The TO manager will number and manage CDs and DVDs as discrete TOs in accordance with TO 00-5-18. OC-ALC/LGLUB must approve any TO numbers requested prior to indexing the disks in JCALS. The TO manager will use JCALS to request a number based on the following guidance:

- CD-ROM/DVDs containing TO sets will be assigned TO numbers in a manner similar to TCTO Series numbers, with the suffix “-CD-#” or “-DV-#” as part of the number.
- If multiple categories of TOs are contained on a CD/DVD, the lowest category number will be used for the disk.
- If TOs for multiple systems or commodities are included on the CD/DVD, use a TO number which will help identify all of the systems/commodities. (See the instructions for establishing a TCTO Series Header Number in TO 00-5-18.)
- If multiple TO types are included (e.g., a disk containing operations, maintenance and inspection TOs), either use the lowest TO type dash (-) number contained on the disk or omit the TO type designator altogether in the CD/DVD TO number.

(2) Title the CD/DVD to help users identify the general nature and coverage of the TOs contained, and include a short description of the specific TOs on the CD/DVD, for example, “Methods & Procedures TOs (MPTO) – 00-5, 00-20, & 00-25 Series.” The complete title will be listed in the TO index, while an abbreviated version without the listing of included TOs will

be used on the CD/DVD and sleeve/case labels, for example, "Methods and Procedures TOs." Specify the digital format and viewing software required for files on the CD/DVD in the JCALS index record as a separate "Catalog Note." When appropriate, add the word "SET" after "TECHNICAL MANUAL" on the labels.

(3) The JCALS index record for the CD/DVD will list the included TOs using the "Associated Publications" function of the JCALS "Update a TM Index" procedure.

(4) TO managers of each TO contained on the disk will update applicable index records to add "Catalog Notes" listing the TO number of the CD/DVD and if applicable, Internet address where the TO is published and the digital format used.

NOTE: When TOs are provided via two or more distribution methods, for example, WWW, CD-ROM/DVD, paper, each version must be separately indexed in JCALS, with its own Publication Stock Number (PSN) and distribution controls.

d. Funding CDs and DVDs. Funding for physical distribution of digital media is managed the same way as funding for publication and distribution of individual paper TOs through the Comprehensive Air Force Technical Order Plan (CAFTOP) process.

8. INTERNET OR WAN TO DISTRIBUTION PROCEDURES.

a. SMs distributing electronic TO files via a weapon-system-peculiar Wide Area Network (WAN) are responsible for developing management procedures to maintain the configuration and concurrent issue of multi-media TOs.

b. TO listings on the host Internet servers will include the TO number, date, title, and change number/date to allow users to verify currency of their copies without opening or downloading the file. Additional data such as TO manager or TCM contact information is optional. TO managers uploading assigned digital TO files onto web servers will provide the local webmaster with required TO file listing data.

c. Index web-based TO files in JCALS with the record marked as "Available for Published Index" and not "Available for Distribution." Establish a publication stock number (PSN) for "Digital On-Line" media code. Add a catalog note giving the URL of the file location and the TO digital format.

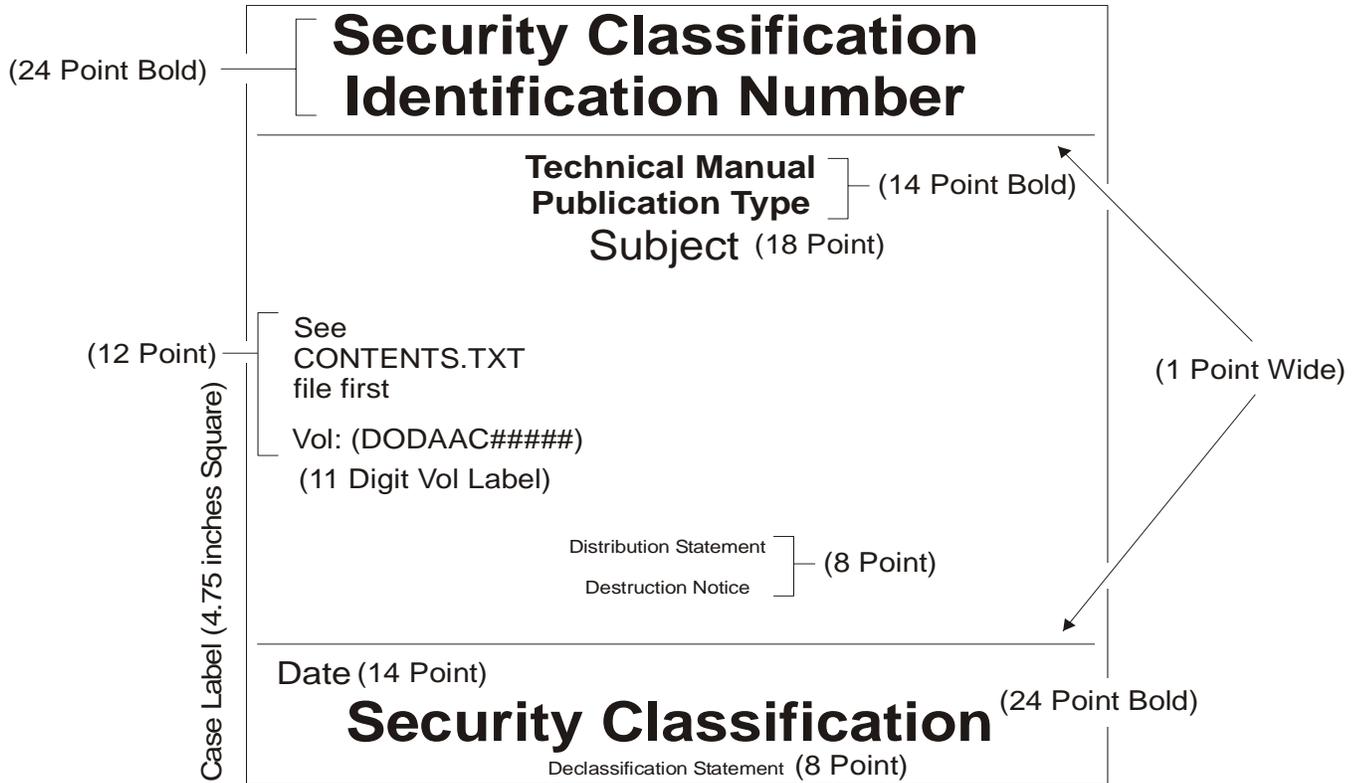
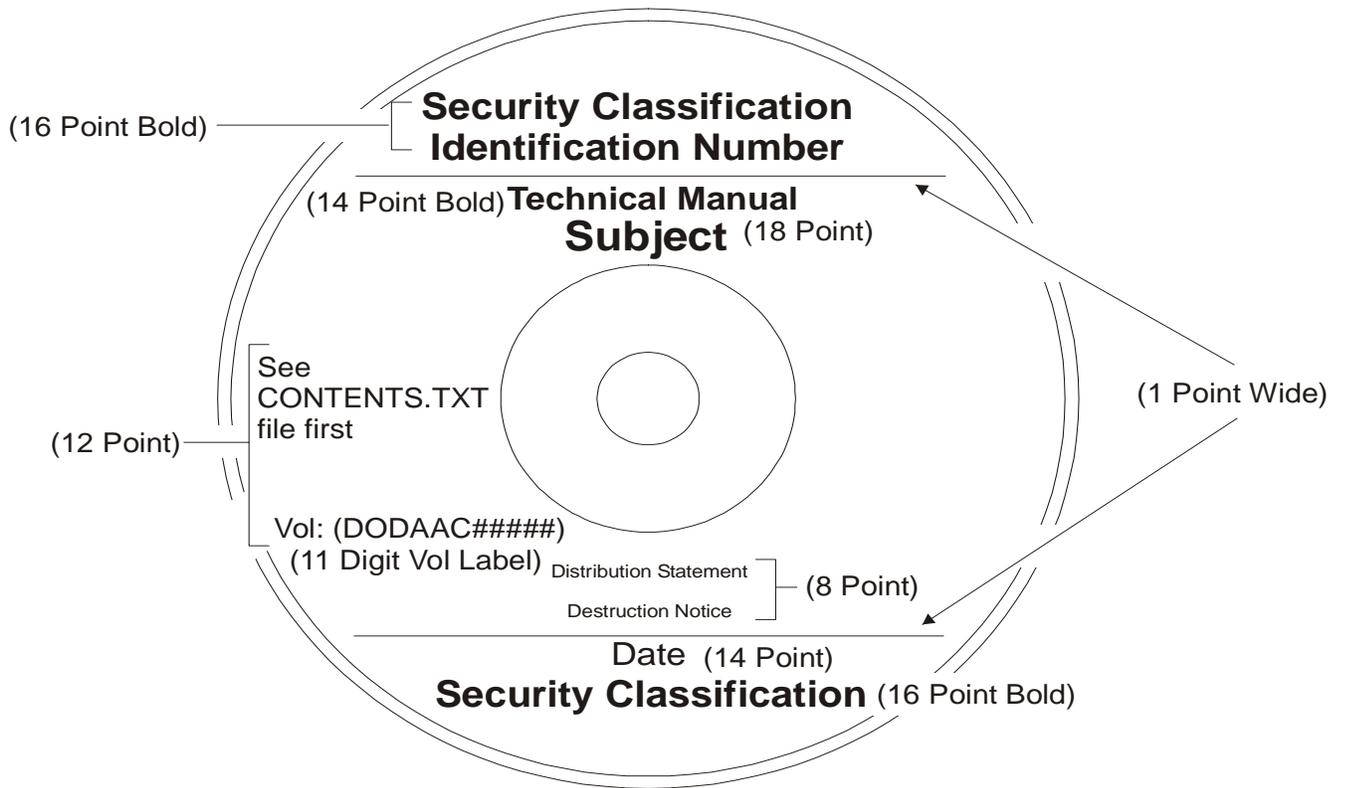
9. SECURITY. Security issues and procedures are covered in DOD 5200.1-R, AFI 31-401, AFI 33-129, and AFI 61-204, among others. Digital TO distribution and notification methods must provide adequate security for classified and limited-distribution files.

10. Direct all questions on this memorandum to af.topp@wpafb.af.mil

SIGNED

TERENCE C. BLACK
Technical Orders Policy and Procedures
Special Projects Branch
Mission Area Support & Special
Projects Division

Attachment:
CD-ROM/DVD Disk Label
and Case Label Sample



CD-ROM/DVD Disk Label and Case Label Sample