

**TO 00-5-15**

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**TECHNICAL MANUAL**

**AIR FORCE  
TIME COMPLIANCE TECHNICAL ORDER  
PROCESS**

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## FOREWORD

### 1 PURPOSE.

TCTOs provide instructions to modify military systems or commodities within specified time limits, initiate special “one time” inspections, or impose temporary restrictions and track configuration on systems or equipment. TCTOs for fielded systems and equipment are planned, prepared and issued by the responsible Equipment Specialist/Technical Content Manager (ES/TCM) (or Modification Manager) under the authority of the affected system/equipment Program Manager/Supply Chain Manager (PM/SCM). The Technical Order (TO) Manager is responsible for assisting an ES/TCM or Modification Manager with the development and publication of TCTOs and related TO Updates.

### 2 SCOPE.

This TO prescribes instructions and procedures for the Air Force TCTO process (see Figure 1-1 TCTO Development Flow Diagram, and Figure 1-2, TCTO Implementation Flow Diagram). This TO incorporates TCTO-related procedures from AFMCI 21-302, Processing Interim Technical Orders and Rapid Action Changes, AFMCMAN 21-1, AFMC Technical Order System Procedures, and portions of the OO-ALC TCTO KAIZEN Rapid Improvement Event (RIE).

**2.1 Procedures.** This TO repeats procedures from other references when necessary to assist with TCTO management, and references to the source documents are made throughout this text as appropriate. Appendix A.1, List of Referenced and Related Publications and A.2, List of Applicable Forms provide numbers and titles of publications and forms cited in this TO.

**2.2 Modifications.** All modifications must be supported by concurrent changes to operational and logistic support elements affected by the modification, such as support equipment, training equipment, technical data, spares, etc.

**2.3 Requirements.** Generally, TCTOs are required only after the Air Force assumes configuration control of a system or commodity. Engineering Change Proposals (ECPs) control modifications prior to Air Force acceptance of the system or commodity being supported.

**2.4 MAJCOM Modifications.** The procedures described in this TO may be used as a guide for Major Command (MAJCOM)-managed modifications.

### 3 ABBREVIATIONS AND ACRONYMS.

All abbreviations and acronyms used in this manual are in accordance with ASME Y14.38, Abbreviations and Acronyms for Use on Drawings and Related Documents.

#### NOTE

Acronyms used only once in the TO are not included in this list.

ACO	Administrative Contract Officer
AFCSM	Air Force Computer Systems Manual
AFKN	Air Force Knowledge Now
AFMC	Air Force Materiel Command
AFOC	Air Force Operations Command
AFRC	Air Force Reserve Command
AFSAC	Air Force Security Assistance Center
AFSC	Air Force Specialty Code
AFSWC	Air Force Service Watch Cell
AFTAC	Air Force Technical Applications Center
AFTO	Air Force Technical Order
AL	Address List

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ALC	Air Logistics Center
ANG	Air National Guard
APU	Auxiliary Power Unit
CAGE	Commercial and Government Entity
C-E	Communication-Electronic
CAMS	Core Automated Maintenance System
CARS	Consolidated Automated Reporting System
CCB	Configuration Control Board
CDRL	Contract Data Requirements List
CEMS	Comprehensive Engine Management System
CG	Computer Generated
CI	Configuration Item
CII	Configuration Item Identifier
CLS	Contractor Logistics Support
CO	Contracting Officer
CPCI	Computer Program Configuration Item
CPIN	Computer Program Identification Number
CTOM	Centralized Technical Order Management
DAC	Designated Acquisition Commander
DAPS	Document Automation and Production Service
DCMA	Defense Contract Management Agency
DIFM	Due In From Maintenance
DLA	Defense Logistics Agency
DLIS	Defense Logistics Information Service
DM	Data Manager
DoD	Department of Defense
DoDD	Department of Defense Directive
DRU	Direct Reporting Unit
DSM	Development System Manager
DSN	Defense Switched Network
ECMS	Engine Configuration Management System
ECP	Engineering Change Proposal
EF	Electronic Format
EO	Engineering Order
ES	Equipment Specialist
EW	Electronic Warfare
EW0	Emergency War Order
FAA	Federal Aviation Administration
FAX	Facsimile
FDO	Foreign Disclosure Office
FED LOG	Federal Logistics Data
FMM	Flight Manual Manager
FMP	Flight Manual Program
FMS	Foreign Military Sales
FOA	Field Operating Agency
FSG	Federal Supply Group
GCSAS	Generic Configuration Status Accounting Subsystem
GFP	Government Furnished Property

GIDEP	Government Industry Data Exchange Program
GP	General-Purpose
HAZMAT	Hazardous Materiel
HQ	Headquarters
IAW	In Accordance With
ICBM	Intercontinental Ballistic Missile
ICSTCTO	Interim Country Standard TCTO
ID	Initial Distribution
IM	Item Manager
IMDS	Integrated Maintenance Data System
IOS	Interim Operational Supplement
IPT	Integrated Product Team
I&S	Interchangeability and Substitutability
ISS	Interim Safety Supplement
ITCTO	Interim TCTO
ITIES	Inter-Service Technical Information Exchange System
JCALs	Joint Computer-aided Acquisition and Logistics Support (System)
JDRS	Joint Deficiency Reporting System
JEIM	Jet Engine Intermediate Maintenance
MAJCOM	Major Command
MDS	Mission Design Series
MILSPEC	Military Specification
MILSTRIP	Military Standard Requisitioning and Issue Procedures
MIP	Materiel Improvement Project
MMAC	Materiel Management Aggregate Code
NATO	North Atlantic Treaty Organization
NDI	Non Destructive Inspection
NRTS	Not Repairable This Station
NSC	National Stock Class
NSN	National Stock Number
NWRM	Nuclear Weapons Related Material
O/I	Organizational/Intermediate
O&M	Operation and Maintenance
OCM	On-Condition Maintenance
ODS	Ozone Depleting Substance
OPLAN	Operation Plan
OPR	Office of Primary Responsibility
OPREP	Operational Report
OSS&E	Operational, Safety, Suitability, and Effectiveness
PC	Product Center
PCO	Procuring Contract Officer
PDL	Personal Distribution List
PDM	Programmed Depot Maintenance
PEO	Program Executive Officer
PGM	Product Group Manager
PI	Product Improvement
PM	Program Manager

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PMA	Production Management Activity
POC	Point of Contact
PMD	Program Management Directive
PMS	Production Management Specialist
PN	Part Number
PR	Purchase Request
PRRG	Pre-Release Review Group
PS&D	Plans, Scheduling and Documentation
QA	Quality Assurance
RAC	Rapid Action Change
RC	Recommended Change
R&D	Research and Development
REMIS	Reliability and Maintainability Information System
RGL	Reading Grade Level
RSP	Readiness Spares Package
SAP	Security Assistance Program
SATODS	Security Assistance Technical Order Data System
SCCSB	Software Configuration Control Sub-Board
SCM	Supply Chain Manager
SE	Support Equipment
SM	Single Manager
SPD	System Program Director
SPM	System Program Manager
SRAN	Stock Record Account Number
SS	Safety Supplement
SSM	System Support Manager
STINFO	Scientific and Technical Information
TCM	Technical Content Manager
TCTO	Time Compliance Technical Order
TM	Technical Manual
TMRS	Tactical Munitions Reporting System
TO	Technical Order
TOC	Technical Order Compliance
TODA	Technical Order Distribution Account
TODPS	Technical Order Distribute and Print Services
TODO	Technical Order Distribution Office
USAF	United States Air Force
VTM	Verification Team Manager
WFM	Work Flow Manager
WRM	War Reserve Materiel

**4 LIST OF RELATED PUBLICATIONS.**

The following publications contain information in support of this technical manual.

**List of Related Publications**

Number	Title
DODD 5000.1	Defense Acquisition System
DOD 5010.12-M	Procedures for the Acquisition and Management of Technical Data



**List of Related Publications - Continued**

Number	Title
DODD 5230.24	Distribution Statements on Technical Documents
AFPD 10-9	Lead Operating Command Weapon Systems Management
AFI 10-206	Operational Reporting
AFI 10-601	Capabilities Based Requirements Development
AFMAN 16-101	International Affairs and Security Assistance Management
AFI 10-901	Lead Operating Command - Communications and Information Systems Management
AFI 11-215	USAF Flight Manuals Program
AFI 20-110	Nuclear Weapons-Related Material Management
AFMCMAN 21-1	AFMC Technical Order Procedures
AFI 21-101	Aerospace Equipment Maintenance Management
AFI 21-101_AMCSUP1	Aerospace Equipment Maintenance Management (supersedes AMCI 21-112)
AFI 21-103	Equipment Inventory, Status, and Utilization Reporting
AFI 21-104	Selective Management of Selected Gas Turbine Engines
AFI 21-118	Improving Air and Space Equipment Reliability and Maintainability
AFI 21-302	Processing Interim Technical Orders and Rapid Action Changes (RAC)
AFMAN 23-110	USAF Supply Manual
AFI 24-303	Command/Air Force Vehicle Integrated Management System and Consolidated Analysis and Reporting
AFI 25-101	War Reserve Materiel (WRM) Program Guidance and Procedures
AFI 33-150	Management of Communications Activities
AFMAN 33-326	Preparing Official Communications
AFI 33-360V2	Forms Management Program
AFI 36-2101	Classifying Military Personnel (Officer and Enlisted)
AFI 40-201	Managing Radioactive Materials In The USAF
AFI 61-204	Disseminating Scientific And Technical Information
AFPD 62-4	Standards of Air Worthiness for Passenger-Carrying Commercial Derivative Transport Aircraft
AFPD 62-5	Standards of Air Worthiness for Derivative Hybrid Aircraft
AFPD 63-11	Modification System
AFPD 63-12	Assurance of Operational Safety, Suitability, & Effectiveness
AFI 63-1101	Modification Management (to be superseded by AFI 63-131, Modification Program Management)
AFI 65-601, Vol. I	Budget Guidance and Procedures
TO 00-5-3	AF Technical Order Life Cycle Management
TO 00-5-16	Software Managers and Users Manual for the USAF Automated Computer Program Identification Number System (ACPINS)
TO 00-5-18	USAF Technical Order Numbering System
TO 00-5-19	Security Assistance Technical Order Program
TO 00-20-1	Aerospace Equipment Maintenance, Inspection, Documentation, Policies and Procedures
TO 00-20-2	Maintenance Data Documentation
TO 00-20-3	Maintenance Processing of Reparable Property and The Repair Cycle Asset Control System
TO 00-25-4	Depot Maintenance of Aerospace Vehicles and Training Equipment
TO 00-25-107	Maintenance Assistance
TO 00-25-108	Communication-Electronic (C-E) Depot Support
TO 00-25-254-1	Comprehensive Engine Management System Engine Configuration, Status and TCTO Reporting Procedures (Note: included on TO 00-25-254-CD-1)
TO 00-25-254-CD-1	Comprehensive Engine Management System (CEMS) (D042)
TO 00-35D-54	USAF Materiel Deficiency Reporting and Investigating

**TO 00-5-15****List of Related Publications - Continued**

Number	Title
TO 00-105E-9	Aerospace Emergency Rescue and Mishap Response Information (Emergency Services)
MIL-PRF-38804	Time Compliance Technical Orders, Preparation of
AFMCMAN 23-3	Cataloging and Standardization
TO 0-1-11N	Joint Nuclear Weapons Publication System Index
TO 0-1-71	Consolidated Security Assistance Technical Order Index
TO 00-5-1	AF Technical Order System

**5 LIST OF APPLICABLE FORMS.**

Form Number	Title
AFTO 22	Technical Manual (TM) Change Recommendation and Reply
AFTO 82	TCTO Verification Certificate
AFTO 95	Significant Historical Data
AF 105F-1	Stock Control Record
AFTO 124	Computation of Technical Order Reading Grade Level
AFMC 133	Interchangeability and Substitutability Program Worksheet
AFMC 172	Coordination of Proposed Technical Orders
AFMC 185	Request for TCTO Kit Assembly
AFTO 203	Technical Order Numbering, Indexing and Control Record
AFTO 252	T.O. Publication Change Request
AFTO 349	Maintenance Data Collection Record
AFMC 518	Configuration Control Board Directive
AFTO 781A	Maintenance Discrepancy and Work Document
AFTO 873	Time Compliance Technical Order Requirements
AFTO 874	Time Compliance Technical Order Supply Data Requirements
AFTO 875	Time Compliance Technical Order Programming Document
AF 1067	Modification Proposal
AF 3525	CCB Modification Requirements and Approval Document
AF 3925	Engineering Order
EF 513	TCTO Interchangeability and Substitutability (I&S) Notification

**6 RECOMMENDED CHANGES.****NOTE**

As used in this TO, "MAJCOM" includes Field Operating Agencies (FOAs) and Direct Reporting Units (DRUs).

HQ USAF/A4LX is responsible for establishing basic TCTO policy and for approving policy and procedure changes. Recommended changes to this TO will be submitted via AFTO Form 22, Technical Manual (TM) Change Recommendation and Reply or the Joint Computer-aided Acquisition and Logistics Support (JCALS) system "Recommend a TM Change" process in accordance with (IAW) TO 00-5-1, AF Technical Order System to the TO Manager, 584 CBSS/GBMUD, 460 Richard Ray Blvd, Ste 200, Robins AFB, GA 31098-1640. HQ AFMC/A4UE, 4375 Chidlaw Rd, Ste 6, WPAFB, OH 45433-5006, e-mail: af.topp@wpafb.af.mil, is the technical content manager (TCM) and will review submissions and recommend approval or disapproval. The Air Force Centralized Technical Order Management (CTOM) Committee must review any recommended changes (RC) involving policy.

## CHAPTER 1

### GENERAL INFORMATION

#### 1.1 TIME COMPLIANCE TECHNICAL ORDER (TCTO) PROCESS.

1.1.1 Program Manager. The term Program Manager (PM) as used in this manual encompasses the terms Single Manager (SM), Supply Chain Manager (SCM), System Program Manager (SPM), System Program Director (SPD), System Support Manager (SSM) and Development System Manager (DSM) in accordance with Department of Defense Directive (DoDD) 5000.1, The Defense Acquisition System.

1.1.2 Policy. TCTOs shall be used to document all permanent modifications, update changes and retrofit changes to standard Air Force (AF) systems and commodities. TCTOs are authorized by AFI 63-101, Acquisition and Sustainment Life-Cycle Management. TCTOs may be used to notify affected personnel of Computer Program Identification Number (CPIN) item changes.

1.1.2.1 Software-only changes to baseline computer programs may be announced by TCTO (reference this TO and TO 00-5-16, Software Managers and Users Manual for the USAF Automated Computer Program Identification Number System (ACPINS). Software only TCTOs may be placed on the Electronic Software Delivery System (ESDS) and distributed concurrently with shipment of the software items (reference TO 00-5-16 for required content). When multiple CPINs apply to a series of system technical orders (e.g., 12P3-2ALQ172 series) notification may be included in one TCTO.

1.1.2.2 Software-only changes to computer programs used exclusively by activities collocated at the same Air Logistics Center (ALC) will not require a TCTO unless otherwise directed by the operational/support configuration management procedures.

1.1.2.3 Alternative methods used to announce software-only changes include message, letter of transmittal or electronic bulletin board. If these methods are used, the PM, CPIN, or TCM must coordinate procedures with affected using commands, and establish positive measures to ensure configuration control of the entire inventory. TCTO numbers and data codes will not be used with these alternative methods.

1.1.2.4 Temporary modifications on equipment, systems and commodities used for research and development shall not be documented within the TCTO process. Research and development items are considered non-standard for the purposes of this process.

1.1.2.5 In order to receive automatic distribution of TCTOs, Technical Order Distribution Offices (TODOs) must be on subscription for all TCTO Series Headers applicable to their mission IAW TO 00-5-1.

1.1.3 Applicability. The TCTO process applies to all Air Force agencies, including the Air Force Reserve Command (AFRC) and Air National Guard (ANG). Special purpose vehicles (e.g., Fire Trucks, 463L Loaders) are modified using the TCTO process.

1.1.4 Program Management Directive. The modification Program Management Directive (PMD) will contain funding direction, assign responsibilities for budgeting resources and specify arrangements for the management of the program.

#### 1.1.5 Exceptions.

1.1.5.1 Modifications to nonstandard cryptologic equipment will be directed and implemented by Cryptologic Systems Group (CPSG).

1.1.5.2 Modification of equipment (other than atmospheric research equipment) peculiar to the Air Force Technical Applications Center (AFTAC), Patrick AFB FL, will be documented by Time Compliance Technical Instructions.

1.1.5.3 TCTOs do not apply to civil engineering, medical equipment, or General-Purpose (GP) vehicles.

1.1.5.4 Vehicular TCTOs are exempt from the Configuration Control Board (CCB) process.

**TO 00-5-15****1.2 RESPONSIBILITIES.**

The following subparagraphs define responsibilities:

**1.2.1 Program Manager.** The Air Force PM has management responsibility for assigned configuration items (CI). These responsibilities include modification management and implementation in accordance with AFD 63-11, Modification System and AFI 63-1101, Modification Management (to be superseded by AFI 63-131, Modification Program Management) based on contractor inputs via the ECP process, a MAJCOM PMD, or from an organic change proposal or Materiel Improvement Project (MIP). TCTOs will be coordinated with all affected using commands and PMs/Chief Engineers of other affected systems and/or commodities as early in the process as possible. Configuration change TCTOs must be authorized by the PM CCB.

**1.2.1.1** The PM will verify that applicable contractors and Foreign Military Sales (FMS) customers establish continuing requirements for TCTO series headers against configuration controlled system or commodities. This action will ensure they receive continuing updates to item configuration. When a modification contract is offered to contractors, the bid package must include the latest configuration of the system or commodity being modified.

**1.2.1.2** Systems and commodities managed and sustained at an ALC may undergo modifications which will require major acquisition development. In these cases, the PM may elect to transfer modification management to a Product Center (PC); however, the PM will retain overall program responsibility.

**1.2.1.3** The PM is responsible for performing required advance notifications prior to the issue of Interim TCTOs (ITC-TOs). The DSM or SSM, as applicable, makes required advance notifications at their location. Chapter 9 provides further details concerning the advance notification process and PM responsibilities.

**1.2.1.4** Upon receipt of AFTO Form 873 with CCB approval date of TCTOs, the TO Manager will obtain a TCTO Number from JCALS, establish a Pub Index record, and use the JCALS Work Flow Manager (WFM) to route the package to the various Offices of Primary Responsibility (OPRs) for TCTO writing, coordination, kit assembly, verification and approval.

**1.2.2 Chief Engineer.** The Chief Engineer or designee is responsible for ensuring and preserving the operational safety, suitability, and effectiveness (OSS&E) of the system or end item throughout the operational life, per AFD 63-12, Assurance of Operational Safety, Suitability, & Effectiveness. The Chief Engineer must be part of the CCB approving any modification TCTOs that change the form, fit, or function of an item or enhances the reliability or performance.

**1.2.3 Production Management Functions.** Upon receipt of a TCTO or a procurable modification data package from a TCM and a kit assembly package from the PM, the responsible end item or commodity Production Management Activity (PMA) performs the below management functions for permanent modifications:

- Preparing purchase requests for or initiating action to assemble related kits.
- Preparing required status reporting documentation for the Systems and Equipment Modification Maintenance System (G079) and required funds obligation forms for entry into the Control Procurement Accounting System.
- Ensuring TCTOs are verified, using TCM assistance as required.
- Ensuring the completion of an AFTO Form 82 and maintaining it in the TCTO file.
- Maintaining kit delivery and distribution schedules.
- Ensuring logistics support (spares, affected TO updates, data and Support Equipment (SE)) is available concurrently with release of the TCTO and kits.
- Managing the accomplishment of the TCTO or modification to the affected military system, commodities and affected spares as required, and tracking compliance.
- Rescinding TCTOs or extending rescission dates as necessary.
- Initiating requests for proper disposition action on any excess kits.

- Ensuring the computer program (software on the appropriate medium, if required) has been prepared by the responsible computer resources activity and sufficient quantities are available for concurrent distribution with the TCTO and any applicable TO updates.

1.2.4 Technical Content Manager. The TCM is responsible for the preparation and development of TCTO technical content.

1.2.5 TO Manager. The TO Manager is responsible for the format and distribution of TCTOs.

### 1.3 DOCUMENTATION.

1.3.1 Submitting Proposed Modifications. Proposed modifications are submitted to the Lead Command via an AF Form 1067, Modification Proposal (AFI 10-601, Capabilities Based Requirements Development). The proposals must be technically validated by the responsible Chief Engineer. Validated AF Forms 1067 are prioritized and approved by a Lead Command Configuration Review Board. Approved proposals result in a PMD with funding, which is submitted to the PM for action. The PM generates an ECP to document the required configuration changes and the modification implementation approach, and submits the ECP to the PM CCB for approval. CCB decisions are documented on an AF Form 3525, CCB Modification Requirements and Approval Document IAW AFI 63-1101 (to be superseded by AFI 63-131, Modification Program Management), or an AFMC Form 518, Configuration Control Board Directive. Approved ECPs provide the authorization to update the configuration of the end item.

1.3.2 Implementing Modifications. When the CCB directs a modification to be accomplished by TCTO, the TCTO is developed and formatted according to MIL-PRF-38804, Performance Specification, Time Compliance Technical Order – Preparation. The development process and TCTO content are managed and controlled through the AFTO Forms 873, Time Compliance Technical Order Requirements (See Chapter 3 for Sample Form and Completion and Processing Instructions); 874, Time Compliance Technical Order Supply Data Requirement (See Chapter 3 for Sample Form and Completion and Processing Instructions); and 875, Time Compliance Technical Order Programming Document (See Chapter 3 for Sample Form and Completion and Processing Instructions). If other TOs must be updated as a result of the TCTO, the changes are developed concurrently by the modification manager and submitted through the JCALS “Prepare a TM Change Package” process. TCTO verification is performed by a team of the same AFSC and skill level as those who will accomplish the TCTO and is documented on the AFTO Form 82, TCTO Verification Certificate (Figure 6-1).

### 1.4 DISTRIBUTION STATEMENTS.

The appropriate distribution, export control, handling and destruction notice, and disclosure statements shall be included on page 1 of all TCTOs and supplements, according to TO 00-5-3 and MIL-PRF-38804. Disclosure statements may be found in AFI 61-204, Disseminating Scientific And Technical Information.

### 1.5 TCTO, TCTO KIT AND TO UPDATE FUNDING.

1.5.1 Funding Policy. The project funding the modification shall also fund the TCTO, any kits and SE required, and all related TO updates according to AFI 65-601V1, Budget Guidance and Procedures. The TCM or Logistics Management Specialist (LMS) responsible for the modification is responsible for developing a budget (lead-time away) covering all aspects of the related TCTO.

1.5.2 Coverage. Funding for the TCTO includes development, prototyping, verification, publishing and distribution of the TCTO and any changes required during the period of performance. Funding for TCTO kit requirements includes material and distribution. Paragraph 5.1.4.2 covers MAJCOM reimbursement for kits with approved waivers to the complete kit concept.

1.5.3 TO Updates. Funding for TO updates as a result of a modification must include developing and publishing TO updates, inserting “after data” in TOs and publishing routine updates removing “before data” after TCTO completion. If Interim Operational/Safety Supplements (IOS/ISS) are used to provide after data, TCTO funds must also pay for that portion of routine updates incorporating the IOS or ISS (when the TCTO compliance period is longer than 1 year).

1.5.4 Inspection TCTO Funding. Inspection TCTOs will be funded by the PM TO sustainment budget.

**TO 00-5-15****1.6 REPORTING DEFICIENCIES IN TCTO INSTRUCTIONS OR KITS.**

**1.6.1 TCTO Document Deficiencies.** The AFTO Form 22 or JCALS “Recommend a TM Change” process will be used to report all TCTO deficiencies, in accordance with TO 00-5-1. When the Expeditionary Combat Support System (ECSS) is deployed, changes will be submitted using the applicable Problem Reporting process. Safety deficiencies will be reported by EMERGENCY recommended change. Technical deficiencies will be reported as URGENT. Non-technical corrections will be submitted as ROUTINE.

**1.6.2 TCTO Kit Deficiencies.** When a deficiency is noted in a TCTO kit, the deficiency shall be reported in accordance with TO 00-35D-54, Deficiency Reporting, Investigation, and Resolution.

**1.6.3 TCTO Kit Shortages.** TCTO kit shortages will be reported to the appropriate PM by supply TCTO kit monitors, using the message format in Figure 5-1, Message Format for Reporting Kit Shortages. DO NOT report kit shortages using Joint Deficiency Reporting System (JDRS).

**1.7 PRELIMINARY TCTOS.**

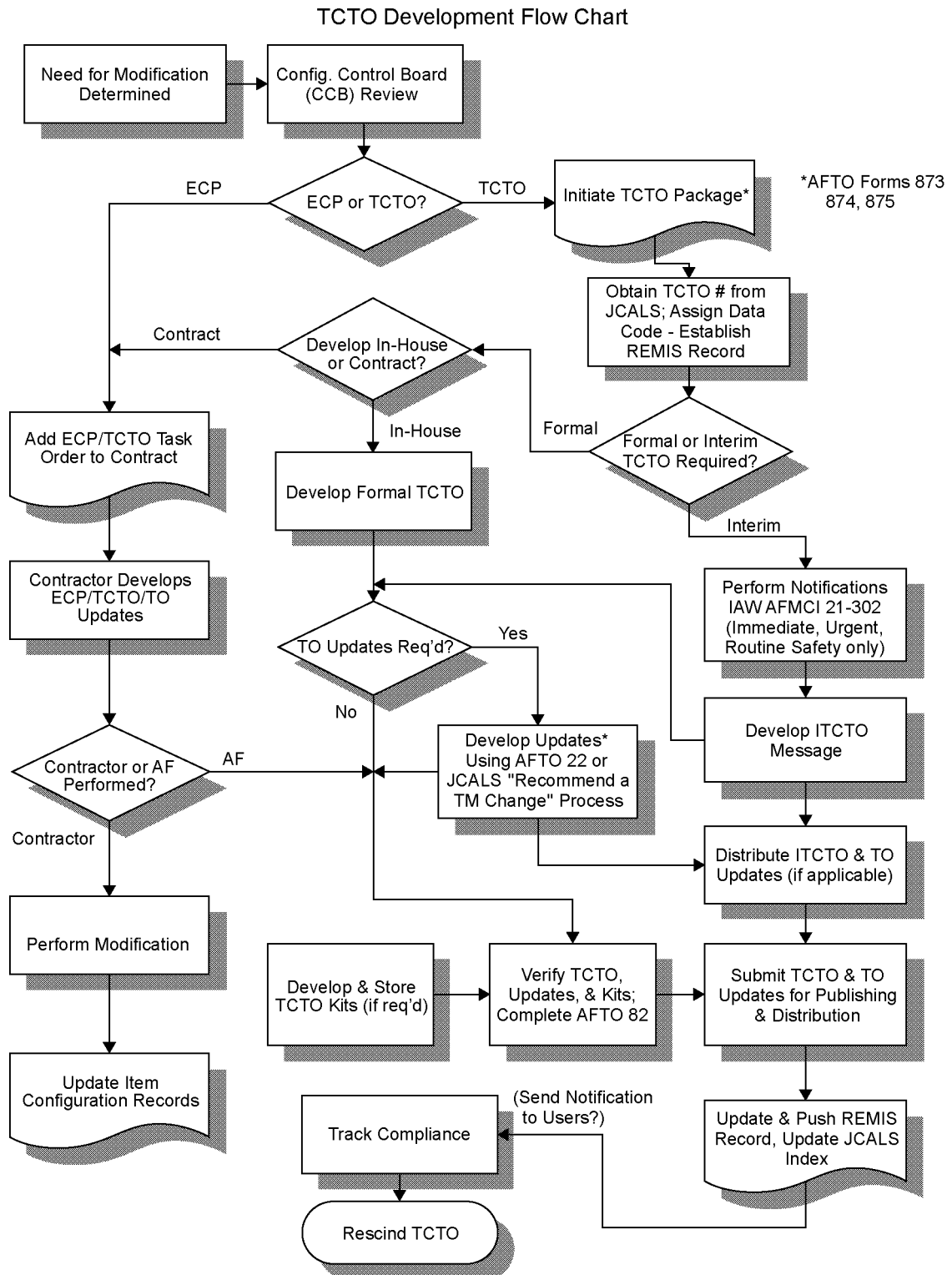
**1.7.1 Authorizing Use of Preliminary TCTOs.** The TO Manager, with the mutual written agreement of the Lead and Using Commands, may authorize the use of verified preliminary TCTOs. The use of verified preliminary technical orders is covered in AFI 63-101 and TO 00-5-1.

**1.7.1.1** This authorization applies to specific programs pending distribution of a formal TCTO. Maximum duration of the authorization is 180 days, unless an extension is approved by the PM and Lead Command.

**1.7.1.2** The TO Manager authorization letter or message will identify the coordinating offices and will be maintained with the data at all times.

**1.7.2 Preliminary depot-level TCTOs.** The use of preliminary depot-level TCTOs must be approved by the PM and affected depot Maintenance Division Chief.

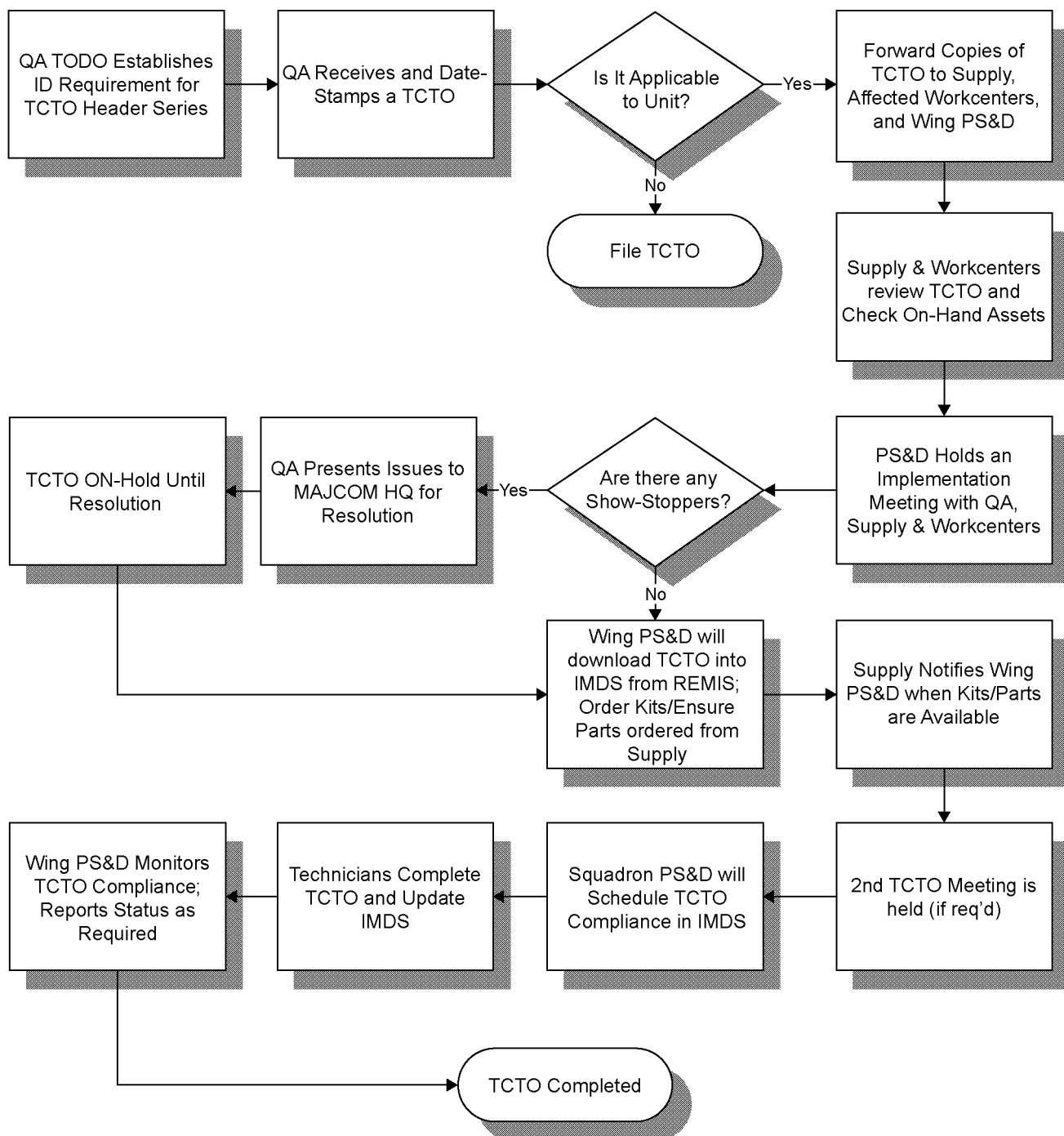




TO-00-5-15-001

Figure 1-1. TCTO Development Flow Diagram

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TO-00-5-15-002

Figure 1-2. TCTO Implementation Flow Diagram



## CHAPTER 2

### MODIFICATION TYPES, TCTOS AND TCTO FORMAT

#### 2.1 MODIFICATION TYPES.

**2.1.1 Permanent or Temporary Modifications.** Modifications may be of two types: permanent (P) or temporary (T) (AFI 63-1101 to be superseded by AFI 63-131, Modification Program Management). Only permanent modifications will be documented through the TCTO process. Permanent modifications may change, add, or delete any configuration item. Permanent modifications to hardware are processed according to the Defense Acquisition Guidebook (<http://akss.dau.mil/dag/>).

**2.1.2 Modifications Affecting Emergency Rescue Procedures.** Test Bed aircraft modified with temporary changes or permanent changes issued as TCTOs which affect aircraft emergency rescue procedures must be reported to HQ AFCEA/CEXF, 139 Barnes Drive, Suite 1, Tyndall AFB, FL (TO 00-5-3, AF Technical Order Life Cycle Management).

#### 2.2 TCTO PRIORITIES, TYPES AND LEVELS.

Each TCTO is assigned a priority, type and level (field or depot) at the time of CCB or Software Configuration Control Sub-Board approval. Three priorities (Immediate Action, Urgent Action, and Routine Action) are authorized. These categories are further divided into types and levels, such as Inspection, Safety, Organizational/Intermediate (O/I) Level, as described in Paragraph 2.2.4 and Paragraph 2.2.5 below. All TCTOs are issued by the responsible TCTO/Modification Manager under the authority of the responsible PM. Table 2-1, Priorities/Types Matrix shows the relationship between TCTO priorities and the different types of TCTOs. The priority is indicated in the instructions by specifying when compliance is to be accomplished (Table 3-1). The priority of a published TCTO may be changed by issuance of a TCTO supplement or replacement TCTO. The action requires approval at the same level as the original TCTO approval authority.

**Table 2-1. Priorities/Types Matrix**

Types	Priorities		
	Immediate Action	Urgent Action	Routine Action
Modification	X	X	X
Inspection	X	X	X
Commodity	X	X	X
Companion	X	X	X
Supplement	X	X	X
Record	--	--	X
Safety	--	--	X

#### NOTE

TCTOs may be accomplished at any level of maintenance, that is, Organizational, Intermediate or Depot (O/I/D). The Program Manager in coordination with the using command determines the TCTO level of accomplishment.

#### 2.2.1 Immediate Action.

**2.2.1.1 Immediate Action TCTOs** are issued to prevent use of equipment or procedures until hazardous safety conditions, which could result in fatality or serious injury to personnel or extensive damage to or destruction of valuable property, can be corrected. Issue is through ITCTO messages (Figure 9-5, Sample Format-ITCTO Message and Figure 9-6, Sample Format-ITCTO Supplement Message), using the highest authorized message precedence IAW AFMAN 33-326, Preparing Official Communications. Make notifications and coordinate ITCTOs in accordance with Chapter 9. Include OC-ALC/ENGLA (TO Repository) as an addressee on all ITCTO messages. For formal TCTOs, the words Immediate Action are printed in red at the top center of the first page and a series of red Xs are printed around the border of the first page.

**TO 00-5-15**

2.2.1.2 The urgency of these TCTOs requires immediate action to remove the aircraft from service, prevent launch of missiles, discontinue operation of ground Communication-Electronic (C-E) systems, or use of related support equipment, personal equipment, or munitions. When possible, corrective actions are included in immediate action TCTOs.

2.2.1.3 Commanders shall ensure distribution to all affected personnel within four hours after receipt because of the critical nature of the TCTO.

### 2.2.2 Urgent Action.

2.2.2.1 Urgent action TCTOs are issued when potentially hazardous safety conditions could result in injury to personnel, damage to property, or when conditions cause unacceptable reductions in combat efficiency. Urgent action TCTOs may be issued as a formal or an ITCTO (ITCTOs will use the highest authorized message precedence).

2.2.2.2 The urgency of these TCTOs requires compliance within specified time limits. If compliance is not accomplished by expiration of the time limit, urgent TCTOs require action to remove aircraft from service, discontinue use of air-launched missiles, prevent launch of missiles, discontinue operation of ground C-E equipment, or use of SE, personal equipment, materials or munitions. On formal TCTOs, the words URGENT ACTION are printed in red at the top center of the first page and a series of alternating red diagonals and red Xs are printed around the border of the first page.

2.2.2.3 Commanders shall ensure distribution is made to all affected personnel within 24 hours of receipt.

### 2.2.3 Routine Action.

2.2.3.1 Routine action TCTOs are issued for any conditions not covered under immediate or urgent action TCTOs.

2.2.3.2 Governing factors are equipment or procedural deficiencies of a material, mechanical, operational, or tactical nature, the uncorrected existence of which could create a hazard through prolonged usage, or have a negative effect on operational efficiency, or reduce tactical or support utility, or reduce operational life or general service utilization of systems or commodities.

2.2.3.3 Routine action TCTOs may also provide enhancements to equipment or system capabilities.

2.2.3.4 The procuring activity is authorized to withhold the release of non-safety routine action TCTOs for a maximum of 90 days to permit simultaneous release of two or more TCTOs requiring work in the same general area. This procedure is authorized for all systems and commodities to reduce access and button-up maintenance man-hours when subsequent TCTOs are known to be approved and in process.

2.2.4 TCTO Types. There are seven types of TCTOs: Configuration Change, Inspection, Commodity, Companion, Supplement, Record, and Safety. The following paragraphs provide further descriptions of each of the seven TCTO types.

2.2.4.1 Configuration Change TCTOs. Configuration Change TCTOs are issued to modify a system or commodity by adding, deleting or altering form, fit, function or interface of a component for a configuration item.

2.2.4.2 Inspection TCTOs. Inspection TCTOs are non-configuration change TCTOs issued to accomplish a one-time inspection, inspection and replacement of hardware with like serviceable items, inspection and repair in accordance with system/equipment repair manuals, or any similar requirement which does not change form, fit, or function. The affected PM Division Chief may authorize non-configuration change TCTOs.

2.2.4.2.1 Inspection TCTOs may be issued as Immediate Action, Urgent Action, or Routine Safety Category TCTOs. An Inspection TCTO is required when the inspections are either performed outside the normal periodic inspection schedule for the equipment, or provide inspection criteria not covered in existing TOs.

2.2.4.2.2 TCTO authors are cautioned against reliance on one-time inspections of items which have safety of flight or catastrophic failure possibilities and are distributed in such large numbers that complete coverage is difficult. When this situation exists, authors should consider a recurring inspection at overhaul, installation, or some other normal inspection interval and, if required, issue a change to the appropriate inspection manual concurrently with the TCTO.

<b>IMMEDIATE ACTION</b>	
DEPARTMENT OF THE AIR FORCE TECHNICAL ORDER	TO 1F-16-1140 DATA CODE 0162903 1 FEBRUARY 1983
<div style="border: 1px solid black; padding: 5px; display: inline-block;">Text and Border Printed in RED</div>	
<b>INSPECTION OF CONSTANT SPEED DRIVE (CSD) ACCUMULATOR MOUNTING BRACKETS, PART NO. 16P1531-23, F-16A/B AIRCRAFT</b>	
<b>NOTE</b>  This technical order formalizes IMMEDIATE action TO 1F-16-1140, data code 0162903, dated 4 February 1983. Remove from active files.	
<b>1. APPLICATION.</b>  <b>1.1 Identification.</b> This technical order is applicable to the following aircraft:	
Model	Serial Numbers
F-16A	AF78-0061, 78-0003, 78-0005, 78-0008, 78-0026, 78-0056 through 78-0059, 78-0061, 78-0064, 78-0124, 78-0146, 78-0152 through 78-0154, 78-0215, 78-0224, 78-0225, 78-0278, 79-0334 through 79-0336, 79-0339, 79-0363, 79-0364, 79-0379, 79-0380, 79-0402, 80-0479, 80-0481, 80-0482, 80-0488, 80-0508 81-0689, 81-0732 through 81-0768, 81-0770, 81-0772
F-16B	AF78-0077, 78-0081, 78-0084, 78-0088, 78-0095 through 78-0097, 78-0100, 78-0104, 78-0166, 78-0302, 79-0419, 79-0423, 79-0425, 79-0430, 80-00638, 81-0812, 81-0814, 81-0815
<b>1.2 Kit Applicability.</b> Kits are not required by this TCTO.	
<b>1.3 Proofing.</b> Kit proof testing, in accordance with TO 00-5-15, has been waived by OO-ALC/XYZTV	
<small> <b>Disclosure Notice.</b> This information is furnished upon the condition that it will be not be released to another nation without the specific authority of the Department of the Air Force of the United States, that it will be used for military purposes only, that individual or corporate rights originating in the information, whether patented or not, will be respected, that the recipient will report promptly to the United States, any known or suspected compromise, and that the information will be provided substantially the same degree of security afforded it by the Department of Defense of the United States. Also, regardless of any other markings on the document, it will not be downgraded or declassified without the written approval of the originating United States Agency.         </small>	
<small> <b>Distribution Statement.</b> Distribution authorized to US Government agencies only; administrative and operational use; 1 May 1990. Other requests for this document shall be referred to SA-ALC/XYZABC, Rome AFB, TX 78241-0009.         </small>	
<small> <b>WARNING.</b> This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et seq.) or the Export Administration Act of 1979, as amended (Title 50, U.S.C., App. 2401 et seq.). Violations of these export laws are subject to severe penalties. Dissemination in accordance with provisions of DoD Directive 5230.25.         </small>	
<small> <b>Destruction Notice.</b> For unclassified, limited documents, destroy by any method that will prevent disclosure of the contents or reconstruction of the document.         </small>	

Figure 2-1. Example of Title Page for Immediate Action TCTO

TO 00-5-15

<b>URGENT ACTION</b>	
DEPARTMENT OF THE AIR FORCE TECHNICAL ORDER	
TO 1F-16-1140 DATA CODE: 0162903 1 FEBRUARY 1983	
INSPECTION OF CONSTANT SPEED DRIVE (CSD) ACCUMULATOR MOUNTING BRACKETS, PART NO. 16P1531-23, F-16A/B AIRCRAFT	
NOTE	
This Technical Order formulates URGENT Action TO 1F-16-1140, data code 0162903, dated 4 February 1983. Remove from active files.	
<b>1. APPLICATION</b>	
1.1 Identification. This technical order is applicable to the following aircraft:	
Model	Serial Numbers
F-16A	AF78-0001, 78-0003, 78-0005, 78-0008, 78-0026, 78-0056 through 78-0059, 78-0061, 78-0064, 78-0128, 78-0140, 78-0152 through 78-0154, 78-0215, 78-0224, 78-0225
F-16B	AF78-0077, 78-0084, 78-0088, 78-0095 through 78-0097, 78-0100, 78-0104, 78-0166, 78-0302, 79-0419, 78-0421, 79-0425, 79-0430, 80-0638, 81-0812, 81-0814, 81-0815
1.2 Kit Applicability. Kits are not required by this TCTO.	
1.3 Proofing. Kit proof testing, in accordance with TO 00-5-15, has been waived by OO-ALCXYZTV	
<b>2. PURPOSE</b>	
The purpose of this Time Compliance Technical Order (TCTO) is to direct an inspection of the Constant Speed Drive Accumulator Mounting Brackets. Failure of the bracket leading to loss of electrical power in-flight established the requirements for this TCTO. Failure to accomplish this inspection could result in failure of the accumulator mounting bracket and subsequent loss of electrical power.	
<b>Disclosure Notice:</b> This information is furnished upon the condition that it will not be released to another nation without the specific authority of the Department of the Air Force of the United States, that it will be used for military purposes only, that individual or corporate rights originating in the information, whether patented or not, will be respected, that the recipient will report promptly to the United States, any known or suspected compromise, and that the information will be provided substantially the same degree of security afforded it by the Department of Defense of the United States. Also, regardless of any other markings on the document, it will not be downgraded or declassified without the written approval of the originating United States Agency.	
<b>Distribution Statement B.</b> Distribution authorized to US Government agencies only; administrative and operational user; 1 May 1990. Other requests for this document shall be referred to SA-ALCXYZABC, GPO AFB, TX 76241-0000.	
<b>WARNING:</b> This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et seq.) or the Export Administration Act of 1979, as amended (Title 50, U.S.C., App. 2401 et seq.). Violations of these export laws are subject to severe penalties. Dissemination in accordance with provisions of DoD Directive 5230.25.	
<b>Destruction Notice:</b> For unclassified, limited documents, destroy by any method that will prevent disclosure of the contents or reconstruction of the document.	
1	

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Figure 2-2. Example of Title Page for Urgent Action TCTO

2.2.4.2.3 Logistics items required for access and button-up of inspection areas will only be provided in TCTO kits when such items are not commonly available such as base level special tools, parts or materials. This is an exception to the Air Force total kit concept. These kits shall not include those normal wear-out items discovered during the inspection, nor those items incurring inadvertent damage during accomplishment of the inspection.

2.2.4.2.4 All TCTOs directing an inspection shall indicate whether or not previous inspections satisfy the one-time requirement and also indicate whether or not the requirement is being included in the normal inspection manual. The considerations should be fully taken into account when the inspection involves chemical reaction or when serviceability is determined by a negative result.

2.2.4.2.5 An AFTO Form 874 is only required for inspection TCTOs if kits, special tools, etc., that are not commonly available at the performing units are required.

2.2.4.2.6 Inspection TCTOs may check conditions where the deficiency and affected parts are identified but the extent of either the deficiency and/or quantity of parts required for corrective action is unknown and varies between end military systems or commodities. Defective parts found to require replacement will be considered as normal wear-out items and requisitioned through normal supply channels.

2.2.4.3 Commodity TCTOs. When a commodity is to be modified, the TCM responsible for the item prepares the commodity TCTO and any required companion system TCTOs. When a system modification affects commodities, the TCM responsible for the system prepares both the system TCTO and the required companion commodity TCTOs. The TCM preparing the TCTOs coordinates with all affected TCMs and PMs. Coordination is accomplished on a priority basis consistent with the urgency of the TCTO. The TCM who owns affected equipment for which another TCM is writing a system or companion TCTO must provide all required source data for TCTO development.

2.2.4.3.1 After coordination and approval, the affected TCM obtains the companion TCTO number and data code from the servicing TO Manager, and furnishes the numbers to the Production Management Activity (PMA) managing the modification. When a PMA receives a TCTO and data code for the companion TCTO, the activity, in conjunction with the TCM, accepts responsibility for all areas of TCTO management. The PMA or TCM is responsible for determining all follow-on actions (rescission, supplements, extension, etc.), and recommending the action to the TO Manager.

2.2.4.3.2 If the TCTO is for depot-level accomplishment, the TCM writes a field level (O&I) companion TCTO to remove and ship the commodity to the source of repair and replace it with a modified item. If the depot modification will be done on an attrition basis, no companion TCTO is required. IPBs will be updated to reflect the modified equipment part number used for field-level replacement.

2.2.4.3.3 If the TCTO is field level accomplishment, then a companion TCTO is required only if the item is to be modified before the next scheduled or unscheduled removal for other reasons. The preparing TCM and using command maintenance directorate negotiate an agreement for establishing the compliance period for field level TCTOs.

2.2.4.3.4 In the case of an item being modified, it is preferable to modify the entire inventory through the commodity TCTO and use the companion system TCTO for removal of unmodified and installation of modified items in the end item.

2.2.4.3.5 The originator of a commodity TCTO prepares and issues the system companion TCTO, but the affected System Office PM furnishes the inspection or removal and replacement instructions. The originator of the TCTO establishes the time frame for the receipt of the information based on the urgency of the TCTO.

2.2.4.3.6 When work involved in one TCTO is dependent upon other TCTOs, an appropriate statement based on MIL-PRF-38804 and AFTO Form 873 shall be included under Block 19, WHEN TO BE ACCOMPLISHED in all involved TCTOs.

2.2.4.4 Companion TCTOs. Companion TCTOs are used when a commodity item must be removed from an end item for modification at a base or depot. In this situation two TCTOs must be written. One TCTO (the "companion") shall be written against the end item to remove the commodity item and replace it with a modified item. The second TCTO shall be written to modify the commodity item itself. When used, companion TCTOs shall be released concurrently with applicable commodity TCTOs. Companion TCTOs shall be issued when a commodity affects safety of flight/operation or configuration of the end item.

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2.2.4.4.1 If a commodity TCTO can be held until the next scheduled or unscheduled maintenance removal from an end item, the use of a companion TCTO is optional. When a TCTO is commodity-driven, the commodity manager prepares and issues the companion TCTO for all impacted systems and platforms, after obtaining the inspection, removal and/or replacement instructions from the manager of the system or platform. The reverse is true when a system modification affects commodities.

2.2.4.4.2 If a commodity TCTO is depot-level-only accomplishment, write a field (O&I) level system (companion) TCTO to remove the commodity item from the end item, ship the commodity to the source of repair, and replace the unmodified commodity with a modified item.

2.2.4.4.3 If a commodity TCTO is for field-level accomplishment, then a companion TCTO is required only if the commodity item is to be removed from the system specifically to perform the TCTO.

2.2.4.4.4 In the case of a commodity item modification, the preferred method is to modify the entire item inventory through a commodity TCTO. A system or commodity companion TCTO shall then be used if required for removal of the unmodified commodity item and the installation of the modified commodity item. If there is no TO category for a commodity item to be modified, a TCTO against the system must direct accomplishment on installed and spare items.

2.2.4.4.5 The only exception is for aircraft engines tracked in the Comprehensive Engine Management System (CEMS) (see Paragraph 2.4).

2.2.4.5 TCTO Supplements. TCTO Supplements are used to change or amend the basic TCTO when new information such as time required to complete the TCTO, personnel required, man-hours required, etc. arises based on field execution. All TCTO supplements will be lettered, not numbered (e.g. -501C).

2.2.4.5.1 If the size of a supplement approaches the size of the basic TCTO, a revised TCTO (keeping the same TCTO and data code numbers) may be prepared in lieu of a supplement.

2.2.4.5.2 When it becomes necessary to issue more than one supplement to a basic TCTO, the later supplement(s) may be either cumulative, replacing the previous supplement(s), or non-cumulative. Supplements requiring additional work shall be the non-cumulative type. Changes that affect the form, fit, or function of the TCTO require a new TCTO.

2.2.4.5.3 Supplements which require additional work (such as re-routing wire bundles, extra testing, inspections, etc.) shall contain a statement regarding additional man-hours and personnel required, and shall include appropriate requirements for documentation. A new data code will be assigned. Revised rescission dates will also be included, if required.

2.2.4.5.4 Supplements will bear the heading "Supplement to Basic Technical Order" and need not bear an indicator of safety or designator of urgency unless the supplement is issued for the purpose of making such a change to the basic TCTO. Supplements automatically assume the same urgency as the supplemented TCTO.

2.2.4.5.5 Interim TCTO Supplements will be used when required to transmit urgent changes to formal TCTOs, and may also be used to make minor technical corrections that do not affect the scope of formal TCTOs. They will always be used to update ITCTOs.

2.2.4.5.6 Formal supplements will not be issued solely to correct the compliance period, rescission date, or man-hour accomplishment time of a TCTO. For these types of updates, the TCTO Manager shall notify users by issuing an Interim TCTO Supplement.

2.2.4.6 Record TCTOs. Record TCTOs do not contain step-by-step instructions in the "how work is accomplished" paragraph. Record TCTOs tabulate the equipment affected, index necessary installation drawings and instructions, and list required parts which are provided by kits. Symbol entries are not required on maintenance forms for record TCTOs. Distinguishing red markings are not required for record TCTOs. All other aspects of the record TCTO will contain the same information and support as do other TCTOs. Record TCTOs identify two types of modifications:

2.2.4.6.1 For complex changes that must be accomplished by contractors, modification centers, or specific Air Force activities higher than O/I-level maintenance, detailed instructions will be referenced in, but not be distributed as part of these TCTOs.



2.2.4.6.2 For prototype TCTO installations which are to remain installed on the system or commodity, the record TCTO will remain in effect until a formal basic TCTO covering the entire fleet or range of affected systems or commodities, kits, and affected TO updates are available for concurrent release.

2.2.4.6.3 The prototype record TCTO may become the formal TCTO by the issuance of a TCTO supplement that adds the additional information required. The formal TCTO will identify whether the prototype installation is satisfactory as installed, or if additional work is required to attain standard configuration.

2.2.4.6.4 Affected TO updates to support a prototype installation must be agreed to by the applicable MAJCOM directorate. These TOs may be verified preliminary TOs or supplemental data, but the data must be in a changeable format.

2.2.4.7 **Safety TCTOs.** The corrective actions for safety deficiencies that impose “remove from service” or flight restrictions are issued in a Routine Safety TCTO. Safety TCTOs are issued to accomplish permanent modifications with safety implications. The TCTOs developed to implement these modifications carry an additional safety indicator in red capital letters above the title on the first page. This marking does not reflect the designation of priority, but is used when the risks are too high if the hazard is not corrected within the compliance period.

2.2.5 **Designated Level of Accomplishment.** TCTOs are issued for a designated maintenance level based on primary responsibility for accomplishment in keeping with readily available skill levels and facilities. A TCTO designated for field level accomplishment does not prohibit accomplishment by depot-level maintenance. The designation of depot-level does prohibit accomplishment by field level maintenance unless the MAJCOM has specific current authority granted by the PM to the units affected. The PM, in coordination with the using command, determines the TCTO level of accomplishment. The following criteria apply:

2.2.5.1 Field level accomplishment will normally be designated when TCTOs are immediate, urgent or safety-related, and require minimum out of commission or down time of systems and commodities, and involve relatively small man-hour expenditures within the concept of maintenance performed by a using organization on assigned equipment. The using command must agree to accomplish field level TCTOs within the designated compliance period. For individual TCTOs, exceptions to the above may be negotiated between the using command and the PM. When TCTOs designated as depot-level maintenance are instead performed at the field level, paragraph 4 of the TCTO, “BY WHOM TO BE ACCOMPLISHED,” shall include the office symbol, e-mail address and Defense Switched Network (DSN) number of the using command office authorizing this level of accomplishment.

2.2.5.2 Depot-level accomplishment will be designated when the requirements of the TCTO are less urgent, require extensive out of commission time for systems and commodities, or involve relatively large man-hour expenditures, extensive shop facilities, and/or skills beyond those normally found at the field level. depot-level TCTOs require that work be accomplished by a specific modification program, use of an on-site or field team, or integration into existing depot work packages, commodity repair, or overhaul programs.

2.2.5.3 The basic processes and procedures for TCTO development under the two-level maintenance concept are unchanged. The PM CCB is responsible for planning, in coordination with the using command, for modification funding and accomplishment.

## 2.3 **SPECIAL CONDITION TCTOS.**

2.3.1 **TCTOs on Special Federal Supply Group (FSG) Items.** Proposed modifications to specifications or configuration changes to FSG 59 (electronics piece parts), FSG 60 (fiber optics), or Federal Stock Class (FSC) 6145 (wire and cable) source coded to Defense Logistics Agency (DLA) must have 645 LOG/ES approval on the AF Form 3525 prior to CCB approval and subsequent TCTO processing

2.3.2 **TCTOs on Radar Equipment.** The policy on modification of radar equipment used jointly by the Air Force and the Federal Aviation Administration (FAA) is in the numbered minutes of the Joint Radar Planning Group.

2.3.3 **TCTOs Applicable to Security Assistance Program (SAP)/Foreign Military Sales (FMS).** TCTOs applicable to military systems or commodities used by SAP/FMS require some coordination with the countries involved. The PM shall notify the affected country managers of all safety of flight and all releasable (Foreign Disclosure Office (FDO) approved) modifications applicable to the SAP/FMS equipment. Send the modification offering (see AF Form 3525, CCB Modification Requirements and Approval Document) to the country in sufficient time to allow the country to identify kit requirements for

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participation in a consolidated kit buy. The Air Force Security Assistance Center (AFSAC)/IPS must be advised to assure any required coordination actions are taken. See TO 00-5-19, Security Assistance Technical Order Program for additional details. (See Chapter 9 for special distribution procedures for FMS Interim TCTOs.)

**2.3.4 Electronic Warfare (EW) Systems.** The responsible PM periodically updates software for EW systems which impact the TOs managed by an aircraft or training device PM at a different location. Concurrent release of the changed software and updates to all TOs affected by the software change is required. To facilitate concurrent release, the following procedures apply:

**2.3.4.1** The commodity EW TCM ensures current aircraft or training operations TOs (-1 series) and maintenance (-2 series) checkout procedures are available from the responsible PMs.

**2.3.4.2** The commodity EW TCM prepares a draft of the changed checkout procedures and verifies the changes with affected aircraft or training system PM assistance during verification of the TCTO and affected TO source data. The commodity EW TCM furnishes verified, marked-up copy of source data for all affected TOs to the applicable PMs.

**2.3.4.3** Affected aircraft or training system PMs ensure initial distribution of formal updates to affected TOs is completed as follows:

**2.3.4.4** When less than 50 pages of TO data are affected and TO updates are organically prepared, initial distribution will be accomplished within 90 calendar days of receipt of verified source data. The 90 days is divided as: TCM, 30; TO Manager, 45; and Printing and Distribution, 15 days.

**2.3.4.5** When preparation of TO updates is accomplished by a contractor or when 50 or more TO pages are affected, the EW TO Manager and the TO Managers for the aircraft or training systems will negotiate a mutually agreeable initial distribution date.

**2.3.5 Modifications to Commercial-Derivative Aircraft.** Modifications to commercial-derivative aircraft that will retain FAA certification must comply with the intent of AFD 62-4, Standards of Airworthiness for Passenger-Carrying Commercial Derivative Transport Aircraft, and AFD 62-5, Standards of Airworthiness for Commercial Derivative Hybrid Aircraft.

**2.3.6 Commercial and Other-DoD-Component Modification Instructions.** See Paragraph 2.7.

**2.3.6.1** Commercial publications directing modifications to systems or end items (other than temporary modifications) and initial or one-time inspections to be performed by Air Force organic resources will be numbered and managed as TCTOs in accordance with this TO (see Chapter 4). TCTO numbers will also be issued for publications which update the configuration of Contractor Logistics Support (CLS) managed systems and end items when configuration control is the responsibility of the Air Force. For publications directing work to be performed by contractors, the responsible activity will determine whether or not a TCTO number will be assigned based on program requirements. This may result in TCTO numbers being assigned and managed within the TO system for programs managing O&M manuals outside the system (e.g., for CLS maintained systems).

**2.3.6.2** Commercial Manuals and associated TCTOs may only be distributed via regular e-mail if they are Scientific and Technical Information (STINFO) code "A."

## **2.4 SINGLE-TCTO PROCESS.**

A single TCTO for removal, modification and reinstallation of components and return of end items to serviceable status is authorized for use only as indicated below. For all other systems and commodities, companion TCTOs shall be released concurrently with applicable commodity TCTOs and are issued according to Paragraph 2.5.

**2.4.1 Category 2 TCTO.** Managers may issue a single Category 2 (Airborne Engines) TCTO to modify the engine, whether or not installed in the aircraft. The single TCTO method will only be used if it will accommodate all CEMS and Integrated Maintenance Data System (IMDS) tracking and reporting functions supporting field and depot activities. TCTOs applicable to a commodity installed on the engine will be issued in the appropriate commodity TO category, with a companion TO Category 2 TCTO for removal of the unmodified item and installation of the modified item to provide engine configuration tracking information.



**2.4.2 Single System or End Item TCTO.** A single system or end item TCTO may be issued when no TCTO category exists for the commodity item to be modified.

## **2.5 RELEASE INSTRUCTIONS.**

Some conditions may require accomplishment of more than one TCTO before lifting of restrictions. When such conditions arise, a TCTO supplement is prepared by the responsible PM giving proper release instructions.

**2.5.1 Corrective Action TCTOs.** Under no circumstances will the PM include releasing statements in the corrective action TCTO. The PM issuing the corrective action TCTO provides the TCTO number to the end item PM as early as possible.

**2.5.2 Flight Manual TCTOs.** TCTOs affecting Flight Manual Program (FMP) publications must be coordinated with the Flight Manual Manager. Flight Manuals must be updated concurrently with affected maintenance TOs.

## **2.6 INTERIM TCTO (ITCTO).**

When circumstances preclude the timely publication of emergency instructions as formal TCTOs, ITCTOs are issued by electronic means. The processing and distribution of the ITCTO or ITCTO supplement will be accomplished in accordance with Chapter 9 of this TO and TO 00-5-1. Message precedence and delayed delivery provisions are provided by TO 00-5-1. Include OC-ALC/ENGLA (TO Repository) as an addressee on all ITCTO messages. ITCTOs issued under the criteria of this technical order may be formalized.

## **2.7 NON-TCTO MODIFICATION INSTRUCTIONS.**

**2.7.1 Procedures.** A service bulletin, other DoD component modification instructions, and similar publications prepared by manufacturers or other government agencies are not authorized for distribution to Air Force personnel for compliance, except as specified in TO 00-5-1. Any activity receiving other than authorized instructions will notify the MAJCOM weapon system manager and request disposition instructions. The TCM, depot engineering or technical support activities and/or Flight Manual Managers (FMMs) will review the publications. If approved for AF use, the TO Manager assigns TCTO and data code numbers, a compliance period, issue and rescission dates in JCALS, and an authority line to the publication. The publications are distributed through normal Air Force channels. The TCTO will cover those areas not specifically covered by the publication. Specific TCTO requirements covered by the publication will be referenced in the TCTO.

**2.7.2 Exception.** Service bulletins prepared by the contractor or manufacturer of general purpose commercial vehicles shall be used by Air Force personnel to correct deficiencies that are discovered during production and for the duration of the warranty. The 580 CBSS/GBLB, 460 Richard Ray Blvd, Suite 200, Robins AFB, 31098-1813 will take necessary action to ensure that the government continues to receive service bulletins for all GP commercial vehicles in the Air Force inventory. When required, The 580 CBSS/GBLB shall direct corrective action. The MAJCOM Transportation Division shall establish procedures to implement and monitor compliance with Service Bulletins and Recalls. Using activities shall notify the MAJCOM when a service bulletin is accomplished by bulletin number, registration number, work order number and date for input to the Consolidated Automated Reporting System (CARS) (AFI 24-303, Command/Air Force Vehicle Integrated Management System and Consolidated Analysis and Reporting).

## **2.8 RETROFIT CHANGES.**

**2.8.1 Spares in Stock or War Reserve Materiel (WRM).** Retrofit changes that affect spares in stock or War Reserve Materiel (WRM) (AFI 25-101, War Reserve Materiel Program Guidance and Procedures) will identify each affected item by national stock class (NSC), part number (PN), and nomenclature.

**2.8.2 WRM Assets.** WRM assets shall be specified in the TCTO as either requiring or not requiring accomplishment. Accomplishment may be deferred past the normal TCTO compliance period by the TCTO manager, in which case, the TCTO will not be rescinded. TCTOs involving WRM will be complied with when assets are removed from Readiness Spares Package (RSP) kits.

## **2.9 NUCLEAR WEAPONS RETROFIT ORDERS.**

For information on these publications, refer to Index TO 0-1-11N, Numerical Index to Joint Nuclear Weapons Publications (Including Related Publications).

**TO 00-5-15****2.10 FORMAT.**

All formal TCTOs (contractor or organically prepared) are formatted according to military specification MIL-PRF-38804. Borders and identification markings printed in red are used to focus attention on the more urgent TCTOs. All TCTOs will be marked with the appropriate title page notices; STINFO Distribution Statement, Destruction Notice, Export Control Notice, etc. (see TO 00-5-3) All formal TCTOs will include a point of contact for the TCTO to provide name, organization, office symbol, e-mail address and DSN in Paragraph 9, titled "POINT OF CONTACT." Interim TCTOs and the ITCTO format are addressed in Chapter 9. Exemption: TCTO text shall be in black print.

## CHAPTER 3

### TCTO DEVELOPMENT, PUBLISHING, UPDATING, COORDINATION, AND DOCUMENTATION

#### 3.1 MODIFICATION NEED DETERMINATION.

The need for a modification is determined by a number of factors including an analysis/review of Deficiency Reports (DR), customer service contact, Product Improvement Working Groups (PIWG), Government Industry Data Exchange Program (GIDEP), and mishaps. Once a determination has been made to perform a modification in accordance with AFI 63-1101, Modification Management on a system or commodity, a further determination needs to be made as to whether the change will be accomplished by either a TCTO or an ECP as depicted in Figure 1-1, TCTO Development Flow Diagram.

#### 3.2 CONFIGURATION CONTROL BOARD (CCB) REVIEW (ECP OR TCTO).

The PM establishes a means for tracking a modification proposal through formal CCB validation and modification completion. The CCB determines whether the modification will be performed as an ECP or as a TCTO. Once the decision has been made to accomplish the modification as a TCTO, the development process is initiated.

**3.2.1 Contractor Driven ECPs or MAJCOM PMDs Modifications.** Modifications driven by contractor ECPs or MAJCOM PMDs will be authorized by the PM CCB in accordance with AFI 63-1101 (to be superseded by AFI 63-131, Modification Program Management), and documented on an AF Form 3525. Program Office-determined needs for modifications or software updates will require assignment of a MIP number and initiation of an AF Form 3525 for CCB approval in accordance with AFI 63-1101 (to be superseded by AFI 63-131, Modification Program Management).

#### NOTE

For permanent modifications under \$10M, an AF Form 1067 may be used in lieu of the AF Form 3525.

**3.2.2 AF Form 3525.** The responsible CCB uses the AF Form 3525 to document approval or disapproval of the modification. If the modification is disapproved, the AF Form 3525 is returned to the initiator. If the modification is approved, the CCB will determine how it should be performed (ECP, Engineering Order (EO), or TCTO), and the CCB chairperson signs the form. Changes to Computer Resource Configured Items (CRCI) are not controlled by TCTOs, but CPIN software changes can be distributed using a TCTO.

#### 3.3 TCTO DEVELOPMENT PROCESS.

The TCTO development process requires collecting applicable data and conducting analyses of safety implications and impact upon other systems, or documentation. Data collection and analyses involve the following tasks:

- Risk assessment and/or Safety Review accomplished in accordance with MIL-STD-882, Standard Practice for System Safety.
- Preliminary inspections to gather additional data if needed.
- Determine asset posture if applicable.
- Determine impact on other TCTOs and TOs.
- FMS and SAP applicability IAW TO 00-5-19, Security Assistance Technical Order Program.
- Review locations of affected systems.

**TO 00-5-15****3.4 TCTO NUMBER ASSIGNMENT FROM JCALS.**

**3.4.1 Series Headers.** The TO Manager must request and index a TCTO Header Series number from OC-ALC/ENGLA before obtaining a number for and publishing the first TCTO in the series. When classified TCTOs will be issued, separate Headers must be established for each different classification of TCTO to be covered under the series. Headers allow TODOs to establish subscription quantities before the TCTO manager has to determine publication quantities and ID labels have to be requested.

**NOTE**

A TCTO Series Header must be established in the JCALS Pub Index before individual TCTOs can be numbered and indexed.

**3.4.1.1** The JCALS automatically-assigned data code is changed in the “Update an Index Entry; Management Information” screen.

**3.4.1.2** The TO Manager requests a TCTO number and Data Code Number through the JCALS “Assign a TCTO Number” function, and the next sequential number in the TCTO Series is automatically assigned by the JCALS System. However, JCALS will allow duplicate Data Codes between different JCALS sites. The TO Manager overrides the system assigned Data Code and assigns new numbers from a block of Data Codes provided to the PM by OC-ALC/ENGLA.

**3.4.1.3** Records are established in the JCALS Pub Index (and reflected in the TO Catalog) for TCTO Series Header listings and for individual TCTOs (issued either as a formal publication or as an interim message) using appropriate JCALS TM processes. In those rare cases where the TO Manager does not have access to JCALS, AFTO Forms 203, Technical Order Numbering, Indexing and Control Record, and 204, (Continuation sheet), may be used. Rescission dates for individual TCTOs will be entered into JCALS.

**3.4.1.4** The TO Manager enters TCTO data into the JCALS Pub Index to set up the record for individual TCTOs.

**3.4.1.5** Both contractor and organically prepared TCTOs are numbered in accordance with this TO and TO 00-5-18.

**3.5 FORMAL OR INTERIM TCTO REQUIREMENT.**

Once a TCTO number has been assigned through the establishment of a JCALS Record, a decision is made to pursue the TCTO as a formal Military Specification (MILSPEC)-developed TCTO or as an interim TCTO (see Chapter 9). This decision is based predominantly on whether circumstances for the required TCTO preclude publication in a timely manner. Once the decision concerning the type of the TCTO has been made, the PMA or TCM will decide that the TCTO can either be accomplished in-house as an organic TCTO or will need to be accomplished through the contractor.

**3.6 CONTRACTOR-PREPARED TCTOS.**

Contractor-prepared TCTOs must be approved by the CCB and comply with TO 00-5-3 acquisition requirements and this TO. The Air Force TCM initiates the AFTO Forms 873 and 875, Time Compliance Technical Order Programming Document. The applicable TO Manager completes the JCALS “Manage TM Numbering; Assign a Publication Number (AF TCTO Publications)” process, and reviews and signs the completed forms.

**3.6.1 Data Calls.** The responsible Air Force Data Manager (DM) forwards a data call to all affected organizations (other PMs and affected TO Managers, program engineering, etc.), requesting identification of data requirements for the TCTO. The DM may request responses on DD Forms 1423, Contract Data Requirements List, or AF Forms 585, Contract Data Requirements Substantiation, but usually accepts inputs via e-mail. The DM provides the proper backup material (ECP, purchase request (PR), etc.) when available.

**3.6.2 Development of TO Data Requirements.** In response to the DM-issued data call, affected TO Managers develop the TO data requirements to support the changes to assigned military systems, commodities or embedded items. TO Managers will not prepare TO data requirements for TOs prime at other centers nor prepare TO data requirements for military systems or commodities not submitted through the DM of the center responsible for the items.

**3.6.2.1** TO data requirements are generated from three sources, data for affected airborne equipment, data for affected support equipment, and data for other affected commodities managed at other centers:

3.6.2.1.1 The DM-prepared data call is submitted to the end item TO Manager. The data requirements will include a list of the required updates for affected TOs affected by the TCTO.

3.6.2.1.2 The DM-prepared data call is submitted to the ES in the Product Group responsible for affected SE. Data requirements will include any required modifications to SE required by the TCTO, and any additional TOs requiring updates.

3.6.2.1.3 The DM-prepared data call is submitted to non-located DMs whose centers are prime on other commodities affected by the TCTO. The non-located DM submits their center data requirements to the PM DM.

3.6.2.2 The PM DM combines all data requirements, forwarding the combined DD Forms 1423 or AF Forms 585 to the PMA for attachment to the PR. Under emergency conditions, the DM issues the data call and combines the Contract Data Requirements List (CDRL) while the PR is being processed. The DM ensures the CDRL is provided to the buyer.

3.6.3 AFTO Form 874. Once the contract for the TCTO is signed, the contractor will complete an AFTO Form 874 (if required) according to Paragraph 3.10 based on data in the AFTO Form 873, and forward the forms to the PMA for coordination and approval.

3.6.4 Recommended Changes. Contractors will submit proposed associated TO Changes according to contract provisions.

3.6.5 Verification. When a TCTO is contractor-prepared and verification is accomplished elsewhere, the PM will forward a copy of the completed AFTO Form 82 to the Contracting Officer (CO - includes either the Administrative Contract Officer (ACO) or Procuring Contract Officer (PCO)) within 30 days. Forward any deficiencies noted during verification through the CO to the contractor so corrective action may be completed prior to TCTO and kit acceptance.

### 3.7 ORGANICALLY-PREPARED TCTOS.

System modifications and initial or one-time inspections must be documented and managed IAW this TO. The TCM initiates AFTO Forms 873 and 875 for all approved TCTOs (Paragraph 3.9 and Paragraph 3.11 respectively).

3.7.1 AFTO Form 874. When development of the TCTO has progressed to the point where the parts affected and kit requirements can be determined, the TCM preparing the TCTO initiates an AFTO Form 874 (Paragraph 3.10). The AFTO Form 874 is required when TCTO kits or special tools/test equipment are required, when spares are impacted, and/or when parts are added or removed. An AFTO Form 874 is not required for inspection TCTOs unless required consumables, special tools, etc., are not commonly available at the performing units.

3.7.2 Recommended Changes. The TCM preparing the TCTO also initiates the TO Recommend Change process IAW TO 00-5-3 to update each TO affected by the modification. An alternative procedure is to use the AFTO 252 process. The recommended change will identify the TCTO being supported and will specify the distribution date required to ensure concurrent release.

3.7.3 Format. After completion of the AFTO Form 874 (when required), the TCM prepares the body of the TCTO in accordance with MIL-PRF-38804.

3.7.4 TCTO History. The PMA will assemble a TCTO history folder (paper or electronic) containing the below documents. The history folder will be retained by the PMA after completion of the TCTO for the life cycle of the system or commodity affected.

- AF Forms 1067 or 3525
- Draft TCTO
- JCALS "Recommend a TM Change" and "Prepare TM Change Package" screens or the AFTO Forms 252
- AFMC Form 133, Interchangeability and Substitutability Program Worksheet
- Print-out of completed web-based Electronic Form 513, TCTO Interchangeability and Substitutability (I&S) Notification (see 4.7.6.)

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- AFTO Forms 873, 874 & 875 (as applicable)
- AFTO Form 82

**3.7.5 Pre-Release Review Group Meeting.** The PMA requests a Pre-Release Review Group (PRRG) meeting (if required) with the TCM, TO Manager and other affected activities to ensure all actions have been completed for concurrent release of the TCTO, any kits involved, and any required TO updates. The TCTO rescission period is determined at the meeting. After the meeting, the PMA or TCM submits the draft TCTO and associated JCALS “Prepare TM Change Package” work folders to the TO Manager for preparation of a pre-publication review copy. The TCM and TO Manager perform a pre-publication quality check of the draft, and submit it for publication and distribution. The TO Manager is responsible for the style, format and indexing of the TCTO.

**3.8 FORMS USED.**

There are three important forms that are used to document key information concerning equipment modifications and the TCTO required to implement the inspection or modification. The AFTO Form 873, Time Compliance Technical Order Requirements, (Figure 3-1) documents the plan and requirements for accomplishing a TCTO. The AFTO Form 874, Time Compliance Technical Order Supply Data Requirements, (Figure 3-2) is used as an assembly document for all supply information required to ensure TCTO/TCTO Kits are available before the TCTO is released. The AFTO 875, Time Compliance Technical Order Programming Document, (Figure 3-3) serves as a checklist for the PM to determine when all logistics actions are accomplished to support the completion of a TCTO and related TO Updates. Instructions for completing each of these AFTO Forms are in the ensuing paragraphs.

TIME COMPLIANCE TECHNICAL ORDER REQUIREMENTS			
1. TO		2. DATE	
<b>I. HEADING INFORMATION</b>			
3. TCTO TITLE			
4. TCTO/SUPPLEMENT	5. DATA CODE NUMBER	6. TCTO ISSUE DATE	
7. ECP NUMBER	8. CCB APPROVAL	9. END ITEM NUMBER (NSN or CPIN)	
10. REPLACES/REINSTATES TCTO NUMBER		11. TYPE/CATEGORY OF TCTO a. <input type="checkbox"/> SAFETY      d. <input type="checkbox"/> SUPPLEMENT b. <input type="checkbox"/> RECORD c. <input type="checkbox"/> IMMEDIATE <input type="checkbox"/> URGENT <input type="checkbox"/> ROUTINE	
12. CLASSIFICATION OF TCTO <input type="checkbox"/> UNCLASS <input type="checkbox"/> SECRET <input type="checkbox"/> CONF	13. MOD NUMBER	14. MIP NUMBER	15. FAA APPROVAL NUMBER
16. SAFETY TCTO MARKING REQUIRED (Routine Safety TCTO only) <input type="checkbox"/> YES <input type="checkbox"/> NO		17. RECISSION PERIOD/DATE /	
<b>II. COMPLIANCE INFORMATION</b>			
18. LEVEL OF ACCOMPLISHMENT <input type="checkbox"/> O/I LEVEL MAINTENANCE <input type="checkbox"/> DEPOT LEVEL <input type="checkbox"/> TRC <input type="checkbox"/> FIELD 20. <input type="checkbox"/> FUEL PURGE REQUIRED <input type="checkbox"/> ADDITIONAL WORK REQUIRED		19. WHEN TO BE ACCOMPLISHED a. <input type="checkbox"/> IMMEDIATELY UPON RECEIPT OF THE TCTO (Immediate) b. <input type="checkbox"/> NOT LATER THAN _____ DAYS AFTER (The TCTO) (All components) ARE AVAILABLE (Urgent) <input type="checkbox"/> URGENT <input type="checkbox"/> NOT URGENT c. <input type="checkbox"/> AT TIME OF <input type="checkbox"/> TCTO <input type="checkbox"/> ALL COMPONENTS BEING AVAILABLE d. <input type="checkbox"/> DURING DEPOT LEVEL MAINTENANCE	
21. WORK REQUIRED BY THIS TCTO WILL BE ACCOMPLISHED a. BY (ALC)      b. AS SCHEDULED BY c. <input type="checkbox"/> CONCURRENTLY WITH <input type="checkbox"/> PRIOR <input type="checkbox"/> SUBSEQUENT TO TCTO _____ DATA CODE _____ d. LAUNCH FACILITIES <input type="checkbox"/> WILL <input type="checkbox"/> WILL NOT BE REMOVED FROM ALERT STATUS TO ACCOMPLISH THIS WORK <input type="checkbox"/> N/A e. _____ SYSTEM <input type="checkbox"/> WILL <input type="checkbox"/> WILL NOT BE REMOVED FROM ALERT STATUS TO ACCOMPLISH THIS WORK <input type="checkbox"/> N/A			
22. DISTRIBUTION STATEMENT	23. REASON		24. CONTROLLING DOD OFFICE
25. AS OF DATE	26. EXPORT <input type="checkbox"/> YES <input type="checkbox"/> NO	27. HANDLING & DESTRUCTION NOTICE <input type="checkbox"/> YES <input type="checkbox"/> NO	
<b>III. SUPPLY INFORMATION</b>			
28. AFMC FORM 874 IS REQUIRED <input type="checkbox"/> YES <input type="checkbox"/> NO		29. SPARES AFFECTED <input type="checkbox"/> YES <input type="checkbox"/> NO	
30. CONTRACTOR SHOULD SUBMIT AFMC FORM 874 TO			
31. WAR RESERVE MATERIAL (WRM) <input type="checkbox"/> N/A <input type="checkbox"/> CANISTERED ITEMS AFFECTED <input type="checkbox"/> SPECIAL INSTRUCTIONS REQUIRED <input type="checkbox"/> COMPLIANCE ESSENTIAL FOR ALL WRM			
<b>IV. KIT INSTALLATION TOOLS</b>			
SPECIAL TOOLS, TEST EQUIPMENT, FIXTURES, OR SOFTWARE ARE REQUIRED <input type="checkbox"/> YES <input type="checkbox"/> NO			
<b>V. MANHOURS REQUIRED</b>		<b>VI. WEIGHT AND BALANCE</b>	
<input type="checkbox"/> EXPANDED BREAKDOWN AS SHOWN IN SPECIFICATION <input type="checkbox"/> TOTAL <input type="checkbox"/> _____ (manhours)		<input type="checkbox"/> CHANGE <input type="checkbox"/> NO CHANGE <input type="checkbox"/> N/A	

Figure 3-1. Example of AFTO Form 873 (Sheet 1 of 3)

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<b>VII. FORM ENTRY REQUIREMENTS PRESCRIBED BY THE 00-20 SERIES TECHNICAL ORDERS</b>				TCTO NO:	
32.					
<b>VIII. FUNCTIONAL CHECK</b>					
33. <input type="checkbox"/> REQUIRED <input type="checkbox"/> NOT REQUIRED <input type="checkbox"/> N/A		34. <input type="checkbox"/> FUNCTIONAL CHECK FLIGHT <input type="checkbox"/> SYSTEM OPERATIONAL CHECK <input type="checkbox"/> N/A		35. FLIGHT MANUAL MANAGER <input type="checkbox"/> N/A <input type="checkbox"/> SIGN Click here to sign	
<b>IX. TECHNICAL ORDERS</b> <input type="checkbox"/> N/A					
TECHNICAL ORDER NUMBER/CHANGE #	DATE OF BASIC/CHG	TECHNICAL ORDER NUMBER/CHANGE #	DATE OF BASIC/CHG		

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Figure 3-1. Example of AFTO Form 873 (Sheet 2)



TCTO NO:			
<b>X.</b>		<b>VERIFICATION (TCTO/K#)</b>	
36. <input type="checkbox"/> REQUIRED <input type="checkbox"/> NOT REQUIRED (See Remarks)		37. VERIFICATION SITE <input type="checkbox"/> CONTRACTOR FACILITY <input type="checkbox"/> DEPOT <input type="checkbox"/> FIELD	
<b>XII.</b>		<b>COMPLETE KIT</b>	
<b>MODIFICATION MARKINGS</b>		38. WAIVED <input type="checkbox"/> YES <input type="checkbox"/> NO MAJCOM COORDINATION FOR WAIVER – DATE _____ NAME: _____ GRADE: _____ OFFICE SYMBOL: _____ PHONE: _____	
39. REQUIRED <input type="checkbox"/> YES <input type="checkbox"/> NO	40. TYPE AND LOCATION		
<b>XII REMARKS</b>			
41. REMARKS			
42. CONTRACT NO:		43. CLIN:	
<b>XI CERTIFICATION: "I CERTIFY THAT THE ABOVE ENTRIES ARE ESSENTIAL REQUIREMENTS AND CONFORM TO EXISTING AIR FORCE POLICIES"</b>			
INDIVIDUAL PREPARING FORM (Signature, Orgn, Symbol and Phone)		BRANCH APPROVAL (Typed Name and Signature)	
Click here to sign		Click here to sign	
FAA APPROVING OFFICIAL (Typed Name and Signature)		TECH ORDER MANAGEMENT OFFICE APPROVAL (Typed Name and Signature)	
Click here to sign		Click here to sign	
PROGRAM MANAGER (PM)(Typed Name and Signature)		SAFETY OFFICE (Typed Name and Signature)	
Click here to sign		Click here to sign	

Figure 3-1. Example of AFTO Form 873 (Sheet 3)



PART B. ACTION REQUIRED ON SPARES					
NOTE: MODIFICATION OF SPARES WILL BE ACCOMPLISHED AND COMPLETED PRIOR TO MODIFICATION RESCISSION DATE.					
SPARES TO BE MODIFIED		<input type="checkbox"/> YES	<input type="checkbox"/> NO	WAR RESERVE MATERIAL TO BE MODIFIED	
				<input type="checkbox"/> YES <input type="checkbox"/> NO	
IF SPARES ARE TO BE MODIFIED, INDICATE ACTION REQUIRED IN ACTION COLUMN BY NUMERICAL REFERENCE TO APPLICABLE PHRASE BELOW.					
1. IMMEDIATELY MODIFY ALL STOCKS. CONDITION TAG ALL STOCKS AS REQUIRING TCTO COMPLIANCE.					
2. MODIFY INITIAL QUANTITY INDICATED PRIOR TO ISSUE OR SHIPMENT FROM DEPOT (item in long supply). CONDITION TAG ALL STOCKS AS REQUIRING TCTO COMPLIANCE.					
3. MODIFY ONLY AS REQUIRED ( <i>requirement exists for modified and unmodified stocks</i> )					
4. DLA ITEM. FOLLOW AFMAN 23-110 PROCEDURES.					
5. SHIP TO _____		MARKED FOR _____			
				(REWORK, SALVAGE, RECLAMATION, ETC.)	
6. WAR RESERVE MATERIAL STOCKS IN STORAGE SITE(S)					
<input type="checkbox"/> TO BE SHIPPED TO _____		FOR _____			
<input type="checkbox"/> TO BE MODIFIED LOCALLY				(REWORK, SALVAGE, RECLAMATION, ETC.)	
7. REIDENTIFY AFTER MODIFICATION (Ref MIL-STD-100 and MIL-T-38804)					
8. TAKE IMMEDIATE DISPOSAL ACTION THROUGH LOCAL DEFENSE REDISTRIBUTION AND MARKETING ORGANIZATION (DRMO).					
9. BEGIN DISPOSAL ACTION ON _____					
		(DATE)			
10. RETURN THESE PARTS TO LOCAL SUPPLY ORGANIZATION.					
11. OTHER ( <i>Indicate action to be taken</i> )					
ALL SPARES, WHETHER TO BE MODIFIED OR NOT, WILL BE LISTED BELOW AND APPROPRIATE ACTION TO BE TAKEN ON EACH ITEM WILL BE IDENTIFIED.					
*CODE* IS SAME AS PART A.					
<u>QTY</u>	<u>NSN OR CAGE CODE</u>	<u>PART NUMBER</u>	<u>NOMENCLATURE</u>	<u>SOURCE</u>	<u>CODE</u> <u>ACTION</u>
PART C. KITS/PARTS REQUIRED TO MODIFY SPARES					
<input type="checkbox"/> SAME AS PART A					
<input type="checkbox"/> IF DIFFERENT, LIST KITS AND ITEMS AND CODE AS IN PART A ABOVE.					
a. NUMBER OF KITS REQUIRED _____					
b. LIST KIT INFORMATION ON 1ST LINE BELOW, COMPONENT INFORMATION BENEATH.					
<u>QTY</u>	<u>NSN</u>	<u>PART NUMBER</u>	<u>NOMENCLATURE</u>	<u>SOURCE</u>	<u>CODE</u>

Figure 3-2. Example of AFTO Form 874 (Sheet 2)

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## PART D. DISPOSITION OF REMOVED AND REPLACED PARTS.

NOTE: CODE CRITICAL ITEMS WITH \*: CRITICAL ITEMS ARE PARTS THAT WILL DEMODIFY OR CAUSE HAZARDOUS SAFETY CONDITIONS IF REINSTALLED OR MODIFIED EQUIPMENT. THESE ITEMS WILL BE LISTED IN PART H FOR SPECIAL MANAGEMENT PROCEDURES AND CONSIDERED FOR MUTILATION. "CODE" IS SAME AS PART A.

INDICATE REQUIRED DISPOSITION BY NUMERICAL REFERENCE TO APPLICABLE PHRASE

1. TAKE IMMEDIATE DISPOSAL ACTION THROUGH LOCAL DEFENSE REDISTRIBUTION AND MARKETING ORGANIZATION (DRMO).
2. BEGIN DISPOSAL ACTION ON \_\_\_\_\_
3. RETURN THESE PARTS TO LOCAL SUPPLY ORGANIZATION
4. DLA ITEM. FOLLOW AFMAN 23-110 PROCEDURES.
5. OTHER (*Indicate action to be taken*) \_\_\_\_\_

NSNPART NO.NOMENCLATURECODEACTION

Figure 3-2. Example of AFTO Form 874 (Sheet 3)

PART E. MINOR ASSEMBLIES AND PARTS <i>(Including M &amp; O Type Items)</i>			
LIST ALL OFM/DEPOT AND TRC PARTS <i>(Bits and Pieces)</i> AFFECTED AND INDICATE ACTION REQUIRED IN ACTION COLUMN BY NUMERICAL REFERENCE TO APPLICABLE PHRASE.			
1. TAKE IMMEDIATE DISPOSAL ACTION THROUGH LOCAL DEFENSE REDISTRIBUTION AND MARKETING ORGANIZATION (DRMO).			
2. BEGIN DISPOSAL ACTION ON _____			
3. RETURN THESE PARTS TO LOCAL SUPPLY ORGANIZATION			
4. DLA ITEM. FOLLOW AFMAN 23-110 PROCEDURE.			
5. OTHER <i>(Indicate action to be taken)</i> _____			
<u>NSN OR CAGE CODE</u>	<u>PART NO.</u>	<u>NOMENCLATURE</u>	<u>ACTION</u>

Figure 3-2. Example of AFTO Form 874 (Sheet 4)

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PART F: SIZE, WEIGHT AND COST OF KITS			
<u>KIT LETTER</u>	<u>SIZE</u>	<u>WEIGHT</u>	<u>COST (Compute IAW AFMAN 23-110, Vol 1, Part One, Chap 7)</u>

PART G. DISPOSITION OF KITS <i>(Following Modification time Period)</i>	
<input type="checkbox"/> KITS REMAINING IN STOCK AFTER RECISSION DATE _____ OR COMPLETION OF MODIFICATION REQUIREMENTS WILL BE REPORTED EXCESS TO KIT MANAGER _____ IAW AFMAN 23-110, VOL VI FOR DISPOSITION INSTRUCTIONS.	ALC CODE
<input type="checkbox"/> RETURN TO _____ ALC	
<input type="checkbox"/> OTHER <i>(Explain reason checking this block)</i>	

PART H. ACTION REQUIRED ON SUPPLY RECORDS. <i>(For those critical items identified in Part D With * )</i>			
1. AF BASE RECORDS.			
<u>NSN</u>	<u>PART NO.</u>	<u>NOMENCLATURE</u>	<i>(Assign SM Code or Issue Exception Code IAW AFMAN 23-110, Vol II, part 2, Chap 8 or Vol II, Part 1 as applicable)</i>
2. BASE SUPPORT RECORDS			
<u>NSN</u>	<u>PART NO.</u>	<u>NOMENCLATURE</u>	<i>(Assign SM Code IAW AFMAN 23-110, Vol III, Part 2)</i>
3. DEPOT RECORDS			
<u>NSN</u>	<u>PART NO.</u>	<u>NOMENCLATURE</u>	<i>(Assign SM, Code IAW AFMAN 23-110, Vol III, Part 1 and Vol III, Part 3)</i>

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Figure 3-2. Example of AFTO Form 874 (Sheet 5)

PART J. KIT INSTALLATION TOOLS ( <i>special tools, test equipment, or fixtures</i> ) . NSNs MARKED WITH * REQUIRE TABLE OF ALLOWANCE (TA) ACTIONS.				
<u>NSN</u>	<u>PART NO.</u>	<u>NOMENCLATURE</u>	<u>SOURCE</u>	<u>DISPOSITION</u>
PART K. REMARKS				
PART L. CERTIFICATION				
EQUIPMENT SPECIALIST	OFFICE SYMBOL	PHONE	SIGNATURE Click to sign	
EQUIPMENT MANAGER'S BRANCH	OFFICE SYMBOL	SIGNATURE Click to sign		DATE
APPROVAL OF SM	OFFICE SYMBOL	SIGNATURE Click to sign		DATE
PRODUCTION MANAGEMENT SPECIALIST	OFFICE SYMBOL	PHONE	SIGNATURE Click to sign	
ENGINEER	OFFICE SYMBOL	SIGNATURE Click to sign		DATE
CONTRACTOR'S SIGNATURE ( <i>If applicable</i> )				

Figure 3-2. Example of AFTO Form 874 (Sheet 6)



TO 00-5-15

TIME COMPLIANCE TECHNICAL ORDER PROGRAMMING DOCUMENT				
FROM (Office Symbol)		TO (Office Symbol)		
TCTO NUMBER		TCTO TITLE/APPLICATION		
TCTO IS <input type="checkbox"/> CLASSIFIED <input type="checkbox"/> SAFETY <input type="checkbox"/> UNCLASSIFIED <input type="checkbox"/> RECORD		TYPE <input type="checkbox"/> IMMEDIATE <input type="checkbox"/> URGENT <input type="checkbox"/> ROUTINE		ACCOMPLISHED AT <input type="checkbox"/> ORG / INTERM <input type="checkbox"/> DEPOT <input type="checkbox"/> CONTR FACILITY <input type="checkbox"/> OTHER
RESCISSON PERIOD / DATE		TCTO ISSUE DATE		DATA CODE NUMBER
				MATERIAL SAFETY NUMBER
ITEM NO.	ITEM	REFERENCE	ACTION REQUIRED	ACTION COMPLETED
			DATE PROGRAMMED AND/OR REMARKS	DATE AND REMARKS
1	<b>TCTO</b>	TO 00-5-15		
a.	AFMC FORM 873 PREPARED			
b.	AFMC FORM 874 PREPARED			
c.	TCTO REVIEWED BY TO MGMT OFF			
d.	TCTO AND DATA CODE NUMBER ASSIGNED			
e.	TCTO PREPARED BY <input type="checkbox"/> CONTRACTOR <input type="checkbox"/> ORGAN AVAIL DATE _____			
f.	TCTO INCLUDES INSTRUCTIONS FOR PART NUMBER CHANGE			
g.	AF SAFETY AND HEALTH REVIEW	AFI 91-301		
2	<b>TECHNICAL ORDERS (TO)</b>	TO 00-5-15		
a.	TO's WILL NEED UPDATING (incl-6 work cards, tapes)			
b.	FLIGHT MANUALS AFFECTED	AFI 11-215		
c.	CORROSION PREVENTION AND CONTROL PROGRAM COORDINATION	AFI 21-105 AFMCI 21-117		
d.	NDI PROGRAM COORDINATION	AFI 21-105		
e.	AFFECTED TO's REVIEWED AND AFMC 252 SUBMITTED to T.O. MGMT OFFICE			
f.	UPDATING ACCOMPLISHED BY <input type="checkbox"/> CONTRACTOR <input type="checkbox"/> ORGANIC	AFI 21-105		
g.	FORMAL MANUALS WORK CARDS OR TAPE CHANGE AVAIL DATE			
h.	SAFETY OR OPERATIONAL SUPPLEMENT AVAILABILITY DATE			

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Figure 3-3. Example of AFTO Form 875 (Sheet 1 of 5)

ITEM NO.	ITEM	REFERENCE	ACTION REQUIRED	ACTION COMPLETED
			DATE PROGRAMMED AND/OR REMARKS	DATE AND REMARKS
<b>3</b>	<b>MODIFICATION KIT</b>	T.O. 00-5-15		
a.	KIT REQUIRED			
b.	GFP SCREENING FOR AVAILABILITY OF KIT COMPONENTS REQUIRED			
c.	DEPOT MFR OF PARTS REQUIRED			
d.	COMPONENTS ARE SUBJECT TO GFE			
e.	SPARES AFFECTED			
f.	KIT INSTALLATION TOOLS REQUIRED			
g.	AFMC FORM 185 REQUIRED			
h.	HAZARDOUS MATERIALS CONTAINED/ MARKINGS ACCOMPLISHED	AFI 32-7086/ AFMC Sup 1		
<b>4</b>	<b>TCTO/KIT VERIFICATION</b>	T.O. 00-5-15		
a.	AFTO FORM 82 INITIATED			
b.	TCTO VERIFICATION SCHEDULED DATE: _____			
c.	WHERE TO BE ACCOMPLISHED <input type="checkbox"/> CONTRACTOR <input type="checkbox"/> DEPOT <input type="checkbox"/> FIELD			
d.	MAJCOM / BASE NOTIFIED ( <i>Name, Orgn, Phone</i> )			
e.	SITE AND EQUIPMENT (MDS) SCHEDULED			
<b>5</b>	<b>SUPPLY RECORDS</b>	AFMAN23-110V3P1		
a.	COMMODITY MGR(s) NOTIFIED TO REVIEW ASSIGNED MANAGER CODES ON CRITICAL ITEMS			
b.	DATE CODE BECOMES EFFECTIVE			
c.	PERSON NOTIFIED ( <i>Name, Orgn, Phone</i> )			
<b>6.</b>	<b>DISPOSAL ACTION</b>	T.O. 00-5-15		
a.	ACTION WILL BEGIN ON REMOVED AND REPLACED PARTS DATE: _____			
b.	DD FORM 1348-1 HAS BEEN PREPARED			
<b>7.</b>	<b>SHELF LIFE CONTROL</b>	T.O. 00-5-15		
a.	SHELF LIFE CONTROL ITEMS IDENTIFIED ON AFMC FORMS 874 AND 172			
b.	CODED IN TCTO			
c.	IDENTIFIED IN KIT CONTENTS LIST			

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Figure 3-3. Example of AFTO Form 875 (Sheet 2)

TO 00-5-15

ITEM NO.	ITEM	REFERENCE	ACTION REQUIRED	ACTION COMPLETED
			DATE PROGRAMMED AND/OR REMARKS	DATE AND REMARKS
<b>8</b>	<b>CONFIGURATION MANAGEMENT</b>	AFMCPAM 63-104		
a.	CONFIGURATION OF SYSTEMS/EQUIPMENT IS AFFECTED			
b.	FORMS FOR INPUT INTO RECORDS SUBMITTED			
<b>9</b>	<b>REPAIR KIT PARTS</b>	AFMAN 25-1		
a.	PARTS IN REPAIR KITS ARE AFFECTED BY MOD			
b.	ACTION HAS BEEN TAKEN TO REALIGN REPAIR KITS			
<b>10</b>	<b>SUPPORT EQUIPMENT (SE)</b>	AFMCI 23-104		
a.	CHANGES ARE REQUIRED TO SE			
b.	SE IS <input type="checkbox"/> COMMON <input type="checkbox"/> PECULIAR			
c.	SE COMMODITY MANAGER NOTIFIED			
d.	ADDITIONAL SE REQUIRED DUE TO MODIFICATION			
e.	TA ADJUSTMENT HAS BEEN SUBMITTED			
<b>11</b>	<b>SPARE SUPPORT</b>	AFMCI 23-101		
a.	NEW ITEMS IN THE AF INVENTORY WILL BE AVAILABLE DATE: _____			
b.	ITEMS SMR CODED			
c.	PROVISIONING ACCOMPLISHED			
<b>12</b>	<b>STOCK LIST</b>	AFMCMAN 23-3		
a.	ACTION TAKEN TO INITIATE STOCK LIST CHANGE FOR NEW PARTS			
b.	CATALOGING/PROVISIONING DATA CHANGE NOTIFICATION INITIATED			
c.	PART NUMBER CHANGE REQUIRED AND ENTERED IN MCRL			
d.	IF PECULIAR PARTS ARE REMOVED FROM INSTL, CATALOGING NOTIFIED TO DELETE STOCK NO.			
<b>13</b>	<b>INTERCHANGEABILITY</b>	AFMCMAN 23-3		
a.	INTERCHANGEABILITY AFFECTED			
b.	CASC HAS BEEN NOTIFIED TO PREPARE CHANGE TO I&S STOCK LIST			
c.	NEW PART NUMBERS FOR MODIFIED ITEMS WILL BE AVAILABLE	AFMAN23-110V1P1		
d.	NOMENCLATURE CHANGE COMPL DATE			

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Figure 3-3. Example of AFTO Form 875 (Sheet 3)

ITEM NO.	ITEM	REFERENCE	ACTION REQUIRED	ACTION COMPLETED
			DATE PROGRAMMED AND/OR REMARKS	DATE AND REMARKS
<b>14</b>	<b>ENGINEERING DRAWINGS</b>	AFMCI 21-401		
a.	NEW OR CHANGED DRWG RQRD FOR <input type="checkbox"/> WEAPON SYS <input type="checkbox"/> COMP <input type="checkbox"/> BOTH			
b.	AF FORM 2600 SUBMITTED DATE: _____	AFI 21-204		
c.	DRAWINGS WILL BE AVAILABLE DATE: _____			
d.	DD FORM 1423 REQUIRES CONTRACTOR TO FURNISH NEW OR REVISED DRAWINGS			
<b>15</b>	<b>PERSONNEL TRAINING</b>	AFI 36-2232		
a.	ADDITIONAL TRAINING IS REQUIRED			
b.	REQUEST FOR TRAINING HAS BEEN SUBMITTED TO PERS AND ADMIN OFC			
c.	ATC REQUIREMENTS CONSIDERED			
<b>16</b>	<b>TRAINING EQUIPMENT</b>	AFI36-2232/TO00-5-15		
a.	TRAINING EQUIPMENT IS AFFECTED-OO-ALC CONTACTED DATE: _____			
b.	KITS ARE REQUIRED FOR MOD OF MTUs			
c.	AFFECTED SN's HAVE BEEN PLACED IN W/S TCTOS (Date)			
d.	AFFECTED TRAINING EQUIPMENT MANUALS REQUIRE CHANGE			
e.	TRAINING EQUIPMENT MODIFICATION IS COMPATIBLE WITH SYSTEM/EQUIPMENT MODIFICATION			
<b>17</b>	<b>OTHER AGENCIES/DEPARTMENTS</b>			
a.	ITEMS OF ANOTHER DEPARTMENT ARE INVOLVED			
b.	DEPARTMENT NOTIFIED DATE: _____			
c.	EQUIPMENT IS USED BY SECURITY ASSISTANCE PROGRAM COUNTRIES			
<b>18</b>	<b>PRESERVATION AND PACKAGING DATA</b>	AFMCI 24-201		
a.	AFMC FORM 158 HAS BEEN ACCOMPLISHED			
b.	CURRENT PACKAGING DATA NEEDS CHANGE			
<b>19</b>	<b>MASTER MATERIAL SUPPORT RECORD</b>	AFMCMAN 33-2		
a.	MOD AFFECTS PART/MATERIAL LISTED ON RDB/API RECORD			
b.	FILE MAINTENANCE HAS BEEN ACCOMPLISHED IN RDB/API			

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Figure 3-3. Example of AFTO Form 875 (Sheet 4)

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ITEM NO.	ITEM	REFERENCE	ACTION REQUIRED	ACTION COMPLETED																								
			DATE PROGRAMMED AND/OR REMARKS	DATE AND REMARKS																								
<b>20</b>	<b>OTHER</b>																											
a.	MOD CHANGES SECURITY CLASS OF <input type="checkbox"/> EQUIPMENT <input type="checkbox"/> DATA	AFI 31-401																										
b.	WAR RESERVE MATERIAL (WRM) CONSIDERED	AFMAN 23-110V1P1																										
c.	MISSILE TARGETING IS AFFECTED																											
d.	TARGETING OFFICER HAS BEEN NOTIFIED																											
e.	IS ISSL AFFECTED? / LOADED?	AFMAN 23-110V1P1																										
f.	SOFTWARE CHANGES INVOLVED	TO 00-5-15																										
21. ADDITIONAL REMARKS																												
<p>22. <b>CERTIFICATION</b></p> <table border="1"> <tr> <td>ENGINEERING SPECIALIST <i>(Typed Name and Signature)</i></td> <td>OFFICE SYMBOL</td> <td>PHONE</td> <td>DATE</td> </tr> <tr> <td>CLICK HERE TO SIGN</td> <td></td> <td></td> <td></td> </tr> <tr> <td>PRODUCTION SPECIALIST <i>(Typed Name and Signature)</i></td> <td>OFFICE SYMBOL</td> <td>PHONE</td> <td>DATE</td> </tr> <tr> <td>CLICK HERE TO SIGN</td> <td></td> <td></td> <td></td> </tr> </table> <p>To the best of my knowledge, I certify that all logistics actions for this modification are completed and ready for release.</p> <p><input type="checkbox"/> IMMEDIATELY <input type="checkbox"/> ON _____</p> <table border="1"> <tr> <td>PRODUCTION DIVISION/BRANCH CHIEF <i>(Typed Name and Signature)</i></td> <td>OFFICE SYMBOL</td> <td>PHONE</td> <td>DATE</td> </tr> <tr> <td>CLICK HERE TO SIGN</td> <td></td> <td></td> <td></td> </tr> </table>					ENGINEERING SPECIALIST <i>(Typed Name and Signature)</i>	OFFICE SYMBOL	PHONE	DATE	CLICK HERE TO SIGN				PRODUCTION SPECIALIST <i>(Typed Name and Signature)</i>	OFFICE SYMBOL	PHONE	DATE	CLICK HERE TO SIGN				PRODUCTION DIVISION/BRANCH CHIEF <i>(Typed Name and Signature)</i>	OFFICE SYMBOL	PHONE	DATE	CLICK HERE TO SIGN			
ENGINEERING SPECIALIST <i>(Typed Name and Signature)</i>	OFFICE SYMBOL	PHONE	DATE																									
CLICK HERE TO SIGN																												
PRODUCTION SPECIALIST <i>(Typed Name and Signature)</i>	OFFICE SYMBOL	PHONE	DATE																									
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PRODUCTION DIVISION/BRANCH CHIEF <i>(Typed Name and Signature)</i>	OFFICE SYMBOL	PHONE	DATE																									
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Figure 3-3. Example of AFTO Form 875 (Sheet 5)

### 3.9 AFTO FORM 873 COMPLETION AND PROCESSING.

3.9.1 General. The responsible TCM will complete the AFTO Form 873. The form documents the plan for accomplishment of the TCTO.

#### **NOTE**

When a supplement or change to a TCTO is developed, complete only the AFTO Form 873 blocks that changed from the original form.

### 3.9.2 AFTO Form 873 Completion.

3.9.2.1 Block 1, To. The organization and address, contractor or organic, which will prepare the TCTO.

3.9.2.2 Block 2, Date. Date prepared.

### 3.9.3 Part I, Heading Information.

3.9.3.1 Block 3, TCTO Title. The first two words of a TCTO title must indicate the action required, i.e., "Modification of...", "Replacement of...", "Installation of...", "Rework of...", "Removal of...", "Calibration of...", "Relocation of...", "Inspection of...", or "Issuance of... (software)." The rest of the title will be formatted in accordance with Appendix B and MIL-PRF-38804 and must include both old and new part numbers when a change occurs. Supplements will use the same title as the affected basic TCTO.

3.9.3.2 Block 4, TCTO/Supplement Number. Obtain from the TO Manager.

3.9.3.3 Block 5, Data Code Number. Obtain from the TO Manager.

3.9.3.4 Block 6, TCTO Issue Date. The date should be consistent with the availability of the first shipment of kits (when required) to operational units and publication of related TO updates to ensure concurrent logistics support. If the AFTO Form 873 is for a contractor-controlled modification, annotate "See remarks" here and add a remark in block 40: "The contractor shall establish the TCTO issue date based upon availability of kits and related TO updates."

3.9.3.5 Block 7, ECP Number. When an ECP or EO generated the TCTO.

3.9.3.6 Block 8, CCB Approval Date. Obtain from the AF Form 3525.

3.9.3.7 Block 9, End Item Number (NSN or CPIN). The assigned National Stock Number (NSN) of the item being modified or inspected, or the CPIN of the software being distributed. If a NSN has not been assigned, enter the stock class followed by the manufacturer part number, and enter the manufacturer Commercial and Government Entity (CAGE) code in the remarks block.

3.9.3.8 Block 10, Replaces/Reinstates TCTO Number. When applicable.

3.9.3.9 Block 11, Type/Category Of TCTO. Check one box for the category of the TCTO, Table 3-1, TCTO Matrix Chart and if applicable, the boxes for SAFETY, RECORD and/or SUPPLEMENT.

3.9.3.10 Block 12, Classification Of TCTO. Check the applicable box.

3.9.3.11 Block 13, Mod Number. Obtain from the AF Form 3525.

3.9.3.12 Block 14, MIP Number. Complete according to local operating instructions.

3.9.3.13 Block 15, FAA Approval Number. Obtain from the FAA when the modification has a joint FAA/Air Force impact.

3.9.3.14 Block 16, Safety TCTO Marking Required (Routine Safety TCTO Only). Check appropriate box.

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**3.9.3.15 Block 17, Rescission Period/Date.** When an issue date has been entered in block 6, enter the appropriate rescission date here. If block 6 was annotated "See remarks," enter the rescission period from Table 3-1, TCTO Matrix Chart. The PRRG will enter the actual rescission date prior to release of the TCTO.

**3.9.4 Part II, Compliance Information.**

**3.9.4.1 Block 18, Level Of Accomplishment.** Check the applicable boxes. In accordance with this TO, TCTOs will normally be accomplished at the O & I level only when the required skills and equipment are available, and not more than 8 clock hours and 25 man-hours are required. All other TCTOs will be depot-level. Exceptions may be negotiated between the using commands and the responsible TCM.

**3.9.4.2 Block 19, When To Be Accomplished.** Check the appropriate boxes for the urgency and maintenance level of the TCTO. If "b" for urgent TCTOs is checked, enter the number of "days after." If "c" for routine TCTOs is checked, and TCTO accomplishment is keyed to an event, enter the event on the blank line. If either "b" or "c" is checked, delete the non-applicable term ("THE TCTO" or "ALL COMPONENTS") in parentheses.

**3.9.4.3 Block 20.** Check applicable boxes.

**3.9.4.4 Block 21, Work Required By This TCTO Will Be Accomplished.**

**3.9.4.4.1 Block 21a, By (ALC).** Identify the organization which will perform a depot-level TCTO (it is assumed that O/I-level TCTOs will be performed by all units possessing the equipment to be modified/inspected).

**3.9.4.4.2 Block 21b, As Scheduled By.** Enter the organization responsible for scheduling TCTO accomplishment (user, production manager, contractor, etc.).

**3.9.4.4.3 Block 21c.** Mark the appropriate box for "Concurrently With," "Prior To," Or "Subsequent To" and enter the controlling TCTO number and data code, if applicable.

**3.9.4.4.4 Block 21d, Launch Facilities.** Mark the appropriate box.

**3.9.4.4.5 Block 21e, Alert-Committed System.** If alert-committed systems other than launch facilities are affected by the TCTO, enter the system name and mark the appropriate box as above.

**3.9.4.5 Block 22, Distribution Statement.** Enter the applicable AFI 61-204 distribution statement code.

**3.9.4.6 Block 23, Reason.** Enter the reason (justification) for the distribution statement selected.

**3.9.4.7 Block 24, Controlling DoD Office.** Enter the appropriate OPR office symbol.

**3.9.4.8 Block 25, As Of Date.** Enter the effective date of the distribution restriction (normally the publication date of the basic TCTO).

**3.9.4.9 Block 26, Export Controlled.** Check one.

**3.9.4.10 Block 27, Handling & Destruction Notice.** Check one.

**3.9.5 Part III, Supply Information.**

**3.9.5.1 Block 28, AFTO Form 874 Is Required.** Mark one.

**3.9.5.2 Block 29, Spares Affected.** Check one.

**3.9.5.3 Block 30, Contractor Should Submit AFTO Form 874 To.** If the AFTO Form 874 is to be contractor-prepared, enter the address to which the form must be sent upon completion (normally the responsible program management agency).

**3.9.5.4 Block 31, War Reserve Materiel (WRM).** Mark the appropriate boxes.



**3.9.6 Part IV, Kit Installation Tools.** Special tools, test equipment, fixtures or software are the items not usually available to the organization performing the TCTO, and which must be obtained or manufactured specifically for the TCTO. Mark the appropriate box.

#### NOTE

Software will be distributed through the CPIN system. Special equipment will be distributed as specified on the AFTO Form 874.

**3.9.7 Part V, Man-Hours Required.** Mark the appropriate box, and if known, enter the man-hours total. All unclassified TCTOs will have man-hours given Air Force Specialty Code (AFSC) unless only one man and less than one man-hour is required (MIL-PRF-38804). Leave blank for classified TCTOs.

#### NOTE

TCTOs cannot be supplemented to change man-hours.

**3.9.8 Part VI, Weight And Balance.** For aircraft-related TCTOs, check “Yes” or “No.” For non-aircraft-related commodity TCTOs, check “N/A.”

**3.9.9 Part VII, Form Entry Requirements Prescribed By The 00-20-Series Technical Orders/TCTO No.** Enter the specific reporting instructions specified by TOs 00-20-1, Aerospace Equipment Maintenance Inspection, Documentation, Policy and Procedures, or 00-20-2, Maintenance Data Documentation, in accordance with MIL-PRF-38804. Enter the identification of the system or equipment affected by the TCTO. List the part numbers of commodity items, and the registration or serial numbers of serialized end items to which the TCTO applies. Reporting instructions must also be provided for the spares part numbers. For IMDS, enter “Upon completion of the TCTO, update the applicable maintenance data collection systems according to command directives.” Enter the TCTO number in the space provided.

**3.9.10 Part VIII, Functional Check.**

**3.9.10.1 Block 32.** Check the appropriate box.

**3.9.10.2 Block 33.** If block 32 “Required” was checked, mark either “Functional Check Flight (FCF)” Or “System Operational Check;” otherwise, mark “N/A.”

**3.9.10.3 Block 34, Flight Manual Manager Coordination.** If the TCTO is aircraft-related or affects flight manuals, obtain the FMM signature. For other TCTOs, mark “N/A.”

**3.9.11 Part IX, Technical Orders Affected.** If no related TO updates are required, check N/A. Otherwise, enter the complete list of TOs affected by the TCTO. If the TCTO is developed by a contractor, enter “As identified in Paragraph 7d of the TCTO.”

#### NOTE

The ES/TCM responsible for the TCTO must complete a JCALS “Recommend a TM Change” or an AFTO Form 252 for each TO listed, and send them to the PMA. The PMA will ensure that the draft TCTO and JCALS RC screens/AFTO Forms 252 are sent to the TO Manager for publication and concurrent release. The PMA is responsible for overseeing the availability and concurrent release of kits, parts, TCTO and related TO updates. If a contractor is developing the TCTO, the responsibilities may be discharged by the contractor.

**3.9.12 Part X, Verification (TCTO/Kit).**

**3.9.12.1 Block 35.** If “Not Required” is checked, a waiver must be documented in the remarks block.

**3.9.12.2 Block 36, Verification Site.** Mark the appropriate box. Enter the site location in the remarks block.

**3.9.13 Part XI, Complete Kit.**

**3.9.13.1 Block 37, Waive.** Any deviation from the complete kit concept must be approved in accordance with TO 00-5-15.

**TO 00-5-15****3.9.14 Part XII, Modification Markings.**

**3.9.14.1 Block 38, Required.** Mark the appropriate box.

**3.9.14.2 Block 39, Type and Location.** Indicate the type and location of markings for other than part number changes in accordance with MIL-PRF-38804.

**3.9.15 Part XIII, Remarks.**

**3.9.15.1 Block 40, Remarks.** Items entered as continuations must indicate the part or block continued. If TCTO and data code numbers are obtained for use by another ALC or Product Center (PC), identify the center here. The TCM shall list all FMS countries who can receive the TCTO.

**3.9.15.2 Block 41, Contract No.** Enter if a contractor team is the action agency.

**3.9.15.3 Block 42, CLIN.** Enter the applicable Contract Line Item Number.

**NOTE**

The Certification block should be signed by the responsible TO Manager. If TOs managed by other PMs are involved, the Center TO Home Office should coordinate in the remarks block.

**3.9.16 Part XIV, Certification.** The PMA will return the AFTO Form 873 to the originator if the required signatures are not present. A copy of the completed AFTO Form 873 is forwarded to the contractor when applicable. The signed original will be retained by the PMA as part of the modification history file until TCTO completion. The history file will be retained by the PMA for the life cycle of the system or commodity affected.

**3.10 AFTO FORM 874 COMPLETION AND PROCESSING.**

**3.10.1 General.** The AFTO Form 874 is used to provide supply-related information for the TCTO. The PMA must complete approval and processing of the form within 30 days of receipt from the contractor or other preparing activity. Requirements personnel must coordinate on the form if supply actions are required. The original signed copy of the form will be retained by the PMA as part of the history file of the modification. After completion of the TCTO, the PMA will maintain the history file for the life cycle of the system or commodity affected.

**NOTE**

- The AFTO Form 874 has been approved by the Office of Management and Budget (OMB Number 0704-0188) for preparation by Air Force contractors.
- If a TCTO requiring kits/special tools/test equipment must be released as an ITO, it may be processed and released prior to completion and approval of the AFTO Form. However, the TCM must obtain coordination and approval of the supply information in the draft ITCTO before it is released.

**3.10.2 Explanation of Terms.**

**3.10.2.1 Critical Item.** As used here, pertains to parts which could cause demodification or create hazardous conditions if reinstalled on modified equipment.

**3.10.2.2 Spares.** Items in stock affected by the modification or inspection.

**3.10.3 Responsibilities.****3.10.3.1 TCM for Contractor-Prepared AFTO Forms 874.**

**3.10.3.1.1** Reviews AFTO Form 874 within 7 days after receipt from the PMA to determine kit requirements and critical items.

3.10.3.1.2 Ensures the contractor has listed the NSNs for all stock listed items and the manufacturer part number and CAGE code for non-stock listed items on the AFTO Form 874. Include any items which will require re-identification after modification. Work through the PMA to obtain any missing information.

3.10.3.1.3 Ensures the contractor has calculated the number of kits required for installs and spares.

3.10.3.1.4 Returns the form to the PMA after the review.

3.10.3.2 TCM for Organically-Prepared AFTO Forms 874).

3.10.3.2.1 Initiates the form.

3.10.3.2.2 Submits the form to the PMA for coordination of any supply actions.

3.10.3.2.3 Notifies individual Item Managers (IM) and DLA responsible for items affected by the TCTO of potential impacts on assigned equipment.

3.10.3.2.4 Reviews completed form after return from requirements section, and submits to PMA for file.

3.10.3.3 PM. The PM will assign the end item manager to:

3.10.3.3.1 Receive the AFTO Form 874 from the PMA.

3.10.3.3.2 Decide individual responsibilities and accomplish the coordination of TCTO supply data through use of the AFMC Form 172 in accordance with AFMAN 23-110.

3.10.3.3.3 Receive the completed AFMC Form 172 from affected individual component/piece/part managers, annotate relevant supply requirements on the AFTO Form 874, obtain branch signature in the block marked "Equipment Manager's Branch," and return the AFTO Form 874 to the PMA.

3.10.3.4 IMs and DLA Agencies. Individual item managers and DLA agencies responsible for items affected by the TCTO will be notified of the potential impacts on assigned equipment, and kept apprised of any changes to requirements or schedule slippages. IMs and DLA agencies will:

3.10.3.4.1 Annotate the quantities of spares to be modified.

3.10.3.4.2 When the TCTO is specified for accomplishment during Programmed Depot Maintenance (PDM) only, provide specific action required on serviceable items in stock.

3.10.3.4.3 Ensure the only information included in Part B is pertinent to spares in stock and does not include action for removed or replaced parts. (Information about removed and replaced parts is included only in Part D.)

3.10.3.4.4 Provide disposal instructions for modified critical spares or components of spares with no other equipment application.

3.10.3.4.5 Review and complete Part H by assigning proper manager review codes in accordance with AFMAN 23-110 for the items identified as critical in Part D.

3.10.3.4.6 Review the AFTO Form 874 for affected parts added or deleted by the TCTO, and take proper stock balance adjustment action. (Consider reducing projected demand and repair rates, reducing or terminating purchase requests and contracts, establishing order requirements for new components, or making other adjustments as required.)

3.10.3.4.7 Submit all non-NSN (Non-development (ND), Kits) and NSN requests using the Air Force Federal Logistics Information System (FLIS) Edit and Routing System (D143C) or hard copy AF Form 86, Request for Cataloging Data/Action, in accordance with AFMCMAN 23-3 for cataloging assignment and/or maintenance actions.

3.10.3.4.8 Electronically transmit a digital AFTO Form 874 as an e-mail attachment to the DLIS/KDAS TCTO Focal Point (DLIS/KDAS, 74 Washington Ave N, Ste 7, Battle-Creek, MI 49017-3084, e-mail: J6BAFCAT@dla.mil).

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3.10.3.4.9 Return the AFTO Form 874 to the end item manager.

3.10.3.4.10 Immediately after all affected equipment has been modified and the TCTO has been rescinded, ensure disposition of excess kits in accordance with AFMAN 23-110.

3.10.3.5 The Cataloging Activity, DLIS/KDAS will:

3.10.3.5.1 Receive digital AFTO Form 874 and perform an I&S review. Complete the I&S review and return the form electronically within 10 working days.

3.10.3.5.2 Receive non-NSN or NSN requests (D143C or AF Form 86) and process as necessary.

3.10.3.6 Production Management Activities will:

3.10.3.6.1 Serve as program monitor for all documentation relating to the TCTO.

3.10.3.6.2 Receive contractor-prepared AFTO Forms 874 and suspense to affected government coordinating and approval activities.

3.10.3.6.3 Receive organically-prepared AFTO Forms 874 from TCMs and manage coordination and approval requirements.

3.10.3.6.4 Ensure the responsible PM forwards the Base's AF Form 86 request to the cataloging activity for input to Battle-Creek for all new provisioned or non-NSN items identified on the AFTO Form 874.

3.10.3.6.5 Review the AFTO Form 874 for kit application and ensure the quantity corresponds to the purchase request for kit procurement.

3.10.3.6.6 Indicate in Part A the Air Force Stock Record Account Number (SRAN) from which kits are requisitioned. Omit category "A" distribution except for nuclear ordnance commodities.

3.10.3.6.7 Establish or update records required to perform kit distribution and management.

3.10.3.6.8 Ensure all required signatures have been entered on the AFTO Form 874. Keep one copy for record purposes and return the original to the originator. For contractor-prepared forms, provide a copy to the TCM.

3.10.4 Instructions for Completing AFTO Form 874.

3.10.4.1 Heading Information.

3.10.4.1.1 Return To. The activity preparing the TCTO (TCM or contractor return address).

3.10.4.1.2 Date. Form preparation date or (if contractor-prepared) date submitted to the government.

3.10.4.1.3 Date First Kit Must be Available. Entered by the government based on modification program requirements.

3.10.4.1.4 TCTO Number and Data Code Number. Obtain from AFTO Form 873.

3.10.4.1.5 TCTO Title and Application. Obtain from AFTO Form 873.

3.10.4.1.6 Kit Assembly. Check the appropriate box.

3.10.4.2 Part A, Kits/Parts Required Per Aerospace Vehicle or Commodity Item. If kits are NOT required, mark the appropriate box. When kits are required, identify the activity to which kit requisitions are submitted. Indicate the total number of kits required for modification of in-use assets. Indicate if any non-kitted parts and materials are required. Enter kit delivery dates. Enter the first ("A") kit information on the first line of the list, followed by each component part. Then enter data for additional kits (if required) in the same manner. The proper information and requisitioning data are reflected in the

source column. The block must list and code all items for the modification. Items for which no substitutes are authorized must be indicated. When possible, list substitutes for the items with no suitable substitutes in the Air Force stock listed (limit 5). If more space is needed, separate sheets identifying the TCTO and AFTO Form 874, Part A, may be attached.

**3.10.4.3 Part B, Action Required On Spares.** Identify all items affected by the modification, including the embedded recoverable items and expendable items used to support and repair components. Show spares, mobile spares kits and WRM affected by the TCTO. Indicate where the items are to be modified and the specific actions required on each. The end item manager will verify and correct the recommended actions as required.

**3.10.4.4 Part C, Kits/Parts Required To Modify Spares.** List kits and parts required to modify spares, if different from the requirements of part A. If there is no difference, check the first box; otherwise, complete using the instructions for part A. Indicate the number of kits required to modify all known spares.

**3.10.4.5 Part D, Disposition of Removed and Replaced Parts.** Complete the section to provide instructions for disposition of removed and replaced parts. The end item manager will verify and correct the recommended disposition instructions if necessary. The instructions must provide for disposition in compliance with all established policies. All items critical to flight safety or which cause demodification if reinstalled on modified equipment will be coded as such on the AFTO Form 874. Instructions must be provided for mutilation of critical parts NOT usable in other applications. The mutilation instructions and disposal instructions prescribed by AFMAN 23-110 must be a warning note preceding the tabular listing of the item or items in paragraph 5.1.4 of all applicable TCTOs (MIL-PRF-38804).

**3.10.4.6 Part E, Minor Assemblies and Parts.** Identify and list disposal actions for items (bits and pieces, economic order quantity type) which are currently in the supply system and which will become obsolete with the accomplishment of the TCTO.

**3.10.4.7 Part F, Size, Weight and Cost of Kits.** List the kit identification number, size, weight, and cost.

**3.10.4.8 Part G, Disposition of Kits.** Provide disposition instructions for excess kits at the time of TCTO rescission.

**3.10.4.9 Part H, Action Required On Supply Records.** Identify action required on supply records and list all critical items. Item manager review codes are listed in AFMAN 23-110. Item manager and depot supply records will be coded immediately upon release of the TCTO.

**3.10.4.10 Part J, Kit Installation Tools.** List all special tools, test equipment or fixtures required for kit installation which are not normally available to the performing activity. The method of obtaining special equipment will be listed in the source column, and the disposition column will provide instructions for disposal after completion of the TCTO.

**3.10.4.11 Part K, Remarks.** Used for any carry-over information (indicate which part/block is being carried over) and to provide further explanation of TCTO requirements.

**3.10.4.12 Part L, Certification.**

**3.10.4.12.1** The PMA will not complete processing the AFTO Form 874 until the required signatures are present.

**3.10.4.12.2** For contractor-prepared TCTOs, the contractor will sign the form before returning it to the government for review and approval. After approval, any differences from the contractor-submitted data will be resolved and the approved form will be returned to the contractor to permit initiation of TCTO development.

**3.10.4.12.3** Unless otherwise specified on the form by the preparing contractor, Government-Furnished Property (GFP) equipment and supplies required to support TCTO accomplishment will be shipped directly to the contractor facility. GFP which will NOT be included in TCTO kits must be clearly identified.

### **3.11 AFTO FORM 875 COMPLETION AND PROCESSING.**

**3.11.1 General.** The AFTO Form 875 is a programming document to ensure concurrent availability of all support for a TCTO (companion TCTOs, related TO updates, special tools and equipment, and kits). The document is used to identify and coordinate the relevant logistics actions to ensure the maximum effectiveness of TCTO completion.

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3.11.1.1 The PM organization which will manage the TCTO initiates the AFTO Form 875 after CCB approval of the TCTO. The responsible TCM determines which items are applicable based on information provided by the AF Form 3525 and AFTO Form 873, and marks the “Action Required” blocks on the AFTO Form 875. The TCM then signs off any completed actions in the “Action Required” blocks and forwards the form, accompanied by the AF Form 3525, to the applicable PMA to guide the management and programming of the TCTO.

3.11.1.2 The PMA will monitor and control the accomplishment of actions, coordination, and approvals required by the tailored AFTO Form 875. Once all logistics support actions required by the form have been completed, the PMA signs off the completed items in the “Action Required” blocks, signs the form and forwards it to the PM for signature authorizing release of the TCTO. After the printed material is ready for distribution, it is forwarded with the rest of the TCTO package to the TO Manager for publishing the TCTO and any required TO updates.

3.11.2 Form Retention. Copies of the completed form are provided to the responsible TCM and the kit monitor as authority for release of the TCTO. The PMA maintains a copy of the form in the project folder until completion of the TCTO, after which it will be maintained in a TCTO history folder by the PMA for the life of the system.

### 3.11.3 Instructions for Completion of the AFTO Form 875.

#### 3.11.3.1 Heading Information.

3.11.3.1.1 From. Form initiator.

3.11.3.1.2 To. Production management activity.

3.11.3.1.3 TCTO Number and TCTO Title/Application. Obtain from AFTO Form 873.

3.11.3.1.4 TCTO Is, Type, And Accomplished At. Check the applicable boxes. If “OTHER” is checked, explain in block 21.

3.11.3.1.5 Rescission Period/Date, TCTO Issue Date, And Data Code Number. Obtain from AFTO Form 873.

3.11.3.1.6 Materiel Safety Number. If applicable, enter the number assigned by the Materiel Safety Technical Group.

3.11.3.2 Item 1, TCTO. Completed by the AFTO Form 875 initiator, based on the AFTO Form 873.

3.11.3.3 Item 2, Technical Orders (TO). Completed by the responsible TCM, in conjunction with the TO Manager. The section indicates when JCALS RCs or AFTO Form 252 is required to update related TOs.

3.11.3.4 Item 3, Modification Kit. Requirements personnel responsible for kit development or for monitoring contractor development of kits will complete the section when kits are required. An AFMC Form 185 may be required.

3.11.3.5 Item 4, TCTO/Kit Verification. Ensure coordination and approval of schedules with any affected MAJCOMs and host bases.

3.11.3.6 Item 5, Supply Records. If supply records must be updated, ensure responsible item managers are notified.

3.11.3.7 Item 6, Disposal Action. Ensure disposal activities have been notified.

3.11.3.8 Item 7, Shelf Life Control. Ensure all shelf life items have been identified on the AFMC IMT 874, and are also identified in the TCTO and on any kit parts lists.

3.11.3.9 Item 8, Configuration Management. Ensure proper forms are initiated and configuration records are updated.

3.11.3.10 Item 9, Repair Kit Parts. Ensure any repair kits containing parts affected by the TCTO are identified.

3.11.3.11 Item 10, Support Equipment (SE). Ensure that any SE affected by the TCTO is identified, new requirements are added to allowances, and any affected TOs are updated.



3.11.3.12 Item 11, Spare Support. Ensure that new items have been identified for inventory control, provisioning has been accomplished, and spare support is assured.

3.11.3.13 Item 12, Stock List. Ensure action has been taken to stock-list new items and Base 86 request has been submitted if required.

3.11.3.14 Item 13, Interchangeability. Determine if new or modified items are interchangeable with other stock listed items, ensure I&S stock listed is updated.

3.11.3.15 Item 14, Engineering Drawings. If engineering drawings must be developed or updated, ensure the actions are completed and an AF Form 3925, Engineering Order (EO), is submitted to the program engineers.

3.11.3.16 Item 15, Personnel Training. If additional training will be required by the TCTO, ensure training monitors are informed and training courses are established.

3.11.3.17 Item 16, Training Equipment. Identify any training equipment affected by the TCTO, ensure modifications are compatible with operational equipment modifications, and any affected TOs are updated.

3.11.3.18 Item 17, Other Agencies/Departments. Identify and notify any other users/owners of the equipment being modified of the TCTO.

3.11.3.19 Item 18, Preservation and Packaging Data. Determine if existing procedures require update in affected manuals.

3.11.3.20 Item 19, Master Materiel Support Record. Ensure documentation has been submitted to update data in the records.

3.11.3.21 Item 20, Other. Complete as required for any of the actions listed.

3.11.3.22 Item 21, Additional Remarks. Use for continuation of other items (specify which items) or to add coordination/actions not listed elsewhere on the form.

3.11.3.23 Item 22, Certification. Signatures in the blocks indicate that all required actions, coordination and approval have been accomplished, and the TCTO may be issued.

### 3.12 COORDINATION OF TCTOS.

All proposed retrofit changes which will result in routine action TCTOs shall be approved by the Lead Command System Manager and will be funded in accordance with AFI 65-601V1. The Lead Command will coordinate with all affected Using Commands on any TCTO matters. This action constitutes coordination of a proposed TCTO by means of the appropriate CCB documentation.

3.12.1 PM Coordination. A TCTO prepared by a Product Group Manager (PGM) or TCM responsible for an imbedded commodity is coordinated with the PM responsible for the affected aircraft, missile, or C-E end item and vice versa. PMs control the space within a system or end item allocated for the installation of new components. When more than one PGM desires the use of a specified space within a system or end item, the PM acts as an arbitrator where complications of space usage occur. Two copies of the TCTO draft are forwarded to the PM engineering activity (D086, Mission Workload Assignments System) for engineering coordination.

3.12.2 Other Coordination. One copy of each TCTO is forwarded to the following activities for coordination on the matters indicated:

- MAJCOM/A4M for O- or I-level TCTOs as part of the CCB process.
- Bio-Environmental Engineering (BEE) (at the nearest USAF hospital) when use of the following or similar materials are specified in the TCTO (see TO 00-5-3):

-Chemicals.



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- Paint solvents and removers.
  - Cleaning agents.
  - Fuels, hydraulic fluids, and propulsive agents.
  - New or proposed synthetic materials and plastics.
  - Impregnating materials for cloth, leather, etc.
  - Fiberglass and other dust-producing insulating materials.
  - Any other known or suspected health hazards.
- AFCESA/CEXF for all requirements related to aircraft fire prevention, egress safety, and emergency rescue (see TO 00-5-3).
  - Center/Base Safety Office when publications or procedures expose personnel to hazardous environmental or operational factors which require a review, technical evaluation for ground, weapons, explosive, flying, or system safety, and safety office approval of the proposed TCTO and TO updates.
  - 708 Nuclear Systems Squadron when the TCTO affects radioactive material used in Nuclear Weapons.
  - The USAF Radioisotope Committee Secretariat, HQ AFMOA/SGOR, 8901 18th St, Brooks City-Base TX 78235-5217 (through HQ AFMC/SGP), when a TCTO has information or instructions concerning other radioactive materials (e.g., depleted uranium counterweights, luminous exit markers, optical lens coatings containing thorium, or nucleonic fuel indicators) (AFI 40-201, Managing Radioactive Materials in the US Air Force).
  - The prime ALC Non Destructive Inspection (NDI) manager or other ALC organization designated to provide Level III NDI services, or corrosion control manager when TCTOs have instructions relating to, or a requirement for, NDI or corrosion control treatment. The Air Force OPRs for NDI and corrosion control are AFRL/MLS-OL (4750 Staff Drive, Tinker AFB, OK 73145-3317) and AFRL/MLS-OLR (325 2nd St Bldg 165, Robins AFB GA 31098-1639), respectively.
  - Detachment 63, 688th Armament Systems Squadron when the TCTO could modify the below-listed items in ANY way:
    - Bombs and warheads.
    - Fuzes and fuzing systems.
    - Guided and ballistic missiles.
    - Missiles, grenades artillery, mortar, rocket, and small arms ammunition.
    - Mines, depth charges and torpedoes.
    - Demolition charges and pyrotechnics.
    - Dispensers and clusters.
    - Cartridge and propellant-actuated devices (such as aircraft egress systems).
    - Aircraft weapons/munitions delivery systems.
    - Any item which contains (high or low) explosives, propellant, or hazardous chemicals which may cause injury/death to personnel or damage to equipment.
  - Any affected SAP/FMS program monitors.
  - All TCTOs are coordinated with and a copy is provided to the responsible program configuration management activity for input into the applicable configuration management system.

**3.12.3 Immediate and Urgent Action TCTOs Coordination.** Due to the nature of immediate and urgent action TCTOs, formal coordination will not be accomplished; however, the Lead Command Manager for the system and all using commands shall be informed by telephone or electronic message of these TCTOs when the retrofit change requirements become known. Such coordination is necessary to provide affected commands information on the magnitude, complexity, and man-hours required to accomplish the TCTO.

**3.12.4 Aircraft Emergency Rescue Data.** TO 00-105E-9, Aerospace Emergency Rescue and Mishap Response Information (Emergency Services) is the manual used by military and civilian fire departments for emergency procedures. The TO is available electronically on the Enterprise Corporate Analysis – Time Saver (ECATS) system, <https://ecats.wwwk.okc.disa.mil/> (membership required). If you are not authorized to access this site, contact AFCESA/CEXF. Coordinate all TO/TCTO changes that affect the following aircraft subject areas with the Air Force Civil Engineer Support Agency, Fire Protection Division, Fire Protection Egress Manager, HQ AFCESA/CEXF, 139 Barnes Drive Suite 1, Tyndall AFB, FL 32403, DSN 523-6150, Commercial 850-283-6150, email: HQAFCESA.CEXF@tyndall.af.mil:

- Fire hazards.
- Personnel hazards (intakes, exhausts, radar emitting devices, hot brake areas, auxiliary power unit (APU) ports, etc.).
- Aircraft entry (normal and emergency).
- Engine or APU shutdown (normal and alternative methods).
- Oxygen and fuel shutoff valves.
- Ejection or escape system changes in safing, releasing and extraction.
- Stationary seat restraint systems.
- Changes to flammable systems (oxygen, fuel, hydraulics, batteries and miscellaneous chemicals).
- Fuselage skin penetration points.
- Cabin arrangements and personnel locations, or number of personnel on board.

**3.12.5 Quality Checks.** The TCM is responsible for TCTO adequacy and technical evaluation; the TO Manager is responsible for conformance to MILSPEC format. The TCM and TO Manager will perform a quality check on the final draft of formal TCTOs prior to publication.

### **3.13 PUBLISHING TCTOS.**

**3.13.1 AFTO Form 82.** An AFTO Form 82 is completed on all TCTOs after verification, listing required corrections. The form is forwarded to the contractor, if the TCTO was contractor-prepared, for incorporation before the prepublication review and publication. For organic TCTOs, the form is sent to the TCM for correction of the draft.

**3.13.2 Pre-Release Review Group (PRRG).** After necessary corrections have been made and it is ready for publication, the PMA requests a PRRG meeting to ensure all requirements for concurrent release of the TCTO, kits, and TO updates have been met prior to submitting the package to the TO Manager for publishing. Each TCTO is reviewed for technical content, accuracy, completeness, practicality, Reading Grade Level (RGL) and compliance with the latest version of MIL-PRF-38804. The PRRG, in coordination with the TO Manager, establishes the TCTO rescission date based on risk mitigation analysis. The date will be entered into AFTO Form 873, Block 17 and into JCALS using the “Update an Index Entry” process. The package for contractor-developed TCTOs will be submitted when final reproduction masters are ready for delivery. The complete data package has:

**3.13.2.1** The digital reproduction master, including all artwork and illustrations. Digital reproduction masters should either be a page image file such as Adobe PDF®, SGML-tagged file (IAW MIL-PRF-38804), or a protected word processor document, and must be accompanied by a paper copy to verify formatting information.

**3.13.2.2** A copy of the AFTO Form 875 with PM certification.

**3.13.2.3** A signed copy of the completed AFTO Form 873.

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3.13.2.4 A signed copy of the completed AFTO Form 874; required if a TCTO needs kits and/or special tools and test equipment, affects supply spares, adds components to the modified item, or if removed parts and components require disposition instructions. The form is also required for TCTOs which would normally require kits, but which have received a waiver to the complete kit concept, to document supply status and parts usage. An AFTO Form 874 is only required for inspection TCTOs if kits, special tools/test equipment, etc., not commonly available at the performing units are required.

**NOTE**

When new AFTO Forms 873, 874, or 875 are initiated for a TCTO supplement, complete only the blocks changed from the original form.

3.13.2.5 JCALS “Prepare TM Change Package” screens with appropriate TO updates as required.

3.13.2.6 Completed AFTO Form 124, Computation of Technical Order Reading Grade Level for the TCTO and each TO update (if required).

3.13.2.7 A fund citation.

3.13.3 Illustrations. Except as specified below, illustrations shall be prepared in accordance with MIL-STD-38784 to supplement the text.

3.13.3.1 Illustrations in Record TCTOs. The use of illustrations in Record TCTOs shall be held to a minimum. Illustrations shall be sufficient to determine that the specific retrofit changes have been accomplished. Illustrations in Record TCTOs merely aid in identifying retrofit changes and they shall not normally contain part numbers.

3.13.3.2 Reproducible Copy. For organically-developed TCTOs, the TO Manager oversees preparation of the master reproducible file and ensures the TCTO is printed with the priority required by the urgency of the TCTO. Most printing and ID (Initial Distribution) will be made through the Document Automation and Production Service (DAPS) Technical Order Distribute and Print Services (TODPS) print-on-demand Process. Technical changes to TCTO drafts which have been submitted for publication are made only with the consent of the responsible TCM. Any editorial changes must be coordinated with the TCM before printing and distribution of the TCTO.

3.13.3.3 Reproduction Quality Check. For formal TCTOs the TO Manager will request a printed copy to review before ID by DAPS TODPS.

3.13.4 “513” Procedures. When the item being modified requires re-identification, the TCM completes an on-line 513 format concurrently with the distribution of the TCTO to affected activities, in accordance with AFMCMAN 23-3, Cataloging and Standardization. The Electronic Form 513 format is available at [https://www.afmc-mil.wpafb.af.mil/HQ-AFMC/LG/lgi-page/lgis/Form 513\\_index.htm](https://www.afmc-mil.wpafb.af.mil/HQ-AFMC/LG/lgi-page/lgis/Form%20513_index.htm), and will be completed and submitted online to the AFMC Logistics Information Division, Air Force Global Logistics Support Center (GLSC), 401 SCMS/GUMB. In completing the form, the TCM will:

- Check the “MOD REQUIRED BEFORE ISSUE” block as “NO” if the unmodified and modified items are acceptable for use, pending completion of the TCTO requirements.
- Print “END ITEM MOD” in the shaded area adjacent to the entry of “NSN after modification” if the TCTO requires the end item to be modified to accept the modified item.
- Complete all portions of the form.
- Provide updates when a TCTO is extended or reinstated.

**NOTE**

In most cases, modified items are not re-identified, but are given new NSNs/part numbers through the “Base AF Form 86” process (Paragraph 3.10.3.4). If all of the assets are being modified, the pre-modification NSN/part number will be rescinded after modification completion.

3.13.5 Post-Publication Reviews. The need for post-publication reviews and the frequency of such reviews is determined by the TCM in conjunction with the TCTO user. Factors to be considered include the type of TCTO (immediate, urgent, routine, record), changes to the system or commodity being modified, and accumulation of problem reports.

### 3.14 UPDATING AFFECTED TECHNICAL ORDERS.

TCTOs must NOT direct write-in changes to related TOs. TO and Flight Manual updates for immediate action TCTOs are provided by Rapid Action Changes (RAC), ISSs or IOSs issued concurrently with the Interim TCTO IAW TO 00-5-3. Updates supporting urgent action TCTOs may be issued as interim supplements or formal TO updates.

**3.14.1 Changes to TO and Flight Manual Procedures.** If a routine or urgent action TCTO results in changes of TO or Flight Manual procedures, the TO updates are submitted through the JCALS “Recommend a TM Change” and “Prepare TM Change Package” or AFTO Form 252, Technical Order Publication Change Request functions according to TO 00-5-3, concurrently with the TCTO package (or publication lead time prior to the TCTO submission) to ensure release prior to or concurrently with the TCTO. TO update packages containing both “before” and “after” data may be submitted and published up to 6 months prior to TCTO release.

**3.14.2 TCTO Updates.** Any time the driving TCTO is changed or placed in Abeyance, updates to the affected TOs must be reviewed and amended if necessary.

### 3.15 DEPOT FIELD TEAM SUPPORT.

When a TCTO requires depot support or traveling team accomplishment in accordance with TO 00-25-4, Depot Maintenance of Aerospace Vehicles and Training Equipment, the TCM or PMA ensures advance information regarding work requirements is provided to the affected PM depot maintenance activity, to allow planning for the use of internal assets and resources.

### 3.16 TCTO CONTROL RECORDS.

**3.16.1 Materiel Improvement Project (MIP).** The ALC preparing the TCTO is responsible for maintaining complete chronological record deficiencies. The deficiencies are reported and tracked in the JDRS.

**3.16.1.1** When initial distribution is made, one copy of every formal or interim TCTO authorized for use by the Air Force or contractors is sent to OC-ALC/ENGLA (see TO 00-5-1 and 00-5-3).

**3.16.1.2 Schedules.** For contractor-performed TCTOs, the PM managing the TCTO is responsible for maintaining a TCTO completion schedule prepared by the contractor as required by the contract. The schedule also shows the estimated delivery date of TCTO reproducible master to the Air Force. A copy of the schedule is furnished to the TO Manager.

### 3.17 TCTO DOCUMENTATION AND TRACKING.

All TCTOs, depot and field level, are managed in the JCALS system. Compliance is tracked in other approved management systems such as the Reliability and Maintainability Information System (REMIS – G099)/Generic Configuration Status Accounting Subsystem (GCSAS), Integrated Maintenance Data System (IMDS), and G081 (CAMS for Mobility) (TO 00-20-2, Maintenance Data Documentation).

**3.17.1 TCTO Master Record in REMIS and Follow-up.** The Modification Manager and the preparing TCM are responsible for initiating action to include the TCTO Master Record in REMIS, and for performing follow-up.

**3.17.2 TCTO Reporting.** The TCM shall ensure TCTO reporting instructions are identified in paragraph 8 of the TCTO. Compliance will be reported using the basic TCTO data code only, according to 00-20-series TOs. Additional work directed by TCTO supplements will be reported using the supplement data code.

**3.17.3 TCTO Routing.** Upon approval of the TCTO by the PM CCB, the TO Manager will obtain a TCTO Number from JCALS, establish a Pub Index record, and use the JCALS Work Flow Manager (WFM) to route the package to the various OPRs for TCTO writing, coordination, kit assembly, verification and approval.

**3.17.4 Master Record.** When TCTO publication is assured, the PM TCTO/Modification Manager or Production Management Specialist (PMS) will ensure that a REMIS TCTO Master Record is established and “pushed” to the bases affected by the TCTO when ID has been made. The Master Record for an ITCTO will be established and pushed as quickly as possible after ITCTO transmittal, not to exceed 24 hours. The TCTO/Modification Manager or PMS will ensure that REMIS data is updated and pushed when TCTO changes (supplements, replacing TCTOs, rescission date extensions, etc.) occur.

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**3.17.5 Compliance Period or Rescission Date Extensions.** Data on TCTO compliance, reported by performing organizations through the IMDS/G081/REMIS/CEMS interface, will be used to help determine the need for compliance period or rescission date extensions (see Chapters 7 and 8). TCTO compliance must be reported to REMIS by the ALC depot or field maintenance team performing the TCTO. Depot Maintenance compliance with engine TCTOs will be documented in CEMS by the agency performing the work. TCTO data for precision guided munitions will be entered into the Tactical Munitions Reporting System (TMRS). TMRS will then feed the TCTO data to the Reliability Asset Monitoring System (RAMS).

**3.17.6 Pass/Fail Documentation.** The results of compliance with Inspection TCTOs will be documented in approved management systems (see paragraph 3.13 above) as pass or fail. The PASS/FAIL Indicator will be used. Annotate these TCTOs with a "P" for passed inspections or "F" for failed inspections upon completion of the TCTO during documentation of the how malfunction code "801" transaction. Inspection-type TCTOs are identified in the applicable data system with a TCTO "TYPE CODE" equal to A, B, F, or G:

- A - IMMEDIATE ACTION INSPECTION
- B - URGENT ACTION INSPECTION
- F - ROUTINE ACTION INSPECTION
- G - EVENT TYPE INSPECTION

**3.18 TCTO POSTING.**

TCTOs shall be posted alphanumerically either in the TO library with other TOs or in a separate binder.

**Table 3-1. TCTO Matrix Chart**

Category & Type of TCTO	Compliance Period <sup>1</sup>	Remove From Service <sup>2</sup>	Maximum Rescission Date <sup>3</sup>
<b>INTERIM IMMEDIATE ACTION TCTO:</b>			
All Categories <sup>4</sup>	Immediately	Immediately	1 year after issue
<b>INTERIM URGENT ACTION TCTO<sup>5</sup>:</b>			
All Categories	From 1 to 10 days	Upon expiration of compliance period	1 year after issue
<b>INTERIM ROUTINE ACTION, O/I LEVEL SAFETY INSPECTION TCTO:</b>			
All Categories	From 11 to 35 days	Upon expiration of compliance period	1 year after issue
<b>ROUTINE ACTION, O/I LEVEL SAFETY TCTO:</b>			
Category 1--Aircraft; Category 2--Airborne Engines; Category 31--Ground C-E Equipment; Aerospace and Non-Aerospace Com- modities	From 11 to 90 days	Upon expiration of compliance period	2 years after issue
Category 14--Life Support <sup>6,7</sup>	From 11 to 1825 days	Upon expiration of compliance period	Not to exceed 5 years after issue
Category 21--Guided Missiles Category 35--SE (A4M only)	From 11 to 270 days	Upon expiration of compliance period	2 years after issue
<b>ROUTINE ACTION, O/I LEVEL TCTO:</b>			
Category 1--Aircraft; Category 2--Airborne Engines; Category 31--Ground C-E Equipment; Aerospace and Non-Aerospace Com- modities	From 90 to 270 days	Upon expiration of compliance period	3 years after issue
Category 21--Guided Missiles; Category 35--SE (A4M only)	From 90 to 540 days	Upon expiration of compliance period	3 years after issue

Table 3-1. TCTO Matrix Chart - Continued

Category & Type of TCTO	Compliance Period <sup>1</sup>	Remove From Service <sup>2</sup>	Maximum Rescission Date <sup>3</sup>
ROUTINE ACTION, O/I LEVEL TCTO, BASED UPON MAINTENANCE PRACTICE:			
Category 2--Airborne Engines, On-Condition Maintenance (OCM) Concept	Upon an event, such as next scheduled inspection, Regional Engine Maintenance Organization, etc. (Upon failure is not authorized)	On a date established by the PM with MAJ-COM approval	10 years after issue
All other Categories	Upon an event, such as next scheduled inspection, Jet Engine Intermediate Maintenance (JEIM), removal from Emergency War Order (EWO), number of landings, etc. (Upon failure is not authorized)	On a date established by the PM with MAJ-COM approval	5 years after issue
ROUTINE ACTION, depot-level SAFETY TCTO <sup>8</sup> :			
All Categories	From 11 to 90 days	Upon expiration of the compliance period	1 year after issue
ROUTINE ACTION, depot-level TCTO <sup>9,10</sup> :			
All Categories	Upon Depot Maintenance (if scheduled)	Until completion of Depot Maintenance	10 years after issue
ROUTINE ACTION, depot-level RECORD TCTO:			



**Table 3-1. TCTO Matrix Chart - Continued**

Category & Type of TCTO	Compliance Period <sup>1</sup>	Remove From Service <sup>2</sup>	Maximum Rescission Date <sup>3</sup>
All Categories	Upon Depot Maintenance (if scheduled)	Until completion of Depot Maintenance	10 years after issue

<sup>1</sup> COMPLIANCE PERIOD. See paragraph 7.5 for details on compliance periods.

<sup>2</sup> REMOVE FROM SERVICE. "Remove from Service" date is the same as the "Ground Date" in automated data systems Integrated Maintenance Data System (IMDS, formerly Core Automated Maintenance System (CAMS)) (G054) and Reliability and Maintainability Information System (REMIS). See paragraph 7.6 for details on Remove-From-Service dates.

<sup>3</sup> MAXIMUM RESCISSION DATE. This column designates the maximum TCTO life and does not preclude a shorter, more realistic TCTO life as determined by the appropriate authority based on type of affected system or commodity, level of accomplishment, extent of rework and accomplishment schedule. The Weapons Directorate, AAC/NW, CCB is authorized to determine the appropriate rescission date for 11N-series TCTOs used by the Air Force. The rescission date for 11N-series TCTOs may be less than but not greater than 54 months.

<sup>4</sup> Commodity category TCTOs will not be used as the means of initially removing a system from service. A system category TCTO is written against the system to effect removal action, and an appropriate commodity category TCTO of the same urgency shall be prepared to effect the necessary retrofit change. The system category TCTO shall be signed off to release the system for flight or operation after accomplishment of the commodity category TCTO.

<sup>5</sup> May be issued as a formal TCTO if time permits.

<sup>6</sup> The Human Systems Program Office, Life Support Integrated Product Team (IPT), 311 HSG/YA (Brooks City-Base) and WR-ALC/LR (for U-2 only) CCBs are the only offices authorized to determine and approve the compliance period for Life Support TCTOs. The compliance period shall be concurrent with established inspection cycles whenever possible.

<sup>7</sup> The Life Support IPT (311 HSG/YAC) and WR-ALC/LR (for U-2 only) are authorized to determine the appropriate rescission date for Life Support TCTOs used by the Air Force. The rescission date for Life support TCTOs may be less than but not greater than 1825 days (5 years), concurrent with established inspection cycles whenever possible.

<sup>8</sup> Routine Action, Depot Level, Safety TCTOs shall not exceed the Routine Action, Organizational/Intermediate Level, Safety TCTO matrix elements. The CCB may authorize a waiver when a deviation to this policy appears to be necessary, with written coordination from affected MAJCOMs.

<sup>9</sup> For Routine Action Depot Level TCTOs other than Safety, a compliance period of other than "Upon Depot Maintenance" (e.g., for Field Team Maintenance) may be specified when the PM and MAJCOM concur.

<sup>10</sup> Depot Level TCTOs shall not be issued against aircraft engines which do not have established overhaul intervals, unless support teams (contractor/organic) are scheduled to accomplish the entire inventory within a predetermined time frame specified in the TCTO. In such instances the rescission date shall be established as the scheduled completion date plus 6 months.

## CHAPTER 4

### TCTO, KIT, AND DATA CODE NUMBERS

#### 4.1 TCTO NUMBERING.

TO numbers, including TCTO numbers, are categorized based on functional usage or family groupings (TO 00-5-1). The detailed explanation of the TO numbering process is contained in TO 00-5-18. TO numbers ending in -501 and higher are normally indicative of a TCTO. Prior to numbering the first TCTO for a system or commodity, the TO Manager must establish TCTO Series Headers for each classification of TCTO to be issued (see JCALS Desktop Instructions for procedures). When a new individual TCTO number is required, the TO Manager obtains the number from JCALS. Data codes are assigned from a block of numbers provided by OC-ALC/ENGLA to each program office.

**4.1.1 TCTO Series Headers.** TCTO series headers are set up to collect subscription requirements for each military system or commodity level where it is planned to issue TCTO modification and inspection requirements. The series will be numbered at the lowest level that will ensure all military system and commodity users get needed support, and yet eliminate distribution to TODOs not concerned with the TCTO.

**4.1.1.1** TO Managers will request OC-ALC/ENGLA to establish a TCTO series header for an aircraft, missile or engine category when a new TO series is established. TO Managers will request new TCTO series headers for other TO categories when the first TCTO is in preparation. A separate TCTO series header must be established when individual TCTOs in the series will be assigned different classifications (such as UNCLASSIFIED or SECRET). Once a TCTO series header number is approved, JCALS will automatically number individual TCTOs in the series. Although JCALS provides the capability to automatically assign TCTO Data Codes when the Index record for a new TCTO is established, the capability allows duplicate Data Code numbers to be assigned across the Air Force JCALS enterprise. Therefore, when a JCALS record for a new TCTO is established, the JCALS assigned data code must be replaced by the next sequential number from a block of data codes provided by OC-ALC/ENGLA. Contact OC-ALC/ENGLA directly if data codes are needed.

**4.1.2 Mission Design Series.** Using the “Mission Design Series (MDS)” definition of the weapon system designations in the aircraft, missile, and aerospace TO categories, the TCTO series header is normally set up at the MDS “series” level (1B-52H, 1C-141C, 1F-16D, etc.). If a TCTO requirement has application for more than one “design” (C-135 and C-141, F-15 and F-16, etc.), separate TCTOs are needed for each “design” group. Only when all designs with the same “mission” group (all bombers, all cargo, all fighters, etc.) are affected by the same TCTO requirement is a “mission” group TCTO series (1B, 1C, 1F, etc.) established.

#### NOTE

The numbering scheme for TOs and TCTOs in the bomber, helicopter and trainer Category 1 series has been modified due to the existence of “B-1”, “H-1” and “T-1” systems. (See TO 00-5-18).

**4.1.3 General Series.** In the remaining TO categories, the TCTO series header normally is established at the TO number segment designating the “General Series, Type Model, or Part Number” of the applicable equipment. This is the segment of the TO number that precedes the “Kind” of TO segment. For example, the first TCTO for the equipment covered by 5A3-26-3 would be 5A3-26-501. If the TCTO is applicable to all equipment in a broader TO group such as all 5A3 or all 8S1-2 covered equipment, then the TCTO series header is established at that level.

**4.1.4 Missile, Aircraft or C-E.** TCTOs involving airframes, control surfaces, basic structure, and peculiar contractor furnished equipment in NSC 1420 (guided missile components), 1560 (aircraft structural components) or 1820 (space vehicle components), and installation of system components and accessories in aircraft, missiles or C-E (D086, Mission Workload Assignments System), are numbered in the appropriate series within the missile, aircraft or C-E category.

**4.1.5 System and Training Equipment.** TCTOs which affect both a system (TO Category 1, 21, or 31) and training equipment (except simulators) will be assigned numbers in the system category. Appropriate references will be made to the affected training equipment in the title, in the purpose, and in the applicable paragraphs of the TCTO. Retrofit change instructions for affected training equipment which are different from operational system instructions will be provided in a separate section immediately following the system retrofit change instructions.



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**4.1.6 Training Equipment Only.** TCTOs applicable only to training equipment, which do not affect the military system or commodities supported by the trainer system, will be assigned in TO Category 43. TCTOs applicable to simulators (mission or flight) will be assigned numbers in the applicable TO category.

**4.1.7 TCTOs Involving Computer Programs.** TCTOs involving computer programs of embedded computer systems are numbered in the same category as the TO number assigned to the user instructions for the program.

**4.1.8 Immediate and Urgent TCTOs.** All immediate and urgent action TCTOs, except those issued for non-aeronautical commodities, will be assigned numbers within the applicable system (aircraft, missile or C-E) series or category of TCTOs, in as much as action for removal from service must be effected immediately or within specified time limits. When removal from service is necessary to permit accomplishment of a commodity TCTO, a system category (1, 21, or 31) TCTO will be written against the affected system to effect removal from service action. An appropriate commodity category TCTO of the same urgency as the system TCTO shall be prepared to effect the necessary retrofit change. The system TCTO shall be signed off to release the system for flight or operation after accomplishment of the commodity category TCTO. Although this policy occasionally results in duplicate TCTOs for each type of system (aircraft, missile, or C-E) in which the commodity is installed, this duplication is considered justified to prevent compromise of flight or ground safety. A safety supplement (SS) to the operating or flight manual will be issued stating conditions pertaining to accomplishment of the appropriate item category TCTO and any operating or flight restrictions that are involved.

**4.1.9 Supplements.** Supplements to basic TCTOs are assigned the same TO number as the basic with a suffix letter added to the final part of the number. The letters A and B are reserved for classified supplements as required. The letters I and O are not used in order to avoid possible confusion with numerals.

## **4.2 NUMBERING KITS.**

TCTO kit identification number instructions are prescribed by AFMAN 23-110, Vol. 3, Part 1, Chapter 11, and are developed as follows (Figure 4-1, TCTO Kit Identification Number Data Fields):

**4.2.1 First Four Positions.** The first four positions of the TCTO kit identification number will be the NSC applicable to the end item being modified (e.g., 1560 for aircraft and structural components, 1420 for guided missiles, etc.)

**4.2.2 Fifth Position.** The fifth position is occupied by the letter "K", denoting a kit.

**4.2.3 Sixth Through Twelfth Positions.** The sixth through twelfth positions are occupied by the seven-digit data code number.

**4.2.4 Thirteenth Position.** The thirteenth position identifies or designates the different kits required by the TCTO. If more than one type of kit is required by a particular TCTO (e.g., for a different MDS within a military system, supply spares, trainers, WRM, etc.), the kits will be designated A through Z (omitting I and O) then (Zero) 0 through 9. The first kit of each TCTO kit grouping shall always be designated with the letter A. If only one kit is involved, the number will always have A in the thirteenth position. If more than 34 kinds of kits are required for one TCTO, the 35th kit shall be given a new data code number.

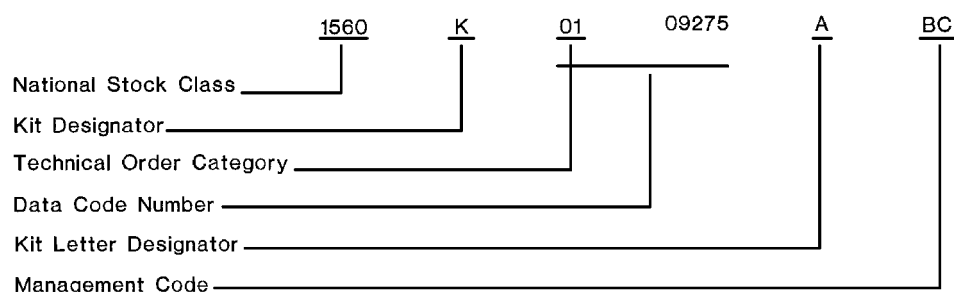
**4.2.5 Fourteenth and Fifteenth Positions.** The fourteenth and fifteenth positions are AFMAN 23-110 assigned management codes corresponding to the ALC managing the kit (D086, Mission Workload Assignments System).

## **4.3 TCTO DATA CODE NUMBERS.**

A seven digit REMIS-identifiable data code is assigned to each TCTO. This code provides a link between a TCTO and required kits, which use the data code as part of the NSN. The data code appears in the upper right corner of the first page and below the TO number on all TCTOs and supplements. See Table 4-1, Rules for Assigning TCTO Numbers, Data Code Numbers and Dates for when to issue new data codes for supplements. REMIS provides a cross-reference between data code numbers and TCTO numbers.

**4.3.1 Data Code Numbers.** The OC-ALC/ENGLA provides a block of data code numbers to each ALC TO Manager for assignment to TCTOs as required. The TO Manager maintains a register and controls assignment of the data code numbers. Do not use the data code automatically supplied by JCALS, because duplicates may be issued. Notification of data code number assignment is made during the input of an individual TCTO to the JCALS System. Additional data code numbers may be required for supplemental kit identification. Data codes are indexed in REMIS.

**4.3.2 Identification of Data Code Numbers.** The first two digits identify the equipment TO category (TO 00-5-18); the remaining five digits identify and maintain serialization control. For example, data code 3306871 indicates TO category 33 (test equipment) with 06871 indicating the 6,871st test equipment data code used. TCTO numbers are obtained from the JCALS system, and data code numbers are acquired from OC-ALC/ENGLA and issued through the TO Manager.



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**Figure 4-1. TCTO Kit Identification Number Data Fields**

**4.3.3 IMDS Procedures.** The seven-digit data code is the key data element used to maintain TCTO records in the IMDS database (the data code cannot be changed). For TCTO supplements with no additional work (no new data code), the IMDS user updates the changed data from the supplement in IMDS. The TCTO number remains the same (e.g., 1F-16-1314 does NOT change to 1F-16-1314C). The TCTO numbers in IMDS and REMIS must match.

**4.3.4 Additional Work to TCTO Supplements.** TCTO supplements that require additional work will have a new data code. The IMDS user loads these supplements the same as new TCTOs. The TCTO number would include the letter of the supplement (e.g., 1F-16-1989D). This load would either be pushed through REMIS or entered manually. CAMS screen 422 is also loaded (either through REMIS or manually) to relate supplements to the basic TCTO. This will allow identification of equipment which was previously completed but which still requires accomplishment of the supplement.

#### NOTE

Those pieces of equipment accomplished prior to release of the supplement would remain loaded and retain the TCTO history.

**Table 4-1. Rules for Assigning TCTO Numbers, Data Code Numbers and Dates**

(Recorded logically) TYPE OR KIND OF TCTO	TCTO NUMBER		DATA CODE NUMBER		ISSUE DATE		RESCISSION DATE <sup>1</sup>	
	NEW	OLD	NEW	OLD	NEW	OLD	NEW	OLD
1. Basic formal TCTO	X		X		X		X	
2. Formal TCTO supplement	Suffix <sup>2</sup>		X <sup>3</sup>		X			X <sup>4</sup>
3. Basic TCTO replacement	X		X		X		X	
4. Basic ITCTO	X		X		X		X	

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**Table 4-1. Rules for Assigning TCTO Numbers, Data Code Numbers and Dates - Continued**

(Recorded logically) TYPE OR KIND OF TCTO	TCTO NUMBER		DATA CODE NUMBER		ISSUE DATE		RESCISSION DATE <sup>1</sup>	
	NEW	OLD	NEW	OLD	NEW	OLD	NEW	OLD
5. ITCTO Supplement	Suffix <sup>2</sup>		X <sup>3</sup>		X			X <sup>4</sup>
6. Replacement ITCTO	X		X		X		X	
7. Replacement supplement (either TCTO or ITCTO)	Suffix <sup>2</sup>		X <sup>3</sup>		X			X <sup>4</sup>
8. Reinstated TCTO		X		X	X		X	

<sup>1</sup> Rescission dates are entered in JCALS, REMIS, and in the TCTO. JCALS index data is shown in the Internet TO Catalog (<https://www.toindexes.wpafb.af.mil>).

<sup>2</sup> Supplements are numbered by addition of a suffix to the basic TCTO number.

<sup>3</sup> New data codes are assigned and entered into REMIS only if the supplement changes the scope of the effort or results in a new kit requirement (TCTO paragraphs 5 and 6). New data codes are not required for minor corrections to TCTO text, addition of tail/serial numbers to the list of equipment affected, or extensions to rescission dates.

<sup>4</sup> Supplements carry the same rescission as the basic. EXCEPTION: Interim supplements issued explicitly to change the rescission date will have a new date.

## CHAPTER 5

### TCTO KITS

#### 5.1 CONTENT OF KITS.

**5.1.1 TCTO Kit Requirements.** Kit requirements are specified in AFMAN 23-110 Vol. 3, Part 1, Chapter 11. TCTO kits shall contain all parts and materials, except petroleum products such as jet fuels, lubricating oil, and solvents, required to accomplish the TCTO on one end article or commodity. A copy of the TCTO will not be included in the kit. The kit will contain a bill of materials identifying the parts and materials.

#### NOTE

Modification Managers and TCTO writers must carefully consider regional and federal restrictions on the use of Hazardous Materiel (HAZMAT) and Ozone Depleting Substances (ODS) when developing TCTO procedures and kit requirements.

**5.1.1.1** The TCTO kit monitor will research and identify kit items using the AF Form 185, Request for TCTO Kit Assembly, in accordance with AFMAN 23-110, Vol. 3, Part 1, Chapter 11, Time Compliance Technical Order (TCTO) Supply Operating Procedures. Where items cannot be readily identified, cataloging personnel may be able to assist. If a requirement exists for non-stock listed items, action should be initiated to have "NC," "ND," or "L" numbers assigned, as applicable.

**5.1.1.2** Screen all kit components against critical (short supply) lists and investment requirements. Prepare a save list of required components.

**5.1.1.3** As soon as immediate and urgent action TCTO requirements are known, expedited action will be initiated to either procure or obtain parts and assemble the necessary kits for accomplishment of the TCTO. All parts and materials required to expedite accomplishment of routine action TCTOs will be assembled as complete kits and furnished to the users. Any shortages will be called to the attention of the issuing activity and that activity will be responsible for shipping the shortage items.

**5.1.1.4** Inspection TCTOs are an exception to the complete kit concept (see Paragraph 2.2.4.2.3).

**5.1.2 TCTO Kit Management.** All kits procured or assembled for accomplishment by organizational, intermediate or depot-levels of maintenance are retained, stocked, stored, or issued by direction of the ALC assigned management responsibility of the TCTO kit National Stock Class or Materiel Management Aggregate Code (MMAC).

**5.1.3 Local Manufacture/Purchase Items.** Using activities will not normally be required to locally manufacture parts required for TCTO accomplishment. When local purchase, local manufacture, stock listed or non-stock listed items or materials are required to accomplish a retrofit TCTO, such items or materials will be manufactured or purchased by the contractor or the depot assembling the kits, packaged as prescribed in the TCTO, and included as regular components of the TCTO kit. Raw cut stock, with a maximum of prefabrication accomplished, will be included in kits.

**5.1.4 Time/Storage-Limited Materiel.** Items subject to restrictive physical characteristics (e.g., shelf life or flammable items, explosives, or medical material) will be included in kits, but may require separate containers, packaging, shipment, and/or storage.

**5.1.5 Depot-Level Parts and Materiels.** Parts and materials required for accomplishment of some depot-level TCTOs may or may not be furnished as individually packaged kits, depending upon circumstances. When depot-level retrofit changes are to be accomplished on an assembly line basis, kits may be assembled and packaged so that each station on the assembly line will have all necessary parts or items in quantities that are required to accomplish each phase of the modification on each item or system that advances past each station.

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**5.1.6 Containers.** When more than one outside container is required to package a complete kit, containers will be conspicuously numbered in consecutive order (e.g., Box 1 of 3, Box 2 of 3, etc.). A list of all items in the kit will be placed inside box No. 1, and one on the outside. This list will also be annotated to show the box number in which each item of the list is located.

**5.1.7 Substitute Parts.** Activities accomplishing a TCTO are authorized to accept substitute parts for installation, provided substitute parts are properly tagged and authorized by the Federal Logistics system (FED LOG).

**5.1.8 Procured Kits.** Kits procured (organically or contractually) by or for an ALC for accomplishment of TCTOs are normally retained by that ALC supply agency for issue. Other kit management and location arrangements may be developed and coordinated as required and would be reflected by the management code portion of the kit identification number.

**5.1.9 Computer Software.** Computer software (e.g., tapes, disks) required to support retrofit changes (NOT revised CPINs distributed by TCTO) will be issued prior to, or concurrently with kit delivery to users.

**5.1.10 Special Tools.** If special tools are required to effect accomplishment of a TCTO, the tools will usually be included in the TCTO kit or provided as a separate kit. If the using command agrees that special tools should not be in the kit, the TCTO shall include the exact methods by which the tools will be obtained or locally manufactured and provide instructions for appropriate disposition of the tools after TCTO compliance.

**5.1.11 Training Equipment.** TCTO kits issued for modification of funded ground training aircraft are furnished in the same manner as for operational aircraft.

## **5.2 SUPPLY SCREENING.**

AF supply stocks will be screened (AF Form 172, Coordination of Proposed Technical Orders) prior to procurement of any modification kit or part to determine if like or similar items in supply can be made available and/or modified for kit assembly. Screening action will be accomplished and documented prior to initiation of procurement action.

## **5.3 SUBSTITUTIONS.**

To avoid delay in assembly and shipment of TCTO kits, substitutions may be made on minor parts without the necessity of changing the TCTO. Parts substituted for items in the TCTO will be tagged to indicate the substitution and the authority. Authority for substitution, when not specified in published stock lists for the commodity class, must be obtained from the applicable PM monitoring the project, and will be listed in the TCTO whenever possible. Any substitutions authorized must not adversely affect the tensile strength, utility, reliability or interchangeability of the assembly as intended by the TCTO.

## **5.4 WAIVERS TO COMPLETE KIT CONCEPT.**

The purpose of the complete kit concept is to ensure timely, efficient, and effective TCTO accomplishment, standardization of materials and elimination of re-requisitioning actions. There may be selected cases where deviation from this policy is in the best interest of the Air Force. Waivers may be approved on a case-by-case basis when the below requirements have been met:

**5.4.1 Non-Kitted Materials.** Non-kitted material requirements must be minimal, consisting of common items which are in stock at bases involved. The PM requesting a waiver will obtain written certification from the cognizant engineering authority that all proposed common materials to be excluded from the kit do not affect safety or have critical properties essential to modification; and any materials which could be provided as substitutes, identified through the Air Force supply system, would not affect these characteristics or induce corrosion when used in the specific application required by the modification.

**5.4.1.1** Exceptions to the requirement for waivers to the Complete Kit Concept are

- For inspection TCTOs, commonly available tools, parts and material required for access and button-up of inspection areas (including stock listed periodic inspection kits) will not be provided in TCTO kits (AFMAN 23-110).
- TCTOs used to announce software-only changes to baselined computer programs (TOs 00-5-15 & 00-5-17, Users Manual; USAF Computer Program Identification Numbering (CPIN) System) are also non-kitted.

- In accordance with AFI 20-110, Nuclear Weapons-Related Materiel Management (NWRM), NWRM are prohibited from inclusion in TCTO Kits and are therefore exempt from the Complete Kit Concept.
- Waivers are NOT required if the only omitted items are petroleum, oil and lubricant (POL) products.

5.4.1.2 The PM will forward the request for kit waiver on field-level TCTOs to the affected Lead Command directorate for approval. Signature at the command three-letter level is mandatory on approved kit waivers and may be transmitted by electronic means (FAX or CAC-signed e-mail). The waiver must state that the deviation is justified and economically feasible; materials required are in stock at the bases involved; and the using command will provide the materials without PM reimbursement. (When urgency of need dictates, and a using command possesses adequate material assets but not at the requiring bases, lateral redistribution may be accomplished to accommodate TCTO accomplishment.)

5.4.1.3 In cases of depot-level TCTOs, the PM must negotiate and obtain documented agreement with the Depot Maintenance Division Chief that the deviation is economically feasible and that materials required are in stock or obtainable at the maintenance location involved. The PM then approves the waiver.

5.4.1.4 When waivers are granted, Paragraph 1.3 of the TCTO shall include the office symbol, e-mail address and DSN number of the Lead Command Point of Contact (POC) or depot maintenance office authorizing the waiver from the complete kit concept.

5.4.2 Depot-Level TCTO Kit. When a routine depot-level TCTO kit would contain material which is a duplicate of material issued in an established repair kit, and the TCTO is to be accomplished only at the time of the scheduled repair, then the complete kit concept is automatically waived for the material that will be duplicated (no waiver documentation is required). MAJCOM and depot waivers are not required on interim and routine safety TCTOs managed by other DoD components or contractors when parts/kits are provided by the other DoD component or contractor.

5.4.3 Non-Kit Type TCTOs. TCTOs, when used for distribution of system CPIN items, are non-kit type TCTOs. CPIN changes may also be distributed via PM Memo of Transmittal. Initial distribution of TCTOs/memos to authorized program users will be accompanied by the CPIN item on the appropriate medium.

5.4.4 Required Computer Programs. Computer programs required to perform or check compliance of the TCTO itself are procured from the responsible engineering activity identified in the Computer Program Compendium/Index and issued in TCTO kits.

5.4.5 Waiver. When a waiver is granted to the complete kit concept the lead command is responsible for planning, programming and budgeting for kits IAW AFI 21-118, Improving Air and Space Equipment Reliability and Maintainability.

## 5.5 ASSEMBLY OF TCTO KITS.

5.5.1 Depot Assembly (AFMAN 23-110, Vol. 3, Pt 1, Chapter 11). When it is determined that the ALC will assemble kits for use with a TCTO, the TCTO kit unit of the ALC supply function will:

5.5.1.1 Verify the quantity of kits required.

5.5.1.2 Screen the list of kit components for proper identification, and where not indicated, insert NSNs.

5.5.1.3 Prepare and forward authorization for kit assembly to the distribution activity responsible for kit assembly with the following essential information:

5.5.1.3.1 Quantity of kits to be assembled.

5.5.1.3.2 Complete list of kit components by quantity, NSN, and nomenclature. Allow space for assembly personnel to annotate the box number in which each item has been placed. This list will also have an appropriate shelf life control item processing code (AFMAN 23-110, Vol. 7, Pt 3) annotated by each item requiring control. Time change items will be identified on this list by an appropriate code as indicated in the TCTO. Sufficient copies will be prepared so that one copy of the list can be placed in, as well as one copy on the outside of box No. 1.

5.5.1.3.3 Any data previously obtained relative to the availability of required items.



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5.5.1.3.4 The applicable fund citation.

5.5.1.4 The distribution activity will be responsible for assembly of TCTO kits in accordance with Paragraph 5.1. The activity will requisition all parts and materials for kit assembly through or from the appropriate SRAN.

5.5.1.5 When sufficient parts and materials have been accumulated and the required kits assembled, the kits will be transferred to the TCTO kit unit for management.

5.5.2 Contractor Assembly (AFMAN 23-110, Vol. 3, Pt 1, Chapter 9, Section H). When a contractor will assemble kits, assembly shall be done in accordance with terms in the contract. Kits will be distributed in the quantities and to destinations scheduled. Kits must be stock listed and issued through the DoD Supply system.

## 5.6 DEPOT STORAGE OF KITS.

5.6.1 Storage. TCTO kits will be stored by the TCTO kit unit of the ALC supply function under the stock number assigned in accordance with AFMAN 23-110, Chapter 11. Active TCTO kits will not be disassembled and the component parts will not be placed in stock under the individual part or stock numbers, nor will these kits be issued for any reason other than TCTO compliance until the TCTO has been rescinded or written authority is granted by the PM/TCM monitoring the TCTO.

5.6.2 Parts Required. Parts subsequently required for service maintenance of the initial TCTO will be requisitioned from the appropriate commodity class in accordance with current supply procedures.

5.6.3 Repair. TCTO kits will be tagged condition "G" (Unserviceable and Incomplete) when certain components are found to need repair. If a holding activity finds that a kit contains damaged parts, those parts will be removed, tagged reparable, and turned in for repair. The kit monitor will immediately requisition individual replacement components to return the kit(s) to complete (usable) status. Kits that are discovered by a holding activity to be short component parts will be reported (See Figure 5-1, Message Format for Reporting Kit Shortages), tagged "Incomplete" and immediately processed in accordance with AFMAN 23-110.

5.6.4 Removal. When TCTO components must be removed from serviceable kits in supply to replace defective components on a previously modified end item, the kit will be coded as "Incomplete" and a replacement component will be ordered.

## 5.7 DISTRIBUTION OF TCTO KITS.

5.7.1 Distribution. TCTO kit distribution will be accomplished on the basis of requisitions submitted in Military Standard Requisitioning and Issue Procedures (MILSTRIP) format from the activity which will accomplish the TCTO. Requisitions will be filled on the basis of the kit shipment schedule provided to the appropriate requisitioning activity.

5.7.2 Receipt. Immediately upon receipt of the TCTO, the managing activity Plans, Scheduling & Documentation Section (PS&D) (or equivalent) will either check unit configuration management records or perform a physical check of affected aircraft, missiles, ground C-E or commodities to determine the number of kits required for compliance. PS&D will notify the base supply activity, who will submit kit requisitions to the designated source of supply.

5.7.3 Shipment. Under no circumstances will TCTO kits, parts or tools, be shipped directly to a performing work center without prior coordination with the appropriate MAJCOM weapons systems office. The MAJCOM weapon systems office is responsible for obtaining the shipping information from each affected wing. The USAF agency responsible for the development of a TCTO will obtain these shipping instructions from the MAJCOM weapons systems office, and provide the instructions to any agency(s) contracted to ship TCTO kits, parts or tools to a USAF unit.

5.7.4 TCTO Kits Not Received. In the event TCTO kits have been requested but not received at the time of system or commodity transfer, the releasing organization will immediately advise the TCTO kit manager to cancel shipment of kits for the system or commodity being transferred. For kits that are found to be in transit, the releasing organization will contact the recipient organization for kit forwarding instructions.

**5.7.5 TCTO Kits Issued but Not Installed.** TCTO kits which have been issued to maintenance but have not been installed prior to transfer of the system or commodity, will be transferred to the receiving activity with the system or commodity when conditions permit. Suitable notification of such a transfer will be provided to the recipient in accordance with AFI 21-103, Equipment Inventory, Status, and Utilization Reporting and concurrently to the ALC TCTO kit manager.

**5.7.6 Transfer.** When an aircraft, missile or other end item is transferred to a depot or a contractor for purposes of installing retrofit changes, procedures in TO 00-20-1, Aerospace Equipment Maintenance Inspection, Documentation, Policies, and Procedures, apply concerning TCTO kits to be retained or forwarded (see also, AFI 21-101, Aerospace Equipment Maintenance Management).

**5.7.7 Retrofit Changes.** All TCTO kits on hand which represent unaccomplished retrofit changes on aircraft systems or commodities which have departed station for depot modification or PDM will be retained until the system or commodity is returned, or action to ship kits to the depot becomes appropriate.

**5.7.8 TCTO Compliance.** Activities receiving assets requiring TCTO compliance, not accompanied by necessary TCTO kits, will requisition the necessary kits.

**5.7.9 Sending and Receiving E-Mail from Organizational Accounts.** The following procedures will allow the exchange of signed and encrypted e-mails to and between Organizational Mailboxes:

- a. The organizational mailbox owner submits a work request to the computer support office.
- b. A Trusted Agent letter is created for each organizational mailbox user and submitted to the base network administration office, which in turn requests a PKI certificate for each user.
- c. The base network administration office provides the issued PKI certificates to the computer support office.
- d. The computer support office installs the PKI certificates on the appropriate user's computer.
- e. Authorized users can now send and receive digitally signed/encrypted mail directly from the organizational mailbox.

## **5.8 DEPOT-LEVEL KITS.**

Parts and materials required for accomplishment of depot-level TCTOs shall be provided as complete kit requirements and identified by kit numbers. The physical packaging may or may not be in the form of individual boxed kits depending upon the circumstances of each retrofit change. When the depot activity (contractor or organic) performing the modification is also the activity furnishing the kit components, requirements may be arranged, when advantageous, to be compatible with a production line maintenance flow.

## **5.9 REPORTING OF TCTO KITS IN SUPPLY.**

**5.9.1 Reporting.** All centrally-procured TCTO kits will have the appropriate Expendability, Recoverability, Reparability Code assigned (AFMAN 23-110, Vol. 2, Pt 13). This code is used in accounting records to ensure that TCTO kits are reported in the Recoverable Assembly Management Process system without regard for unit cost or management control. MAJCOM directed and assembled TCTO kits shall be given a routing identifier of "JBD" and not reported to ALC managers.

**5.9.2 Initial Issues.** TCTO kits will always be issued by supply as initial issues. By issuing the kits as initial issue, Due In From Maintenance (DIFM) reports will not be created.

## **5.10 DISPOSITION OF TCTO KITS.**

The Supply TCTO Kit Monitor/Materiel Control is responsible for the coordination of TCTO kit requirements between supply and maintenance. Regular surveillance will be maintained over kits on hand, requirements in maintenance, and disposition of excess or obsolete kits.



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5.10.1 Disassembly and Disposal. Organizational and intermediate level TCTO kits shall be disassembled or disposed of as specified in the TCTO or according to AFMAN 23-110. Before any disposition action is initiated, the Supply TCTO Kit Monitor/Materiel Control will notify the affected Maintenance Group Commander/Chief of Maintenance, by kit identification number and TO number, of contemplated action based upon direction in the TCTO.

5.10.2 Completion Status. The responsible commander will assess applicable TCTO completion status. When it is determined that no further requirements exist, the commander will provide the kit monitor/material controllers with written certification that the kit in question is not required and that maintenance concurs with disposal or disassembly.

5.10.3 Requirements. Kits which are not required will be processed for disposal or disassembly. Kits which are required will be annotated with the approximate date of TCTO completion.

5.10.4 Excess Kits. Excess kits will be reported via letter or electronic transmission to the applicable TCTO kit unit in accordance with AFMAN 23-110. Based on worldwide Air Force requirements for kits, subsequent disposition instructions will be issued by the kit unit directing reshipment, disassembly or disposal as appropriate.

## JOINT MESSAGE FORM

FROM: UNIT REPORTING KIT SHORTAGE
TO: ALC/(PRODUCT DIRECTORATE)
INFO: MAJCOM/LGM/LGS
ALC AFB//(SM)
OTHER USER LGM/LGS
UNCLAS
SUBJ: TCTO KIT SHORTAGE
1. TCTO NUMBER
2. KIT NUMBER
3. SYSTEM APPLICABILITY
4. PART NUMBER/NSN OF MISSING ITEM(S)
5. NOMENCLATURE OF MISSING ITEM(S)
6. DESCRIPTION OF MISSING ITEM(S)
7. NUMBER OF KITS WITH PARTS MISSING AND NUMBER OF KITS INSPECTED
8. AVAILABILITY OF SUITABLE SUBSTITUTES IF KNOWN
9. SOURCE OF SURVEY
10. ACTIONS TAKEN
11. OTHER INFORMATION SUCH AS CONDITION OF KIT PACKAGE
12. INDICATE TIME FRAME WHEN RESPONSE IS NEEDED
13. POC UNIT/NAME/PHONE

TO-00-5-15-020

Figure 5-1. Message Format for Reporting Kit Shortages



## CHAPTER 6

### TCTO VERIFICATION; RELEASE OF TCTOS, KITS AND TECHNICAL DATA

#### 6.1 TCTO VERIFICATION.

Verification of TCTOs and related TO updates, with or without kits, is mandatory. The purpose of TCTO verification is to ensure that technical guidance is complete, any associated kits are adequate and parts fit properly, skill levels are properly identified, designated support equipment performs satisfactorily, tooling requirements are provided, proper modification marking instructions are included, the modification can be installed within the intended environment, and associated TO updates are correct. Verification must include checking for possible interaction with other proposed or on-going TCTOs to the same system or end item. Verification includes the process formerly known as “kit proofing.” TCTO verification is NOT an inspection of the individual or organization performing the TCTO verification. All modification TCTOs must be verified by performance, unless a verification waiver is approved. The exception to this policy is Immediate and Urgent action modification TCTOs which do not require verification by performance due to urgency. Inspection TCTOs and Modification TCTOs not verified by performance must receive a Desk-Top Analysis.

**6.1.1 Prototyping.** Preliminary TCTOs developed for the Air Force by a contractor must be “prototyped” prior to acceptance for government verification. Prototyping as used here includes contractor certification of the TCTO and any required TO updates, and should involve actual installation of the prototype TCTO kit. Under this situation, the contractor uses the preliminary TCTO instructions and any associated TO task changes to perform the prototype modification.

**6.1.2 Prototyping and Verification.** The PM, in conjunction with the Lead Command, may authorize concurrent prototyping and verification when in the interests of the Air Force.

#### 6.2 APPLICABILITY.

**6.2.1 Verification.** All TCTOs, interim and formal, will be verified on each affected MDS. The following types of modification orders are exempt from verification by performance: (1) FAA certified changes; (2) reinstatement of rescinded TCTOs when the kit production source remains unchanged; (3) CLS-maintained system TCTOs performed by the contractor; (4) joint service TCTO equivalents verified by the proponent service when the equipment configuration is identical; and (5) approved service bulletins (TCTOs) which have been previously accomplished on commercial systems which the Air Force has maintained in identical configuration.

**6.2.1.1** Even when the TCTO itself is exempt from verification, any associated Air Force TO changes must be verified.

**6.2.2 Documentation.** Verification will be certified by the installing agency using an AFTO Form 82, documenting TCTO verification accomplishment, disapproval, or waiver. All related TO updates will be listed in block 14 of the AFTO Form 82 with an annotation of acceptability. The form may be accepted or rejected by the agency having management responsibility for the system or commodity TCTO. The completed AFTO Form 82 (Figure 6-1) for all formal and interim TCTOs will be maintained on file for the life of the affected system or commodity.

**6.2.2.1** The AFTO Form 82 will be completed by the TCM, or in the absence of the TCM, the performing unit, in accordance with Figure 6-2, Preparation Instructions for AFTO Form 82. The original completed copy will be forwarded to the TCM responsible for the TCTO within 10 workdays after completion of the verification.

**6.2.2.2** The AFTO Form 82 is available in IMT format, or may be computer generated (CG) according to AFI 33-360, Publications and Forms Management.

**6.2.3 TCTO Verification Waivers.** A waiver to TCTO verification by performance may be approved by the responsible PM with the concurrence of the Lead Command system manager or equivalent 3-letter office. A waiver of verification by performance must be documented on the AFTO Form 82. TCTO and TO deficiencies noted in block 12 of the AFTO Form 82 must be corrected prior to release of the TCTO and kits to installing activities. When the urgency of need dictates, initial coordination may be via telecon, but must be confirmed by written correspondence. Desktop Analysis must be performed.

**6.2.3.1** When the performing activity is an ALC, the PM will authorize the waiver in coordination with depot maintenance supervision.

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6.2.3.2 The TO Manager or TCM, in conjunction with the Lead Command, may waive verification by performance for TCTOs which use existing TO procedures.

6.2.3.3 Document approved waiver coordination and authority on both the AFTO Form 873 and the AFTO Form 82.

**6.3 REQUIREMENTS.**

One of the first available production TCTO kits will be used to satisfy the verification requirement. The TCTO kit selected will not be engineered into the applicable system or commodity by engineering personnel. A change in kit production source will require another verification effort when kits are produced according to a performance specification, but not when the kits are produced using a detail specification.

6.3.1 Verification. Verification will be accomplished and/or certified by the lead command as noted in the TCTO (paragraph 4, By Whom to be Accomplished). The lowest skill level individuals projected to perform the TCTO in the field must be used in the verification effort.

6.3.2 Observation of Personnel. TCTOs designated for accomplishment by Organizational or Intermediate level personnel of the using command should be verified with over the shoulder observation by responsible procuring activity personnel (TCM, kit development Office of Primary Responsibility), MAJCOM representatives, and contractor personnel if applicable.

6.3.3 Organic Depot Skills. If organic depot skills are required, depot maintenance personnel should accomplish the verification.

6.3.4 Contractor Verification. If the contractor developing the TCTO will also accomplish the installation/modification, verification of the TCTO itself will not be required (contractor prototyping will suffice). However, TCTO-driven changes to associated Operation and Maintenance (O&M) TOs must be verified in accordance with TO 00-5-3, prior to implementing the TCTO. Verification may either be scheduled in conjunction with the contractor TCTO prototyping (provided production-configured kits are available) or during a separate government verification/operational checkout.

6.3.5 Verification Requirement. The requirement for verification will not be satisfied by means of engineering installations, prototype installations, or other test and evaluation procedures. (EXCEPTION: One- or two-of-a-kind commodities for which a record TCTO will be written, or as above where the contractor will accomplish the TCTO.)

6.3.6 Government Verification. Government verification will be accomplished prior to acceptance or issue of organically-performed TCTOs and kits from a contractor.

6.3.7 Minimum Requirements. The following minimum requirements must be verified during TCTO verification:

6.3.7.1 All parts furnished must fit properly, without force (unless the TCTO specifically calls for a force-fit).

6.3.7.2 All special tools and test equipment provided must fit without force, and do the job for which intended.

6.3.7.3 Installation instructions and related drawings must be accurate and adequate to perform the TCTO.

6.3.7.4 The parts listed in the verified copy of the TCTO must agree with the actual items provided in the TCTO kit without exception.

6.3.7.5 Disposition instructions must be clearly defined and acceptable for removed items, and when appropriate, supply items which were modified as a result of the TCTO.

6.3.7.6 TCTO accomplishment must be within the capability of the organizations and individuals that will accomplish the procedures, and be correctly indicated in the TCTO. Only technical data, drawings and tools authorized to the designated maintenance activity during installation will be used for verification.

6.3.7.7 After completion of verification, the modified system or commodity must perform to the criteria prescribed.

6.3.7.8 When an updating change or modification results in a significant effect upon the system or commodity, the TCTO must clearly describe the impact.

6.3.7.9 The number of man-hours projected in the TCTO for accomplishment must be as accurate as possible. Man-hours must be identified by functional area (AFI 36-2101, Classifying Military Personnel (Officer and Enlisted)).

6.3.7.10 Changes to software must be compatible with test equipment and the modified commodity.

6.3.7.11 TCTO test procedures must actually provide the ability to differentiate between acceptable and unacceptable criteria. For example, the testing does not inadvertently omit strength, integrity, dilution, shelf life, expiration, sequence, exposure, or similar procedure criteria with which the designated skill level is not ordinarily familiar.

6.3.7.12 Compatibility with other Government systems.

## 6.4 RESPONSIBILITIES.

### 6.4.1 Air Force Materiel Command.

6.4.1.1 The responsible PM TCM will ensure that updating changes and modifications are verified and corrections incorporated prior to release of TCTOs and kits to the installing activities.

6.4.1.2 Responsible activities will actively manage verification of change and modification TCTOs that are to be contractually or depot installed.

6.4.1.3 The modification manager will negotiate with the using commands for accomplishment of verification for all TCTOs that are to be accomplished at the organizational or intermediate maintenance level, regardless of the source of generation.

6.4.1.4 The PM will provide engineering assistance to the using commands for the organic verification of updating changes and modifications.

### 6.4.2 Lead and Using Commands.

6.4.2.1 The Lead Command will monitor the TCTO verification process on assigned weapon systems and commodities.

6.4.2.2 Using Commands will:

6.4.2.2.1 Provide required facilities, housekeeping, tools, and personnel to ensure the successful verification of those TCTOs to be accomplished at the Organizational/Intermediate level.

6.4.2.2.2 Verify Organizational/Intermediate level TCTOs as negotiated with the PM TCM, and complete the required certification forms, including evaluation comments as appropriate.

### 6.4.3 Depot Maintenance.

6.4.3.1 Monitor the TCTO verification processes on assigned weapon systems and commodities.

6.4.3.2 Provide required facilities, housekeeping, tools, and personnel to ensure the successful verification of those TCTOs to be accomplished at the Organizational/Intermediate level.

6.4.3.3 Verify Organizational/Intermediate level TCTOs as negotiated with the PM TCM, and complete the required certification forms, including evaluation comments as appropriate.

6.4.3.4 Provide updates into REMIS for completed TCTOs.

## 6.5 PROCEDURES.

6.5.1 General Verification Procedures. General TCTO verification procedures will be documented on the program's TO Verification Plan, IAW TO 00-5-3. Verification will be accomplished by the actual installation of one of the first production kits (not an engineering or prototype kit) and verification of associated technical order changes by the designated level of maintenance prescribed by the TCTO.

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**6.5.2 Specific Verification Requirements.** Specific TCTO verification requirements will be attached to the AF Form 3525 or AFMC Form 518 approving the TCTO. This will provide the schedule, location, funding and method of accomplishment either in the appropriate block or an attached continuation sheet. If the AF Form 3525 or AFMC Form 518 indicates that verification is NOT required, a detailed explanation must be provided in the remarks block or attachment.

**6.5.3 Scheduling.** The PM CCB will ensure that plans and schedules for accomplishment of verification are adequate and realistic prior to TCTO approval. Schedule slippage will require positive rescheduling actions.

**6.5.4 Procedures.** The following procedures shall be followed during verification:

**6.5.4.1** The unit tasked to perform TCTO verification shall assign a 7-level or higher skill level Verification Team Manager (VTM – TO 00-5-3), preferably from the unit Product Improvement (PI) or equivalent quality assurance function, to supervise the verification.

**6.5.4.2** The VTM shall ensure all support equipment, facilities, procedures and personnel required by the TCTO are available. The task(s) shall be scheduled as expeditiously as possible without impacting the unit's primary mission.

**6.5.4.3** The verification team will review the TCTO and any changed TO procedures to ensure all procedures and tasks are understood. Then the lowest skill-level team member(s) (5-level minimum) will perform the TCTO procedures exactly as written.

**6.5.4.3.1** Any kit(s) will be checked for completeness, identification of parts, and ease of part installation.

**6.5.4.3.2** After completion of the modification, TCTO test procedures will be performed to verify the successful completion.

**6.5.4.3.3** The associated changed technical data (TOs, drawings, etc.) shall be reviewed and verified IAW TO 00-5-3. If verification must be delayed, the TCM responsible for the TCTO must reschedule the date to support the concurrent release concept for TCTOs, kits and related TO updates.

**6.5.4.4** All problems and deficiencies will be documented on the AFTO Form 82 and returned to the TCTO Content Manager. When applicable, marked-up copies of the TCTO and TO updates will accompany the form.

**6.5.4.5** Verification will be certified by the digital signatures of the VTM in Block 13A, PI representative in block 13B, and the PM representative in Block 13C of the AFTO Form 82.

**6.5.4.6** The original AFTO Form 82, red-lined TCTO and any TO updates, as applicable, will be maintained by the TCM for the life of the affected system or commodity.

**6.5.5 Verification Failure.** If TCTO verification fails any of the above criteria, or if safety hazards are encountered, the verification will be halted and the TCM will be notified. The TCM will direct further actions. Every effort will be made to correct the problems on the spot. However, if problems are such that the TCTO cannot be corrected on scene, the TCTO verification asset will be de-modified and released back to the owning unit. After the problems are corrected, a new verification effort will be scheduled.

**6.5.6 Disapproval.** In the event that the verification activity disapproves the TCTO or kit due to deficiencies, additional comments will be placed in the AFTO Form 82, Block 12 (or a continuation sheet) fully explaining the reason for rejection. A second AFTO Form 82 is required to certify successful accomplishment of follow-on verification.

**6.5.7 Resolution of Deficiencies.** The agency responsible for the system or commodity will take action to resolve all deficiencies noted in Block 12 (including rescheduling any disapproved verifications) prior to release of the TCTO and kits to installing activities.

## **6.6 RELEASE OF TCTOS.**

**6.6.1 Release of TCTO Kits and Technical Data.** An AFTO Form 875 must be completed according to the instructions in Paragraph 3.11 prior to the release of a TCTO, kits, and related TO updates. Air Force policy requires concurrent release of all TCTO-related items (TCTO, kits, TO updates), and is the responsibility of the PM.



**6.6.2 Immediate Action TCTOs.** Immediate action TCTOs will be dated and released immediately, without regard to availability of kits or parts, as soon as engineering and logistics information is available. The compliance paragraph of the TCTO will state that the TCTO will be accomplished immediately (Table 3-1). Prior to release, the PM and Lead Command will determine who will perform any performance verification required.

**6.6.3 Urgent Action TCTOs.** Urgent action TCTOs will be dated and released without regard to kit availability. The compliance paragraph will state that the TCTO will be accomplished within a specified time (from 1 to 10 days) after receipt of the TCTO and kits, when kits are required (Table 3-1). This policy provides advance notice of the safety implications of the TCTO and maintenance scheduling information prior to kit availability. Prior to release, the PM and Lead Command will determine who will perform any performance verification required.

**6.6.4 Release of Immediate or Urgent Action TCTOs.** Upon release of an immediate or urgent action TCTO, expeditious action shall be taken to procure and assemble applicable kits and publish updates to affected TOs. Publication dates are established to be concurrent with the kit availability. If urgency dictates, interim or verified preliminary TO updates may be used to support a formal TCTO (TOs 00-5-1 and 00-5-3).

**6.6.5 Interim Operational or Safety Supplements.** When immediate or urgent action TCTOs do not involve kits or parts, Interim Operational or Safety Supplements to affected TOs will be issued as required with the TCTO. Formal updates incorporating the interims into the affected TOs will be published during the next routine update cycle, but not later than 1 year after TCTO issue. EXCEPTION: ITOs providing temporary procedures or limitations may remain in effect for up to 30 months, in accordance with TO 00-5-1.

**6.6.6 Routine Action TCTOs.** Routine action TCTOs shall not be released until kits are available for release and affected TO updates can be distributed concurrently. The TCTO publication date is determined by the TCM/PMS/TO Manager based on the release date.

**6.6.7 Initial Distribution.** Initial Distribution will be made to those TODOs on subscription for the TCTO series headers.

**6.6.8 Record TCTOs.** Record TCTOs will be released in support of TCTO prototyping installation and depot-level or contractor TCTO accomplishment only.

## **6.7 RELEASE OF KITS.**

**6.7.1 Requisitioning.** All TCTO kits will be requisitioned from the supply activity designated in the TCTO. Kits will be issued as directed by the PM, based on depot responsibility for the system/commodities involved.

**6.7.2 Delayed Availability.** When a TCTO indicates a delayed kit availability schedule, the requisitioning activity will consider the distribution schedule and assigned supply priority before initiating follow-up action to the PMS.

**6.7.3 Failure Receipt.** Failure to receive kits will not be a basis for filing unsatisfactory reports until the delivery schedule indicated in the TCTO has expired. When information is available to indicate that the appropriate delivery time-frame has been exceeded, follow-up will be initiated. Follow-up will be in accordance with the delivery time prescribed for the supply priority assigned to the requisition.

**6.7.4 Release.** Kits will not be released until affected TO updates are ready for distribution.

## **6.8 RELEASE OF TO UPDATES.**

**6.8.1 Concurrent Release of Existing TO Updates.** Retrofit changes may result in changes to existing TOs or introduce a requirement for new data. When this occurs, updates or new data will be prepared and released concurrently with the release of the TCTO.

**6.8.2 Release of Before and After TO Updates.** In cases where affected TO updates reflect both “before” and “after” modification data, the updates may be released up to 180 days prior to TCTO and kit release. In cases where before data is being replaced by the after data, changes must be held for concurrent release with the TCTO. Before data shall be removed after TCTO completion by issuance of routine TO updates. TO updates will be acquired using the same appropriation which funded the TCTO.



TO 00-5-15

<b>TCTO VERIFICATION CERTIFICATE</b>				1. <input type="checkbox"/> UPDATING CHANGE <input type="checkbox"/> MODIFICATION <input type="checkbox"/> INSPECTION <input type="checkbox"/> CPIN		2. <input type="checkbox"/> KIT <input type="checkbox"/> NO KIT		3. DOCUMENT CONTROL NUMBER	
THIS CERTIFIES COMPLIANCE WITH TO 00-5-15 AS FOLLOWS									
4. UPDATING CHANGE/MODIFICATION TITLE					5. IMPLEMENTING TCTO AND DATA CODE				
6. KIT DATA CODE NUMBER			7. INITIALLY INSTALLED ON			8. LOCATION		9. DATE	
10.	KIT VERIFICATION			YES	NO	TO/TCTO VERIFICATION		YES	NO
A	KIT PARTS PERFORM AND FIT PROPERLY					G	DISPOSAL DISPOSITION INSTRUCTIONS SATISFACTORY		
B	TOOLING/TEST EQUIPMENT SATISFACTORY					H	INSTRUCTION FOR IDENTIFICATION OF MODIFIED ITEM SATISFACTORY		
C	INSTALLATION/INSPECTION SATISFACTORY					I	MAN-HOUR ESTIMATE SATISFACTORY		
D	PARTS LIST/KIT CONTENT COMPATIBLE					J	SKILL REQUIREMENTS SATISFACTORY		
E	LEVEL OF INSTALLATION SATISFACTORY					K	ASSOCIATED TESTING PROCEDURE(S) SATISFACTORY		
F	MODIFIED ITEM PERFORMS TO SPECIFICATION					L	ASSOCIATED TO CHANGES VERIFIED (Block 14)		
11. <input type="checkbox"/> APPROVED <input type="checkbox"/> APPROVED WITH CONDITIONS NOTED <input type="checkbox"/> WAIVER OF VERIFICATION BY PERFORMANCE <input type="checkbox"/> DISAPPROVED - RESCHEDULE TCTO VERIFICATION									
12. REMARKS/PROBLEMS/CORRECTIVE ACTIONS									
13. THE UNDERSIGNED CERTIFY THAT REQUIREMENTS OF T.O. 00-5-15 HAVE BEEN SATISFACTORILY COMPLIED WITH (Name, Title, Organization, DSN)									
A. PERFORMING AGENCY (Verification Supervisor)					B. INSPECTION ACTIVITY				
C. SINGLE MANAGER REPRESENTATIVE									

AFTO FORM 82, JAN 96 (EF-V2) (PerFORM PRO)

PREVIOUS EDITION IS OBSOLETE

TO-00-5-15-021

Figure 6-1. AFTO Form 82, TCTO Verification Certificate (Sheet 1 of 2)

AFTO FORM 82, JAN 96 (EF-V2) (PerFORM PRO) (Reverse)

**Figure 6-1. AFTO Form 82, TCTO Verification Certificate (Sheet 2)**

<b>Block 1.</b>	<b>Check appropriate block to indicate type of TCTO.</b>
<b>Block 2.</b>	<b>Check appropriate block to indicate if the TCTO is a kit or a no kit TCTO.</b>
<b>Block 3.</b>	<b>Enter appropriate command document control number.</b>
<b>Block 4.</b>	<b>Enter title of TCTO.</b>
<b>Block 5.</b>	<b>Enter appropriate TCTO number and data code number.</b>
<b>Block 6.</b>	<b>Enter kit data code number (separate AFTO Forms 82 may be required for multi-kit TCTOs).</b>
<b>Block 7.</b>	<b>Enter system/commodity designation and serial number on which verification is being accomplished.</b>
<b>Block 8.</b>	<b>Enter site or location of verification.</b>
<b>Block 9.</b>	<b>Enter date of verification.</b>
<b>Block 10.</b>	<b>Check appropriate "yes" or "no" block for items listed. These are minimum requirements. Additional items may be listed as needed. Any blocks checked "no" should be explained in block 12. If "L, Associated TOs Verified" is checked "yes", the TO numbers, titles, and verification results must be entered on the reverse of the AFTO Forms 82.</b>
<b>Block 11.</b>	<b>Check to show approval, approval with conditions, disapproved, or waiver of the TCTO verification performance.</b>
<b>Block 12.</b>	<b>Enter any comments/recommendations pertinent to verification. A continuation sheet may be used if required.</b>
<b>Block 13.</b>	<b>Enter signature in appropriate blocks as noted.</b>
<b>Block 14 (on reverse)</b>	<b>Enter the TO numbers, titles, and verification results for all TO updates verified at the time of TCTO verification.</b>

TO-00-5-15-023

Figure 6-2. Preparation Instructions for AFTO Form 82

## CHAPTER 7

# COMPLIANCE WITH TIME COMPLIANCE TECHNICAL ORDERS

### 7.1 TCTO COMPLIANCE.

TCTOs are military orders issued by order of the Secretary of the Air Force and as such, shall be complied with as specified in the TCTO. See Figure 1-2, TCTO Implementation Flow Diagram, for the TCTO Compliance flow diagram.

### 7.2 OPERATING ACTIVITIES.

7.2.1 TCTO Control Program. The Maintenance Operations Officer, Chief of Maintenance or equivalent at all USAF organizational and intermediate level maintenance activities will establish a TCTO control program according to AFIs 21-101 and 33-150, Management of Communications Activities.

7.2.2 Accomplishment. Activities shall not accomplish TCTOs until scheduled by the Maintenance Operations Flight/Aircraft Maintenance Unit Plans, Scheduling and Documentation Section (AFI 21-101) or Communications Focal Point (AFI 33-150) (see Figure 1-2).

7.2.3 Host Base Activities. Host base activities shall provide facilities and support for depot or contractor field team accomplishment of TCTOs on systems and commodities at each base.

7.2.4 Transient Aircraft Maintenance and Home Station Activities. Transient aircraft maintenance and home station activities will be responsible for ensuring TCTO accomplishment and status recording in accordance with the instructions of 00-20-series TOs.

7.2.5 Transfer of Aircraft. Upon transfer of aircraft, the section on “Transfer of Documents” in TO 00-20-1 will apply.

### 7.3 DEPOT MAINTENANCE.

7.3.1 Depot Maintenance Activities. Depot maintenance activities will perform:

7.3.1.1 All TCTOs designated for depot-level accomplishment on assigned systems and commodities.

7.3.1.2 Immediate and urgent action organizational and intermediate level TCTOs received while an affected military system or commodity asset is undergoing depot-level maintenance or modification.

7.3.1.3 Current outstanding routine organizational and intermediate level TCTOs for which kits are available and which have been negotiated in the work package.

7.3.2 Compliance Period Waivers. The depot maintenance activity will contact the PM requesting a waiver of the compliance period for routine organizational and intermediate level TCTOs which have not been negotiated in the work package for those aircraft that will become red X'd before leaving the depot. A copy of the waiver will be attached to the AFTO Form 781A, Maintenance Discrepancy and Work Document and may be removed only upon completion of the TCTO at the home station IAW TO 00-20-1.

### NOTE

Waivers to compliance periods will expire upon aircraft arrival at home station, and the TCTO must be accomplished prior to releasing the aircraft for service.

7.3.3 TCTO Backlog. If organizational and intermediate level accomplishment field-level capability is exceeded by a released TCTO backlog, action will be taken to request ALC assistance to reduce the backlog to manageable limits according to TOs 00-25-107, Maintenance Assistance or 00-25-108, Communication - Electronic (C-E) Depot Support.

**TO 00-5-15****7.4 WAIVERS TO TCTO COMPLIANCE.**

TCTO compliance may be waived IAW AFI 63-101. There may be some instances when a modification cannot be accomplished due to non-availability of equipment at the depot-level required to test or check out the modification, or other unusual circumstances. In these cases, the PM must evaluate whether or not depot compliance with a TCTO should be waived.

**7.4.1 Documentation.** TCTO waivers are documented on the AFTO Form 95, Significant Historical Data, or the mechanized TCTO status report, as applicable. The entry will indicate the reason and estimated date of compliance. The local Defense Contract Management Agency (DCMA) or senior contractor maintenance official signs and validates these entries.

**7.4.2 Research and Development Missions.** When TCTOs are applicable to components of a system or subsystem which are deactivated, modified, or removed from the aircraft because of Research and Development (R&D) missions, noncompliance will be recorded according to Paragraph 7.4.1. above. The wing operations or maintenance group commanders, equivalent cognizant officials in non-Air Force government organizations, or local DCMA or senior contractor maintenance official for contractor-operated equipment must sign and validate the entries. Accomplish all outstanding TCTOs when components are reinstalled in the aircraft or before the aircraft is transferred to an Air Force facility.

**7.5 COMPLIANCE PERIOD.**

The compliance period is the time allowed to accomplish the TCTO. The period is determined by the PM TCM or PMS based on the TCTO objectives and guidelines in Table 3-1. The compliance period start date for an inspection TCTO is upon receipt of the TCTO, and the inspection must be completed entirely within the stated time frame or the affected system/equipment will be removed from service. Modification TCTO compliance periods for each affected end item will start upon receipt of the TCTO and any associated special tools, parts, kits, and supporting technical data required. For safety TCTOs, the compliance period starts upon receipt of the TCTO itself, regardless of the requirement for kits, parts, etc. Compliance periods will not exceed current rescission dates without PM approval.

**7.6 REMOVE FROM SERVICE DATE.**

The Remove-From-Service date is the expiration of the TCTO compliance period OR 60 days prior to the rescission date, whichever comes first. Remove-From-Service dates are specified in Table 3-1. The affected system or equipment may not be used after this date until the TCTO is accomplished.

**NOTE**

The "Remove from Service" date in this TO is the same as the "Ground Date" in the IMDS, formerly Core Automated Maintenance System ((CAMS)) (G054) and REMIS.

**7.7 EXTENDING A COMPLIANCE PERIOD.**

**7.7.1 Request.** If a unit cannot accomplish the TCTO on all affected assets prior to expiration of the compliance period, the managing PS&D activity must request an extended compliance period from the PM through MAJCOM channels. (See Figure 7-1, Sample Format for Extended TCTO Compliance Period Request).

**7.7.2 Approval.** If the request is approved, the PM, TCM or PMS will establish an extended compliance period for that unit and ensure sufficient kits are retained in the supply system for the specific assets involved. The affected system or equipment will be removed from service when the rescission date is reached.

**7.7.3 Notification.** The PM TCM or PMS will notify affected units via e-mail message or memo of the approved extension. Supplements will not be issued solely to extend compliance periods for individual units. Library custodians will annotate all library copies of the TCTO with the new compliance period, the date received, and the file location of the source document.

**7.7.4 Documentation.** To document TCTO compliance in IMDS after the compliance period/rescission dates have passed, the unit must extend the "Rescission Date" and "Ground Date" for the TCTO in IMDS, comply with the TCTO and document the compliance, then return the TCTO dates to original. A REMIS error message will be generated, but may be deleted.

## 7.8 TCTO COMPLIANCE ON SPARES IN STOCK AND WAR RESERVE MATERIEL (WRM).

7.8.1 Spares In Stock and WRM Assets. Air Force units will comply with outstanding TCTOs on spares in stock and WRM assets as directed by a TCTO.

7.8.2 Technical Order Compliance (TOC) Status. For all organizational, intermediate and depot-level TCTOs, take immediate action to place spares in stock and WRM assets in TOC status. These items should be scheduled through maintenance for modification on a phased basis commensurate with the TCTO priority and compliance period. WRM assets will be maintained and controlled in accordance with AFI 25-101. TCTO requirements will be accomplished before spares or WRM assets are issued to satisfy customer requisitions, unless the customer has indicated in the requisition that an unmodified asset is acceptable and/or a TCTO compliance waiver has been granted according to this TO. All such releases require TCM approval.

## 7.9 CONTRACTORS.

7.9.1 Immediate Action, Urgent Action, and Routine Action Safety TCTOs. Contractors using or maintaining Air Force equipment shall accomplish all immediate action, urgent action, and routine action safety TCTOs and those non-safety TCTOs which are determined to be mission essential by the bailing (see Glossary) command. In identifying mission essential TCTOs, care should be exercised to select those TCTOs which could impair subsequent logistics support if not accomplished.

7.9.2 Depot Maintenance Services. Contractors performing depot maintenance services will accomplish TCTOs as directed by the statement of work. The contract shall require that contractors perform the same TCTOs that the organic depot maintenance activity would accomplish in performing the same maintenance services.

## 7.10 COMPLIANCE WITH RESCINDED TCTOS.

Air Force units will not accomplish a rescinded TCTO without prior approval of the appropriate PM TCM. If it is essential that the TCTO be accomplished, the unit shall provide justification through command channels to the appropriate PM TCM and obtain authorization prior to accomplishment. If manageable quantities of assets are unmodified after TCTO rescission, official reinstatement of the TCTO may not be necessary; rather, the responsible PM TCM can approve accomplishment by message/e-mail/letter. See Paragraph 7.7.4 for IMDS documentation procedures.

## 7.11 TCTO COMPLIANCE ON TRANSIENT AIRCRAFT.

Normally, only immediate or urgent action TCTOs will be accomplished on transient aircraft (see TO 00-20-1).

## 7.12 TCTO COMPLIANCE ON DEPLOYED AIRCRAFT/EQUIPMENT.

TCTOs shall be accomplished on deployed aircraft/equipment within the specified compliance period. The home station is responsible for providing copies of the TCTO and any required kits/special tools to the deployed location.

## 7.13 SAP COUNTRIES COMPLIANCE WITH AIR FORCE TCTOS.

It is USAF policy to offer Air Force system or commodity TCTOs approved for release to SAP customers. TCTOs must be reviewed for releasability by the local FDO. Compliance with Air Force TCTOs will be in accordance with TO 00-5-19, Security Assistance Technical Order Program and AFMAN 16-101, International Affairs and Security Assistance Management.

## 7.14 NEW PRODUCTION SYSTEMS OR COMMODITIES.

All approved ECPs affecting items in production shall be incorporated on the first possible item produced after CCB approval (and contract award, if applicable). The corresponding TCTO effecting any required update change on delivered items requires identification of the production change point in the text of the TCTO (MIL-PRF-38804). The procuring activity exercising approval and management of safety ECPs directed to production and all safety TCTOs issued before system or commodity delivery and for which kits are available, shall be responsible for effecting TCTO accomplishment before delivery. This responsibility is established to prevent the situation where a user accepts delivery of new systems or commodities which must be immediately removed from service due to lack of accomplishment of a safety TCTO.

**TO 00-5-15****7.15 SYSTEMS OR COMMODITIES IN OPERATIONAL INVENTORIES.**

**7.15.1 Responsibilities.** The unit possessing systems or commodities to be modified by a field level TCTO is responsible for scheduling TCTO accomplishment. This includes scheduling removal and replacement of installed commodities and TCTO compliance on the removed assets, supply spares and RSP assets.

**7.15.2 Assets.** Upon receipt of a depot-level TCTO, the system or commodity user, in conjunction with the base supply inspector, will assess the availability of assets requiring modification, including RSP assets. Based on this availability and other factors such as historical "Not Repairable This Station (NRTS)" rates and the TCTO compliance period, the user will develop a base plan to rotate the assets through depot maintenance (or to a depot repair team) for modification with minimal impact to the unit mission. The decision to force-generate assets or operate on an attrition basis depends on failure rates. The plan must be approved by the appropriate Wing Division or Group Commander. Funding of spares will be according to AFI 65-601V1.

**7.16 PREPARATION OF SYSTEMS OR COMMODITIES FOR DEPOT WORK.**

To achieve minimum depot support flow time, O/I-level TCTO kits that will be installed by depot maintenance under the provisions of TO 00-25-4, Depot Maintenance of Aerospace Vehicles and Training Equipment will be forwarded to the depot. Kits forwarded will accompany the system or commodity, or be properly identified with the applicable serial number of the end item, and made available to the depot in time to avoid unnecessary delays.

**7.17 TCTO SUSPENSION (ABEYANCE) AND DEMODIFICATION OF ITEMS.**

**7.17.1 Hazards.** When problems with TCTOs are detected which are of such a nature as to present a hazard to personnel or equipment, the performing unit will immediately cease compliance and notify the parent MAJCOM and TO Manager or TCM responsible. Only the TCM may suspend compliance with the TCTO (the TCTO is placed in abeyance) until the problem can be rectified. Emergency suspensions of TCTOs are electronically transmitted to affected MAJCOMs. Units will not purge the TCTO from IMDS if the unit has a message from the ALC/MAJCOM placing the TCTO in abeyance.

**7.17.2 TCTO Rescission Dates.** Suspended TCTO rescission dates can only be extended one time, not to exceed 50 percent of the original period. Suspended TCTOs that exceed the extended rescission date must be rescinded. The responsible TCM must review the TCTO status and provide updates to affected MAJCOMs every 90 days during the suspension. Both parties must determine whether TCTO verification will be re-accomplished before reinstating a suspended TCTO. The appropriate PM shall be notified if the TCTO is suspended.

**7.17.3 Compliance Periods.** When TCTOs are placed in abeyance the compliance period is also placed on hold and resumes when the abeyance is lifted.

**7.17.4 Approval.** A modified end item or component can only be de-modified with the specific written approval of the owning MAJCOM and the PM.

**7.18 MANAGEMENT CODING OF SUPPLY RECORDS.**

**7.18.1 Procedures Affecting Safety or Hazardous Conditions.** Supply must establish procedures to ensure that parts affecting safety or hazardous conditions replaced by a TCTO are not reissued for the same application (See AFMAN 23-110, Vol. 3, Part I, Chapter 11). These types of items fall into two categories: peculiar and common. Peculiar items are those which are normally used on only one system or commodity. Common items are those which are applicable to two or more systems or commodities. Management coding can only be applied to items specifically designated in paragraph 8 of the TCTO.

**7.18.2 Materiel Control.** Upon receipt of TCTO, material control will contact base supply or the Logistics Readiness Squadron about the availability of spares in stock for modification and to ensure the items identified in the TCTO contain the appropriate codes/flags in accordance with AFMAN 23-110, Volume 2, Part II, Chapter 14. Expedient action will be taken to have the spares modified concurrently with and in proportion to operational system or commodity TCTO modifications. MAJCOMs and bases may, at their discretion, load an issue exception (IEX) code and phrase such as "Do Not Use On B-52H after completion of TCTO 1B-52H-502" in accordance with AFMAN 23-110, Volume 2, Part II, Chapter 11.



**7.18.3 Accounting Personnel.** The above example on records or reference documents will be used by accounting personnel to verify the intended application of item(s) requisitioned to ensure that only modified item(s) are issued for use on modified end items, and demodification will not result. There will be cases where only a percentage of the items affected will be modified, requiring the remainder to be in an active status. When this occurs, a new part number and NSN will be assigned to the modified item when possible. Where the entire spares inventory will be gradually modified to a new configuration, management control procedures will apply until all assets have been modified. Supply will ensure that a proportional percentage of unmodified items are maintained in support of unmodified systems or commodities until the TCTO is completed on all affected end items. At this time, unmodified spares remaining in stock will be scheduled for TCTO accomplishment.

## **7.19 MAINTENANCE RECORDS.**

Compliance reporting is essential for maintenance of configuration records. The activity performing the TCTO shall make appropriate status entries in maintenance records (e.g., AFTO Form 349, Maintenance Data Collection Record and IMDS/REMIS/CEMS/G081, etc.) and compliance reports.

## **7.20 RELIABILITY AND MAINTAINABILITY INFORMATION SYSTEM (REMIS)(G099)(TO 00-20-2).**

REMIS is designed to accumulate data and provide information necessary to support the Air Force equipment maintenance program outlined in AFI 21-101. REMIS will provide accurate, near real-time data accessibility to maintenance engineers and maintenance production functions for all levels of management.

**7.20.1 Interfaces.** REMIS will interface with and accept inputs from the IMDS and G081 (CAMS for Mobility) through the Defense Data Network. Other interfaces use the AFMC local area network or Defense Commercial Telecommunications Network.

**7.20.2 Application Subsystems.** There are three application subsystems of REMIS: Equipment Inventory, Multiple Status, Utilization Reporting Subsystem; Product Performance Subsystem; and Generic Configuration Status Accounting Subsystem (GCSAS). These systems will provide uniform user interface, processing and reporting capabilities.

**7.20.3 GCSAS.** The GCSAS is a single unified information source for all Air Force military system configuration status accounting. The GCSAS replaces the functions of the Standard Configuration Management System, Advanced Configuration Management System, Commodity Configuration Management System, and B-1B Configuration Status Accounting System, and provides CPIN tracking and status checking. GCSAS will:

**7.20.3.1** Provide cradle-to-grave tracking of serially controlled configuration items.

**7.20.3.2** Initialize TCTO and baseline configuration records in order to provide all organizational levels the capability to manage assigned equipment.

**7.20.3.3** Facilitate administration and management of TCTO programs by establishing TCTO to TCTO relationships, cross-referencing commodity TCTO to aircraft TCTO, recording/clearing waivers/deviations through TCTO action, and providing comprehensive TCTO reporting and queries.

**7.20.3.4** Facilitate approved part replacement checks.

## **7.21 COMPREHENSIVE ENGINE MANAGEMENT SYSTEM (CEMS) (TO 00-25-254-CD-1).**

CEMS provides a wide range of automated information system capabilities for engine management as outlined in AFI 21-104, Selective Management of Selected Gas Turbine Engines. CEMS interfaces with the IMDS and G081 (CAMS for Mobility), and will interface with REMIS. CEMS identifies owning SRAN, status, condition and configuration information for all CEMS accountable engines by serial number and Configuration Item Identifier (CII). Engine, module and tracking component TCTO completion, and status actions must be submitted to CEMS. CEMS incorporates the Engine Configuration Management Systems (ECMS). The ECMS capabilities of CEMS include the total TCTO management of serialized, trackable engines and related component parts from initialization to history status after retirement/rescission.

TO 00-5-15

<b>Extended TCTO Compliance Period Request</b>	
1. From: (Unit requesting extension)	Date:
2. To: (MAJCOM)	
3. Info: (Issuing agency identified in the TCTO)	
4. TCTO number:	
5. Rescission date:	
6. Number of units complied with:	
7. Number of units not complied with:	
8. Extended compliance period duration requested: (Days/Months)	
9. Reason for the request:	
10. Point of contact for this request: (name, organization and office symbol, e-mail address, and DSN number)	

TO-00-5-15-024

**Figure 7-1. Sample Format for Extended Compliance Period Request**

## CHAPTER 8

# RESCISSION, EXTENSION, REINSTATEMENT AND REPLACEMENT OF TCTOS

### 8.1 RESCISSION OF TCTOS.

TCTOs are rescinded for Air Force use when TCTO completion is reported on the applicable USAF inventory, or the TCTO manager determines that the information contained therein is no longer required or is incorporated in other publications, or the rescission date of the TCTO has expired. Some TCTOs are rescinded for Air Force use but are retained in stock for SAP use. These TCTOs are identified by a listing in TO index 0-1-71, Consolidated Security Assistance Technical Order Index (TO 00-5-19). Notification of all TCTO rescissions is effected by entries in the TO Catalog. Air Force units will not accomplish a TCTO on which the rescission date has passed without obtaining approval from the TCM through command channels. TCTOs will not be removed from TO files until listed as rescinded in the TO catalog.

#### NOTE

- The 708 NSS/NWLT complies with local operating instructions for Nuclear Weapons TOs.
- Consortium or other cost sharing agreements may require coordination through the appropriate AFSAC office prior to rescission of TCTOs and the removal of “before” modification data.

**8.1.1 TO Manager Procedures.** If the TCTO will be rescinded, the TO Manager must take action to prevent any further reprinting action, provide the PM with timely notice for pre-rescission evaluation and processing of required control documentation within the allotted time frames, and alert using commands and SAP countries to review compliance status of TCTOs. The TO Manager notifies the PMA that the TCTO is nearing rescission.

**8.1.1.1** Upon production management notification, the TO Manager takes action to either rescind the TCTO on the scheduled date or to extend the rescission date in the JCALS Index. If the TCTO will rescind, the TO Manager will verify that “before data” has been removed from all affected TOs, or schedule data removal during the next routine update to affected TOs.

**8.1.1.2** To prevent complete rescission of TCTOs still usable by SAP countries, the TO Manager uses the JCALS “Manage TM Numbering; Rescind a TM” process to rescind the TCTO for Air Force units only. OC-ALC/ENGLA will be notified to include the TCTO in the applicable TO 0-1-71 index. The TCTO records are transferred from JCALS to Security Assistance Technical Order Data System (SATODS).

**8.1.1.3** An immediate, urgent, or routine action safety TCTO rescinded for USAF use but retained for SAP will not be downgraded in criticality when transferred to the TO 0-1-71 index.

**8.1.1.4** A compliance period appropriate for correcting the deficiencies will be assigned. If the compliance period exceeds the limits outlined in Table 3-1, for any reason, the PM or ES will notify the country regarding the status, the reason for the delay, the estimated correction date, and any interim actions the country can take to ensure safe operation of the system or commodity.

**8.1.2 Production Management.** The PMA will review applicable TCTO configuration management data for modification completion status. If the modification is complete, determine the number and location of any excess modification kits, and initiate disposal as prescribed by AFMAN 23-110. If the modification is not complete, obtain the status and commitment for modification completion from each performing organization. Initiate action to extend the rescission date or complete the TCTO within the remaining time.

**8.1.2.1** Determine if any TOs or other active TCTOs will be affected by the rescission and initiate appropriate action.

**8.1.2.2** When disposition of items in Air Force stock is affected, coordinate with the appropriate PM to ensure that all required actions have been completed. Obtain approval from the PM requirements office for TCTO rescission (supply actions are complete) or a commitment to complete TCTO-directed actions for disposition of items.

**TO 00-5-15**

8.1.2.3 Determine if the rescission is applicable to both Air Force and SAP countries (Paragraph 8.1.1.2).

8.1.2.4 Based on the above data, determine if the TCTO is to be rescinded or the rescission date extended. Rescission date extension requires justification and approval (same approval authority as the basic TCTO). Any decision to extend a TCTO or allow it to rescind must be accompanied by funds to publish either the extension or the related TO update(s) to remove “before” data. (See Paragraph 8.1.3.1, Extending Rescission Dates)

8.1.2.5 If the TCTO is to be rescinded and there are excess modification kits, the PMA will coordinate through program engineering to initiate excess AF property disposal procedures prescribed by AFMAN 23-110, Vol. III, Part 1, Chapter 11.

8.1.3 Rescission Dates. The TCM will assign a rescission date for each TCTO based on the categories and types in Table 3-1. This will normally be the maximum time frame allowed. The TCM or PMS can extend the initial rescission period beyond these limits if necessary, with PM approval. Rescission dates are based on the TCTO issue date and will be listed on the title page in accordance with MIL-PRF-38804.

8.1.3.1 Extending Rescission Dates. Air Force Materiel Command (AFMC) TO Managers must periodically use the JCALS “Perform Post Publication Review” function (JCALS Desktop Instruction, TCTO Rescission Review) to generate a listing of assigned TCTOs and monitor rescission dates. Any TCTOs within 90 days of rescission will be identified to the TCM and PMA for review. The PMA will recommend that the TO Manager either rescind the TCTO or extend the rescission date in the JCALS Pub Index, based on compliance status.

8.1.3.1.1 Approval to Rescind. TCTO rescission dates cannot be extended without prior approval of the responsible PM Division Chief. Requests for extension are submitted by letter no later than 75 days before the scheduled rescission date to allow updating of REMIS and JCALS, and publishing a TCTO supplement if applicable.

8.1.3.1.2 Updating REMIS. Within 2 workdays after CCB or PM approval, and not later than 50 days prior to the rescission date, the PMA updates REMIS, and forwards a copy of the CCB or PM approval notice to the TO Manager.

8.1.3.1.3 Updating JCALS. The TO Manager uses the JCALS “Manage TM Index; Update an Index Entry” process to enter the new TCTO rescission date. If the rescission date will be updated by issuing a TCTO Supplement, the “Manage TM Numbering; Assign a Publication Number (AF TCTO Publication)” process will be used to index the supplement with the new rescission date.

8.1.3.1.4 The PM TCM or PMS will extend rescission dates only if the compliance periods cannot be met on a significant number of assets before the original rescission date. Circumstances which could require an extension include problems with availability of the end items or kits/special tools/TOs, changes to the scope of the TCTO, and/or mission requirements.

8.1.3.1.5 Extensions will be updated in REMIS and the JCALS Pub Index (reflected in the TO Catalog). The program office may also provide additional notification to users via electronic message or by issuing an ITCTO supplement. If a supplement is issued changing the scope of the TCTO, any revision of the rescission date will be included in the supplement.

8.1.3.1.6 Library custodians will annotate all library copies of the TCTO with the new rescission date and the source of the update (REMIS/JCALS/TO Catalog).

8.1.3.1.7 If the review indicates that all operational systems or commodities have been accomplished and the TCTO is outstanding on only special test, special project, crash damaged, WRM bailment assets, etc., the TO Manager will rescind the TCTO and the TCM or PMS will establish a serialized manual jacket account record, retaining copies of the applicable TCTO and associated kits for the incomplete assets. At this time, field level organizations will normally purge the TCTO from IMDS.

8.1.3.1.8 When the determination is made to return the assets to operational status, the owning unit will go through the parent MAJCOM to request written ALC permission to comply with the TCTO. When approved, the TCM or PMS will create a maintenance work package containing the TCTO and any kits or special tools required from the manual jacket account, and will send the package to the owning unit for compliance. If the TCTO is still loaded in IMDS, the performing activity will document compliance using the procedures in Paragraph 7.7.4. If the TCTO has been purged from IMDS, and for depot TCTOs, the performing activity will report TCTO compliance via message/e-mail to the ALC TCM or PMS, who will document compliance manually in the jacket file and in REMIS.

8.1.3.1.9 When the determination is made to salvage or dispose of the assets, the applicable manual jacket account record will be reviewed. The copy of the rescinded TCTO will be disposed of and the corresponding kit will be released for excess disposal action.

### 8.1.3.2 Early Rescission of TCTOs.

8.1.3.2.1 Criteria. Use the following criteria for deciding to rescind a TCTO before the rescission date:

- The information has been replaced by or included in another TO or TCTO, or;
- The TCTO procedure is obsolete, or;
- Further compliance with the TCTO is not desirable, or;
- Configuration accounting records indicate compliance with the TCTO, or;
- The TCM or PMA verifies compliance has been completed on both installed assets and all affected spares, or;
- Coordination with the AFSAC office verifies consortium or FMS support agreements have been satisfied, and kits have been delivered or are available.

8.1.3.2.2 Coordination and Approval. TCTO Manager requests for early rescission are submitted to the proper PM division chief, clearly stating the reasons for rescinding and documenting that all necessary coordination has been completed.

8.1.3.2.2.1 The request for TCTO rescission is coordinated with the TCTO kit supply organization. The rescission of a TCTO will not be approved if items requiring compliance before use are in stock, unless a written commitment for completion of TCTO directed actions has been received from the PM activity.

8.1.3.2.2.2 After rescission approval by the proper PM division chief, the rescission approval and date are forwarded by letter from the PMA to the TO Manager to take rescission action. The notification indicates if rescission is for Air Force only or includes the SAP.

8.1.3.2.3 Emergency Suspension/Abeyance. TCTO suspension is called "Abeyance." TCTOs cannot be held in abeyance past the rescission date, and dates can only be extended one time by 50 percent of the original rescission period unless the suspension has been lifted. Suspended Interim TCTOs must either be rescinded or released for compliance after 90 days. See Paragraph 7.17 for emergency suspension procedures.

## 8.2 REINSTATEMENT OF TCTOS.

When it is necessary to reinstate a TCTO (Table 4-1, Rules for Assigning TCTO Numbers, Data Code Numbers and Dates) which has been rescinded, a new reinstatement TCTO will be issued and ID will be made in the same manner as for a new TCTO. In the event that the TCM determines that there is sufficient justification for reinstatement of the TCTO the old data code number will be used to reinstate the TCTO. When the TCTO is reinstated, all supplements current at the time of rescission will also be reinstated or incorporated in the reissued TCTO. TCTO completion reporting, recording, and applicability record adjustments are required according to management decisions pertaining to the reinstatement. A note will be placed on a reinstatement TCTO between the title and paragraph one to read as follows: "This TCTO is issued for the purpose of reinstating TCTO (#), Data Code (#), dated (issue date of the rescinded TCTO)." The following note will be inserted after paragraph three to read as follows: "No additional work is required on (system or commodity end items) on which compliance with TCTO (#), data code (#), dated (issue date of rescinded TCTO), has been completed." If a manageable quantity of found on base assets are unmodified after TCTO rescission, official reinstatement may not be necessary; rather the PMA can authorize the accomplishment of the rescinded TCTO by letter. If a large quantity of assets is involved, issue of a new TCTO is mandatory.

8.2.1 Reinstatement. Rescinded configuration change TCTOs may only be reinstated by approval of the responsible CCB, using an AF Form 3525. Requests for reinstatement are submitted through the CCB executive secretary. Reinstatement of non-configuration change TCTOs is approved by the appropriate PM division chief.

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**8.2.2 Notification.** The PMA ensures that all affected PMs are notified when reinstatement has been issued and special management action is required in the supply area.

**8.3 REPLACEMENT OF TCTOS.**

**8.3.1 Conditions of Replacement.** A TCTO will be replaced with a new TCTO under the following conditions:

**8.3.1.1** When a major portion of the original procedures or instructions require clarification or have been changed due to experience gained by previous installations of the TCTO.

**8.3.1.2** To replace a record TCTO issued to accomplish a prototype installation on a system. A replacement TCTO may be issued to cover the entire population of the affected system or commodity, or the record TCTO can become the replacement TCTO by issuing a TCTO supplement that adds any information required. If a supplement is issued, the TCTO number and data code of the basic TCTO will remain the same.

**8.3.2 Replacement TCTOs.** When it is necessary to replace a TCTO:

**8.3.2.1** The replacement TCTO will be assigned a new TCTO number, data code number, issue date and rescission date. Replacement TCTOs will identify the original TCTO and list any usable original kits remaining in supply under the original kit number. Replacement TCTOs will include all applicable information from existing supplements.

**8.3.2.2** Black line symbols indicating changes are authorized for use in replacement TCTOs.

## CHAPTER 9

### INTERIM TCTOS

#### 9.1 GENERAL.

These procedures and policies apply to both USAF and SAP country systems and commodities. When circumstances preclude timely publication of a formal TCTO, instructions may be issued in an interim format. This applies to all TCTO types, with the coordination and approval of the affected Lead Command. ITCTO Supplements will be issued against only one specific TCTO. Do not combine modification instructions to two or more TCTOs in the same ITCTO message. When changes to an ITCTO are required, the updates will be provided either in an ITCTO Supplement or a replacing ITCTO.

9.1.1 Provisions. Message precedence and delayed delivery provisions are provided by TO 00-5-1.

9.1.2 Redistribution. TODOs redistribute ITCTOs to the sub-accounts Technical Order Distribution Accounts (TODAs) like any other interim TO.

#### 9.2 TYPES AND USES OF ITCTOS.

9.2.1 Interim Time Compliance Technical Orders (ITCTO) and ITCTO Supplements. ITCTOs are issued in the types listed below. They will not be replaced by formal TCTOs or formal supplements.

9.2.1.1 Immediate Action ITCTO with an immediate compliance period: Issue when safety conditions would result in a fatality or serious injury to personnel or extensive damage to or destruction of equipment or property.

9.2.1.2 Urgent Action ITCTO with a 1-10 day compliance period: Issue when combat necessity or potentially hazardous conditions could result in injury to personnel, damage to property or unacceptable reductions in operational efficiency.

9.2.1.3 Routine Safety Inspection ITCTO with an 11-35 day compliance period: They may be either non-kitted or issued with an approved waiver to the complete kit concept from the applicable using MAJCOM logistics office. Issue when a deficiency and or affected parts have been identified, but does not impose conditions of either an Immediate or Urgent Action ITCTO and would not result in a reduction in operational capability.

9.2.1.4 Record ITCTO with no compliance period: Issued only for ICBM and associated SE.

9.2.1.5 Routine ITCTOs: Routine-Software only TCTOs may be issued as ITCTOs.

9.2.1.6 ITCTO Supplements: Issue when the basic TCTO was issued as an interim or there is an urgent need to change or stop compliance with a formal TCTO. Routine ITCTO supplements may also be issued for the purpose of extending formal TCTO rescission dates.

9.2.2 Immediate Action, Urgent Action, and Routine Safety Inspection TCTOs. Immediate Action, Urgent Action, and Routine Safety Inspection TCTOs with less than 35 day compliance periods are normally issued as ITCTOs.

9.2.3 Routine TCTOs for Intercontinental Ballistic Missiles (ICBMs) and Associated SE. Routine TCTOs for ICBMs and associated SE (when required to prevent contractor work stoppage during modifications, installations and checkout) and Routine Software-only TCTOs may be issued as ITCTOs.

9.2.4 Record TCTOs for ICBMs and Associated SE. Record TCTOs for ICBMs and associated SE must meet the following criteria prior to issue: (a) the updating change or modification accomplishment does not involve operating activities; (b) the initial updating change or modification accomplishment does not involve operating activities; (c) the initial updating change or modification must be performed within one to thirty days; and (d) the time required for printing and distribution of a formal TCTO or supplement would result in a work stoppage or have an adverse effect on contract schedules.



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**9.2.5 Interim TCTO Supplements.** Interim TCTO Supplements will be used when required to transmit urgent changes to formal TCTOs, and may also be used to make minor technical corrections that do not affect the scope, material or work required of formal TCTOs. Updates to ITCTOs will always be issued as either replacement ITCTOs or ITCTO supplements.

**9.2.5.1 ITCTO and ITCTO supplements** are issued in the types listed in Table 9-1, Advance Notification Requirements For ITCTOs. They will not be replaced by formal TCTOs or supplements.

**9.2.5.1.1 Immediate Action ITCTO:** Issue when safety conditions would result in fatality or serious injury to personnel or extensive damage to or destruction of equipment or property. (Requires advance notification according to Table 9-1, Advance Notification Requirements for ITCTOs)

**Table 9-1. Advance Notification Requirements for ICTOs**

When _____	_____ Will	Notify _____, Via Telecon/E-mail <sup>1</sup> · <sup>2</sup>
an Immediate/Urgent Action ITCTO will be issued that could restrict any Air Force operational weapon system from full capability or operational readiness (GROUNDING)	the responsible PM	senior AFMC and USAF leaders via the Advance Notice of Immediate or Urgent Time Compliance Technical Order (TCTO) Release Form at the Air Force Knowledge Now (AFKN) ITCTO Submission web page, <a href="https://www.d.mil/afknprod/ASPs/CoP/openCoP.asp?Filter=W">https://www.d.mil/afknprod/ASPs/CoP/openCoP.asp?Filter=W</a> .
		the Program Executive Officer (PEO) for systems/items in acquisition <sup>3</sup> · <sup>6</sup>
		the responsible Center Commander for fielded weapon systems <sup>3</sup>
		the PM responsible for management of any impacted end-item systems or commodities <sup>3</sup>
		any affected MAJCOM/CC/A4/A3 offices <sup>3</sup>
		local Safety (SE) and Public Affairs (PA) offices <sup>3</sup>
		Development System Manager (DSM) or Support System Manager (SSM) and respective ALC or PC/PA, as appropriate <sup>3</sup>
		(1) the HQ AFMC Command Center, HQ AFMC/A3XC, DSN 787-6314 // Comm (937) 257-6314 via telecon to confirm receipt of Advance Notification of an Immediate or Urgent Interim Time Compliance Technical Order (ITCTO) Release Form e-mail (ITCTO Submission web page) <sup>5</sup>
		(2) the appropriate Program Wing Commander to coordinate release of any required Operational Report (OPREP)
	HQ AFMC Com-mand Center, HQ AFMC/A3XC	HQ AFMC/CCE by e-mail to confirm receipt of Advance Notice of Immediate or Urgent TCTO Release Form e-mail. Only if GROUN-DING action taken.
		(1) AF Service Watch Cell (AFSWC) via Operations Report-3B ((Operational Report) OPREP) BEELINE requirement in accordance with AFI 10-206, Operational Reporting, Table 3.4, Rule 1E if (if grounding) (2) the Appropriate Program Wing Commander with Immediate/Urgent ITCTO release authority will be the approval/release authority for any required OPREP
	DSM or SSM	their Center Commander <sup>3</sup>
	HQ AFMC/SEF	HQ USAF/SE/SEP/SEF/SEG <sup>4</sup>

**Table 9-1. Advance Notification Requirements for ICTOs - Continued**

When _____	_____ Will	Notify _____, Via Telecon/E-mail <sup>1-2</sup>
an Immediate or Urgent Action ITCTO will affect systems/items still under development or in production	the responsible PM	the applicable Defense Contract Management Agency (DCMA) Office
the ITCTO affects North Atlantic Treaty Organization (NATO) or other foreign governments, before transmission to them	the responsible PM	the Foreign Disclosure Office (FDO) for releasability determination

<sup>1</sup> If Internet connectivity is lost, make telecon notification to the HQ AFMC Command Center, HQ AFMC/A3XC at DSN 787-6314 // Comm (937) 257-6314.

<sup>2</sup> For ITCTOs the Advance Notice of Immediate or Urgent Time Compliance Technical Order (TCTO) Release Form at the AFKN ITCTO Submission web page, <https://wwwd.my.af.mil/afknprod/ASPs/CoP/openCoP.asp?Filter=W> may be used for to satisfy e-mail notification requirement by adding applicable addressees to Block 9 of the form.

<sup>3</sup> After duty hours, contact the appropriate MAJCOM/ALC/PC Command Centers/Posts. See AFI 10-206, Operational Reporting, for MAJCOM phone contacts. If the number for MAJCOM/ALC/PC Command Center/Posts is unknown contact HQ AFMC Command Center for assistance, HQ AFMC/A3XC, DSN 787-6314, Comm (937) 257-6314, by telecon.

<sup>6</sup> PMs of PEO programs will contact the applicable PEO prior to HQ AFMC Command Center notification as required.

<sup>5</sup> PM will call AFMC Command Center to coordinate need to accomplish "Immediate/Urgent ITCTO Advance Notification Checklist" procedures. PM will confirm AFMC Command Center has received the Advance Notification e-mail and notifies the command center of any anticipated Operations Report-3B (OPREP) BEELINE requirements in accordance with AFI 10-206, Operational Reporting, Table 3.4, Rule 1E.

<sup>4</sup> After duty hours notification of HQ USAF offices will be via the AF Service Watch Cell (AFSWC), at DSN 227-6103/2270, Comm (703) 697-6103/2270.

**9.2.5.1.2 Urgent Action ITCTO with a 1-10 day compliance period:** Issue when combat necessity or potentially hazardous conditions could result in injury to personnel, damage to property or unacceptable reductions in operational efficiency. (Requires advance notification according to Table 9-1, Advance Notification Requirements for ITCTOs above)

**9.2.5.1.3 Routine Safety Inspection ITCTO with an 11-35 day compliance period:** They may be either non-kitted or issued with an approved waiver to the complete kit concept from the applicable MAJCOM logistics office. May be issued when safety conditions: (a) will not result in fatalities, serious injury to personnel or extensive damage or destruction; (b) is not a combat necessity nor will result in an unacceptable reduction in operational capability.

**9.2.5.1.4 Record ITCTO:** Issued only for ICBMs and associated SE.

**9.2.5.1.5 Routine ITCTOs:** May only be used for distribution of software only.

**9.2.5.1.6 ITCTO Supplements:** Issue when the basic TCTO was issued as an interim or there is an urgent need to change or stop compliance with a formal TCTO. Routine ITCTO supplements may also be issued for the purpose of extending formal TCTO rescission dates.

### **9.3 APPLICABILITY.**

A single ITCTO may be issued to all users (USAF and SAP) authorized release when effective data and degraded mission capabilities are not identifiable by country. When one ITCTO cannot be released to all users, Interim Country Standard TCTOs (ICSTCTOs) must be issued. All ITCTOs must be approved for release to NATO or other foreign governments by the responsible FDO.

**TO 00-5-15****9.4 AUTHORIZATION FOR ITCTOS.**

The activity having engineering responsibility for the affected item determines the need for and issues an ITCTO. Actions include but are not limited to:

- Restricting use of the system or commodity to known safe areas of operation or flight envelopes.
- Deactivating the defective system or commodity.
- Removing the defective system, commodity, or other end item.
- Removing the entire system, fleet or population of commodities from service, immediately if the nature of the hazard warrants such action.

**9.5 SECURITY ASSISTANCE PROGRAM (SAP)/FOREIGN MILITARY SALES (FMS) SUPPORT.**

**9.5.1 Approval.** All ITCTOs must be approved for release by the FDO supporting the responsible activity before transmission to foreign governments. A single ITCTO may be structured and issued to both USAF and SAP/FMS countries authorized release when effectivity data and degraded mission capabilities are not identifiable by country. When one ITCTO cannot be released to all users, appropriate ICSTCTOs must be issued. (See TO 00-5-19, Security Assistance Technical Order Program)

**9.5.2 Notification.** SAP/FMS customers must be notified by any means available of the imminent release of critical ITCTO messages.

**9.6 RESPONSIBILITIES, NOTIFICATION, AND ISSUE OF ITCTOS.**

**9.6.1 Program Manager (PM).** ITCTOs are issued by the PM responsible for the system or end item affected by the modification or inspection, in accordance with this TO. The PM is responsible for ensuring and preserving the operational safety, suitability, and effectiveness (OSS&E) of the system or end item throughout the operational life, per DoDD 5000.1, Defense Acquisition System and AFD 63-12, Assurance of Operational Safety, Suitability, & Effectiveness. The PM's organization responsible for the affected weapon system or end item is called the "responsible activity" in this TO.

**9.6.1.1** The PM will complete the ITCTO Checklist (Figure 9-1, ITCTO Checklist) as part of the ITCTO development and distribution process. Figure 9-2, ITCTO Approval Signature Levels will assist in the process of developing an ITCTO for release. Additional signatures may be located in Figure 9-4, Additional ITCTO Distribution Addresses.

**9.6.1.2** The responsible activity researches, develops, coordinates, obtains release approval and distributes ITCTOs. The PM will provide a program Community of Practice (COP) for program-related TO information for customers.

**9.6.1.3** The PM performs required advance notifications according to Table 9-1 of this TO prior to the issue of ITOs, ITCTOs. The DSM or SSM, as applicable, makes required advance notifications at their location that will ground all or part of a fleet of aircraft or missiles or other end item. The advance notification process consists of three basic steps (see Figure 9-3, 3-Step Notification Process): (1) PM releases the ITCTO Advance Notification E-mail via the ITCTO Submission web page IAW Table 9-1; (2) PM calls the AFMC Command Center to confirm receipt of e-mail and notifies Command Center of OPREP requirement if applicable; and (3) AFMC Command Center e-mails AFMC/CC Exec and submits an OPREP-3B (BEELINE) voice report to AFSWC if the ITCTO involves grounding weapon system assets IAW AFI 10-206, Operational Reporting, Table 3.4, Rule 1E.

**9.6.1.4** The issuing activity ensures the ITCTO is assigned a message precedence commensurate with the urgency of need for the data in accordance with AFMAN 33-326.

**9.6.2 Chief Engineer.** The chief engineer is responsible and accountable to the PM for consistent application of a disciplined engineering process, per AFMCI 63-1201, Assurance of Operational Safety, Suitability, & Effectiveness, to ensure that the system's or commodity's OSS&E baselines are preserved for the life of the program. The chief engineer must coordinate on and approve all ITCTOs affecting systems and end items for which they have technical responsibility.

**9.6.3 TO Managers/Flight Manual Managers (FMMs – AFI 11-215).** Issue all ITOs/RACs affecting the assigned weapon system/commodity. For the JCALS system, establish/monitor Personal Distribution Lists (PDL) to ensure distribution of ITOs/RACs to all affected TO-using activities – this responsibility shall not be delegated outside the TO Management organization. EXCEPTIONS: When the TO manager/FMM is not assigned to the PM organization, the PM will appoint an in-house function to perform the TO Manager/FMM responsibilities.

**9.6.4 Technical Content Managers (TCM).** The TCM is responsible for evaluating TO RCs and developing and coordinating ITOs and RACs when required. The TCM is responsible for TCTO adequacy and technical evaluation. The TO Manager is responsible for the ITCTO's format (see Figure 9-5, Sample Format - ITCTO Message, and 9-6, Sample Format - ITCTO Supplement Message and content coverage required by MIL-PRF-38804). The TCM and TO Manager shall perform a quality check on the final ITCTOs prior to publication.

**9.6.5 Advance Notification of Release.** The Sustaining Engineering Branch, AFMC/A4UE, manages the “Advance Notification of Release” process to inform AF and AFMC senior management of an Immediate/Urgent ITCTO release, the content of the Air Force Knowledge Now (AFKN) ITCTO Submission web page, and in conjunction with AFMC/A8C resolves any error messages. The AFKN ITCTO Submission web page contains the form for preparing and submitting an Advance Notification e-mail.

**9.6.6 HQ AFMC Flight Safety.** HQ AFMC/SEF, will notify Air Force Safety POCs according to Table 9-1 of this TO.

**9.6.7 TO-Using Organizations.** Distribute copies of incoming ITOs or notification messages to all affected base activities not included in the PDL. Activities omitted from PDLs who have a need for ITOs will notify the responsible activity to include them for future distribution.

## **9.7 SUSPENSION AND RESCISSION.**

Emergency suspension or rescission of an ITCTO without compliance will be approved at the same level that approved issuing the ITCTO. Suspended ITCTOs may be held in abeyance for a maximum of 90 days from the date of dispatch, at which time the ITCTO will be rescinded or released for compliance.

## **9.8 INDEXING ITCTOS.**

TO Managers will index ITCTOs and ITCTO Supplements before, or as soon as possible after, the messages are transmitted. ITCTOs will not be requisitioned. The basic ITCTO index entry will identify the publication as an interim and will include the legend: “REQUEST ITO FROM (POC office symbol, name and DSN shown in the interim message).”

## **9.9 ITCTO PROCEDURES TO REMOVE SYSTEMS OR COMMODITIES FROM SERVICE.**

**9.9.1 Notification.** Notification of pending ITCTO issue to cause removal from service actions shall be in accordance with this TO.

**9.9.2 Alternate Courses of Action.** Once the need for issuance of an immediate action TCTO is identified, the agency with management responsibility evaluates the situation for alternative courses of action. If an alternative is not feasible, that agency takes the actions described in this TO.

**9.9.2.1** ITCTOs must be issued within a maximum of 24 hours for immediate, 48 hours for urgent action situations, and 5 working days for interim routine action O and I level safety inspection ITCTO. ITCTOs must either provide a fix within that time, or the ITCTO will provide instructions to “safe” the system or commodity. When a fix is determined, it will be issued as a new TCTO or an ITCTO supplement. Immediate Action ITCTO messages shall be sent using Immediate message precedence.

**9.9.2.2** Prepare the ITCTO according to the formats in Figure 9-5 or Figure 9-6.

## **9.10 ITCTO DISTRIBUTION.**

**9.10.1 ITCTO Distribution Methods.** The authorized methods and procedures for disseminating controlled, unclassified information (CUI), applicable for any technical data (including Technical Orders, ITCTOs, Technical Reports, Test Data, etc.) with STINFO distribution statements are in TO 00-5-3.

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**9.10.2 Address Lists For ITCTO Distribution.** The responsible activity will establish and maintain ALs or Personal Distribution Lists (PDL) for ITCTO distribution according to this TO. During the development/production phase of a program, the AL will either be developed by the TO manager or from an existing AL verified based on known users of the TO series involved. During the sustainment phase, the TO Manager will obtain a JCALS report of ID by TO Number identifying users with established requirements for specific TO or TCTO series for use in preparing/updating the AL. TODOs on ID for TCTO series headers are responsible for periodically checking applicable ALs to ensure the parent unit is included (TO 00-5-1).

**NOTE**

- Base Administrative Management functions are not responsible for local distribution of ITCTOs to units that are assigned a TODO code by OC-ALC. AFMC TODOs affected by an ITCTO are to be included in individual ALs and/or PDLs established for distribution of ITCTOs.
- Countries not supported through the SAP may receive ITCTOs if disclosure is authorized; however, the country must request to be placed on the distribution list through the USAF approving agency (TO 00-5-19).

(References: AFI 10-206 and TO 00-5-15)

(Instructions: Check/fill in applicable blocks or enter N/A)

1. DATE \_\_\_\_\_ 2. TIME: \_\_\_\_\_
3. ACTION OFFICER NAME: \_\_\_\_\_  
OFFICE SYMBOL: \_\_\_\_\_  
DSN NUMBER: \_\_\_\_\_
4. ITCTO Number: \_\_\_\_\_ Data Code: \_\_\_\_\_  
ITCTO Title: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
5. Date and time ITCTO will be released: \_\_\_\_\_
6. Have advance notifications been made IAW Table 9-1? \_\_\_\_\_ YES \_\_\_\_\_ NO
7. Has the PM concurred and coordinated with affected MAJCOM that this ITCTO will remove from service or suspend use of affected system/equipment if inspection/corrective actions aren't completed within the specified time? List affected MAJCOM and/or responsible activity points of contact (name, office symbol, DSN) who concurred that the defect described in this ITCTO justifies potential removal from service or suspending use of affected system/equipment. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
8. Is an OPREP required? \_\_\_\_\_ YES \_\_\_\_\_ NO  
(If Yes, appropriate Program Wing Commander will coordinate with the AFMC Command Center and approve/release OPREP.)
9. List MAJCOMs that possess affected system/equipment. \_\_\_\_\_
10. Identify the MAJCOM manager(s) of the affected system/equipment.  
Name: \_\_\_\_\_  
Office Symbol: \_\_\_\_\_ DSN: \_\_\_\_\_
11. Has the commodity IM been contacted to determine whether other systems/end items are affected? \_\_\_\_ YES \_\_\_\_ N/A
  - a. Is a companion commodity ITCTO required? \_\_\_\_\_ YES \_\_\_\_\_ NO  
(If "YES" provide the following information on the commodity ITCTO)  
ITCTO Number: \_\_\_\_\_ Data Code: \_\_\_\_\_  
ITCTO Title: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
  - b. Identify managers of other affected systems/equipment that have been notified. If separate ITCTOs will be issued for the other affected systems/equipment, also enter ITCTO number.  
Office Symbol/Name: \_\_\_\_\_ DSN: \_\_\_\_\_ ITCTO Number: \_\_\_\_\_  
Office Symbol/Name: \_\_\_\_\_ DSN: \_\_\_\_\_ ITCTO Number: \_\_\_\_\_
12. Item Part Number: \_\_\_\_\_  
Item NSN: \_\_\_\_\_  
Quantity Per Application: \_\_\_\_\_  
Quantity of item in stock: \_\_\_\_\_  
Quantity on order: \_\_\_\_\_  
Estimated Delivery Date: \_\_\_\_\_  
Item Manufacturer: \_\_\_\_\_  
Other sources for procurement: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
13. Source of Repair: \_\_\_\_\_
14. Is the ITCTO data proprietary: \_\_\_\_\_ YES \_\_\_\_\_ NO

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**Figure 9-1. ITCTO Checklist (Sheet 1 of 2)**

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15. Percentage of installs that are expected to require replacement: \_\_\_\_\_

16. TO figure, index and page number that best illustrates problem: \_\_\_\_\_

17. Problem and cause (brief statement including any related incident or mishap):  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

18. Urgency of need (brief statement including impact of taking no action):  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

19. Level of Accomplishment: \_\_\_\_\_ Organizational \_\_\_\_\_ Intermediate \_\_\_\_\_ Depot

20. Number of systems/equipment affected: \_\_\_\_\_

21. Mission, Design and Series: \_\_\_\_\_

22. Have PDM or depot aircraft been inspected to confirm problem? \_\_\_\_\_ YES \_\_\_\_\_ NO  
 How many? \_\_\_\_\_ What percentage of inspected are defective?: \_\_\_\_\_

23. Kits or parts required: \_\_\_\_\_ YES \_\_\_\_\_ NO \_\_\_\_\_ Waived by MAJCOM  
 Name, Office Symbol, and DSN of MAJCOM individual: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

24. Kits or parts available: \_\_\_\_\_ YES \_\_\_\_\_ NO (briefly explain) \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

25. Are special tools or test equipment required? \_\_\_\_\_ YES \_\_\_\_\_ NO (briefly explain) \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

26. Are special tools or test equipment available? \_\_\_\_\_ YES \_\_\_\_\_ NO (briefly explain) \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

27. Synopsis of work involved: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

28. Inspection man-hours: \_\_\_\_\_

29. Repair/replacement man-hours: \_\_\_\_\_

30. Will a functional test flight be required: \_\_\_\_\_ YES \_\_\_\_\_ NO

31. Was ITCTO verification accomplished? \_\_\_\_\_ YES \_\_\_\_\_ NO \_\_\_\_\_ Waiver  
 AFTO 82 Initiated \_\_\_\_\_ YES \_\_\_\_\_ NO.  
 Briefly explain where and by whom accomplished, or why not accomplished: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

32. Will FMS be notified? \_\_\_\_\_ YES \_\_\_\_\_ NO (briefly explain) \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

33. Chief Engineer (or Equivalent) Coordination: \_\_\_\_\_

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Figure 9-1. ITCTO Checklist (Sheet 2)

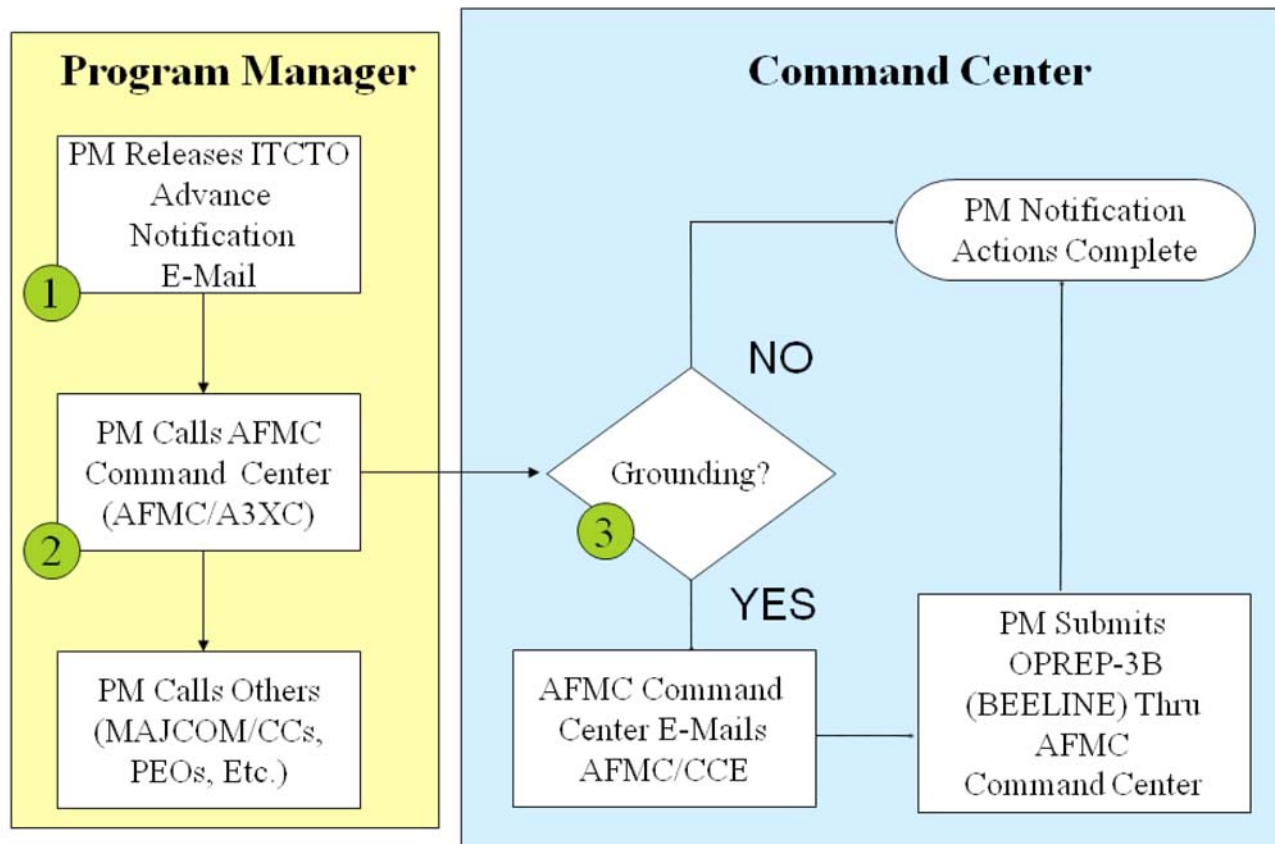


ITCTO is:	ACTION	ACTION AUTHORITY
1. All ITCTOs	Coordinate/Approve Contents: Release after approval:	Chief Engineer TO Manager/FMM
2. Immediate Action ITCTO for Operation Plan (OPLAN) 8044--tasked systems/equipment	Approval: Through: Signature:	Chief of Staff, USAF PM, ALC/CC, AFMC/CC PM
3. Immediate Action ITCTO other than 3 above	Approval/Signature:	PM
4. Urgent Action ITCTO	Approval/Signature:	PM
5. Routine Safety Inspection ITCTO, 11-35 day compliance, non-kitted or with MAJCOM/A4 - approved waiver to complete kit concept	Concurrence: Approval/Signature:	Affected MAJCOM/A4 PM
6. Record ITCTO for ICBM or associated SE	Coordinate: Approval:	Contractor PM
7. ITCTO Supplement	Approval/Signature:	Same as the basic ITCTO
8. Routine ITCTO Supplement to Formal TCTO to extend rescission date	Approval/Signature:	Same as the basic TCTO

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Figure 9-2. ITCTO Approval Signature Levels

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Figure 9-3. 3-Step Notification Process Flow Chart

ITO/RAC Type/Applicability	Include Following Addressees
All ITCTOs	OC-ALC/ENGLA, Tinker AFB, OK (Repository) Aerospace Maintenance and Regeneration Center (AMARC)/MAWL, Davis-Monthan AFB, AZ
ITCTOs that affect assigned systems and equipment	Responsible TO Management Organization (See AF TO Catalog Application)
ITCTOs which restrict any Air Force Combat Weapon System from full capability or operational readiness	Air Force Combat Operations Staff, HQ USAF/A300A, Pentagon, Washington, DC
All Immediate and Urgent Action ITCTOs	Prime Center/CC/CV/PA Prime Center Materiel Safety Program Manager HQ USAF/A4M/SEP/SEF HQ AFMC/CC/CV/CA/A3/A8C/EN/A4/A4UE/PA/SE/SEF Lead Command/CC/A3/A4 Other Affected MAJCOM/CC/A3/A4
ITCTOs Transmitted to HQ AMC	<b>HQ AMC/A4</b>
All ITCTOs affecting Weapons Delivery TOs	5 AF/A4, Yokota AB, JA 607 ASG/CC, Osan AB, KOR
ITCTOs related to nuclear safety	896 MUNS/CC, Nellis AFB, NV 898 MUNS/CC, Kirtland AFB, NM
ITCTOs for systems, equipment and munitions assigned to the US Army	Commander, US Army Armament, Munitions and Chemical Command (CDRAMCCOM), Rock Island, IL
ITCTOs for systems and equipment assigned to the US Navy	Commander, Naval Air System Command (COMNAVAIRSYSCOM), Washington, DC
ITCTOs for systems and equipment assigned to the US Coast Guard	Commandant, US Coast Guard/G-EAE, Washington, DC US Coast Guard Aircraft Repair and Supply Center, Elizabeth City, NC
ITCTOs affecting operational munitions, aircraft and missiles	HQ USAF/A4E, Washington, DC Det 63, 688 <sup>th</sup> Armament Systems Squadron (688 ARSS), 2008 Stump Neck Road, Indian Head MD 20640-5099, Naval Explosive Ordnance Disposal Technology Center, Indian Head, MD
ITCTOs affecting systems and equipment when contract is administered by Defense Contract Management Agency (DCMA)	Applicable Defense Logistics Agency
ITCTOs affecting USAF rotation squadrons in the applicable command and ITCTOs affecting SAP systems and equipment assigned to Italy, Greece and Turkey	Commander Allied Air Forces Southern Europe (COMAIRSOUTH)
ITCTOs for systems and equipment in production	Applicable DCMA Office
ITCTOs affecting FAA certified aircraft or similar FAA certified systems	Federal Aviation Administration (FAA)/FS-700 Washington, DC FAA Technical Center/ACT-300/AC-800, Atlantic City, NJ
ITCTOs affecting systems and equipment assigned to SAP/FMS Countries	555 IGP/CC, Wright-Patterson AFB, OH (555.IGP.workflow@wpafb.af.mil) 558 CBSS/GBHCC, Tinker AFB, OK (558 CBSS.GBHC.Workflow@tinker.af.mil)
ITCTOs for C-130 and E-4	MODUK/PE, London, England
ITCTOs for German Air Force (GAF) RF-4E and USAF F-4 series that may apply to GAF	GAF Materiel Office, AMO ROMAL 3Al, Posz Wahn, Germany
RF-4E due to similar equipment	GAF Liaison Office/MM (L-22), Hill AFB, UT AMEMB, Bonn, Germany (ODC/AF)
ITCTOs affecting Israel	RUEA USAI, Israeli Defense Attaché, Washington, DC

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Figure 9-4. Additional ITCTO Distribution Addresses

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**FROM: (Single Manager)****TO: (List message addresses or use AIG, as appropriate)****OC-ALC TINKER AFB OK//TILUB// (Mandatory)****UNCLAS****SUBJ: INTERIM (enter IMMEDIATE ACTION, URGENT ACTION or RECORD) TIME COMPLIANCE****TECHNICAL ORDER (number), DATED (date), DATA CODE (number), TITLE: (enter title of the ITCTO). (When applicable, enter: THIS ITCTO SUPERSEDES ITCTO (number), DATED (date), DATA CODE (enter data code)).****1. COMMANDERS ARE RESPONSIBLE FOR BRINGING THIS ITCTO TO THE ATTENTION OF ALL AFFECTED AF PERSONNEL****2. DISTRIBUTION STATEMENT****3. (When applicable, enter) EXPORT CONTROL WARNING****4. HANDLING AND DESTRUCTION NOTICE****5. THIS ITCTO APPROVED BY (enter name, organization and office symbol, and DSN).****6. (Enter applicable statement) THIS IS A NONKITTED ITCTO –or– WAIVER TO COMPLETED KIT CONCEPT APPROVED BY (enter name, organization and office symbol of the MAJCOM representative).****(The body of the ITCTO message will follow the format of a formal TCTO to include numbered paragraphs titled:)****7. APPLICATION****8. PURPOSE****9. WHEN TO BE ACCOMPLISHED (Compliance Period and Rescission Date).****10. BY WHOM TO BE ACCOMPLISHED****11. WHAT IS REQUIRED****12. HOW WORK IS ACCOMPLISHED****13. SUPPLEMENTAL INFORMATION****14. RECORDS****15. POINT OF CONTACT FOR THIS ITCTO IS (name, organization and office symbol E-MAIL address, and DSN number).**

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Figure 9-5. Sample Format - ITCTO Message

**FROM: (Single Manager)**

**TO: (List message addresses or use AIG, as appropriate)**

**OC-ALC TINKER AFB OK//TILUB// (Mandatory)**

**UNCLAS**

**SUBJ: INTERIM (enter IMMEDIATE ACTION, URGENT ACTION or RECORD) TIME COMPLIANCE  
TECHNICAL ORDER SUPPLEMENT (number), DATED (date, DATA CODE (number), TITLE:  
(enter title of the ITCTO).**

**1. THIS PUBLICATION SUPPLEMENTS ITCTO (number) DATA CODE (number), DATED (date)  
RESCISSION DATE (date), TITLE: (enter title of the basic ITCTO) TO MAKE CORRECTIONS AS  
INDICATED HEREIN, (Enter as appropriate, NOT ADDITIONAL WORK IS REQUIRED BY THIS  
SUPPLEMENT --or-- ADDITIONAL WORK IS REQUIRED BY THIS SUPPLEMENT AND  
APPROPRIATE REFERENCE WILL BE ENTERED ON (specify maintenance form or record) FOR THE  
EQUIPMENT AFFECTED AND AN AFTO FORM 349 SUBMITTED. (When applicable, enter: THIS  
MESSAGE SUPERSEDES ITCTO SUPPLEMENT (number), DATED (date), A SUITABLE  
REFERENCE TO THIS SUPPLEMENT SHALL BE MADE ON THE TITLE PAGE OF THE BASIC  
PUBLICATION. COMMANDERS ARE RESPONSIBLE FOR BRINGING THIS SUPPLEMENT TO THE  
ATTENTION OF ALL AFFECTED AF PERSONNEL.**

**2. DISTRIBUTION STATEMENT**

**3. (When applicable, enter) EXPORT CONTROL WARNING**

**4. HANDLING AND DESTRUCTION NOTICE**

**5. THIS ITCTO SUPPLEMENT APPROVED BY (enter name, organization and office symbol, and DSN)**

**(The body of the ITCTO Supplement message will follow the format of a formal  
TCTO Supplement. Reference the paragraph of the basic ITCTO and  
provide the amended instructions.)**

**6. (Para number) IS AMENDED TO (provide instructions).**

**7. " " " " " " "**

**8. " " " " " " "**

**(ETC)**

**(Para Number) POINT OF CONTACT FOR THIS ITCTO SUPPLEMENT IS (name, organization and office  
symbol, E-MAIL address and DSN number).**

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Figure 9-6. Sample Format - ITCTO Supplement Message



## APPENDIX A

### ADDING EQUIPMENT NUMBERS TO A JCALS TECHNICAL ORDER RECORD

#### A.1 ADDING NEW EQUIPMENT PART NUMBERS TO JCALS.

##### NOTE

Before performing the task below the responsible equipment specialist must provide the part number and equipment nomenclature, same format as entered/maintained in the D043, to the TO Manager for adding to the JCALS database.

**Table A-1. Update TO-Equipment Cross Reference**

Tech Order TO Equipment Part Number Cross Reference Report (Version 2.0, 10 Sep 03)		
Step	Screen	Field
1	JCALS Session Manager	Select TM Tools
2	TM Tools	Select TM Report Generator
3	TM Report Generator Type	Select Generate TM Index Report
4	TM Report Generator Sub-Type	Select Inter-service Technical Information Exchange System (ITIES) Cross Reference Report and Click, OK.
5	Inter-service Technical Information Exchange System Cross Reference Report screen will display.  <b>NOTE</b>  Wildcard searches are permitted.	Enter the equipment part number in the Equipment ID No field.
6	Report results will display in bottom half of the ITIES Report Screen in order by Equipment ID No, Service, Pub Type, Pub Status, Pub No, Pub Date, Prop ID, Cage Code, Nomenclature, FSC, NIIN, CF(A)E, MMAC, and Contract No.	If you would like to save the report click on the Save as File button at the bottom of the screen and save the report to your PC.  To exit this screen Click the Close button.
7	Continue next report action from the Choose a Report Type & Subtype Screen	Perform Steps 3 thru 6.

##### NOTE

You may choose to perform this task before “Adding New Equipment Part Numbers to JCALS” or “Updating Equipment Part Number in the JCALS Index” to ensure the Equipment Part Number has already been established in JCALS.

**Table A-2. Adding New Equipment Part Numbers to JCALS (Version 2.0, 10 Sep 03)**

Step	Screen	Field
1	JCALS Session Manager	Select TM Tools
2	TM Tools	Select TM Processes
3	TM Processes Type	Select Perform Acquisition
4	TM Processes Sub-Type	Select Manage Item Data and Click the OK button.



**Table A-2. Adding New Equipment Part Numbers to JCALS (Version 2.0, 10 Sep 03) - Continued**

Step	Screen	Field
5	The Manage Item Data Screen will display. Go to the bottom half of the screen, right side of Results.	Click the Add button
6	The Add Item Data will display.  <b>NOTE</b>  More than one equipment part number may be added from this screen by Clicking the Apply button instead of Clicking the OK button after the first database entry.	Enter new equipment part number in the Part Number field and the new equipment nomenclature in the Nomenclature field. Both entries are required. Continue to enter as much known data in remaining fields. When you have completed entering data, Click Apply to enter more than one equipment part number or Click OK for one or the last equipment part number entry. Repeat Step 6 for more than one equipment part number.
7	The Manage Item Data Screen will display. Results field will display new entries.	Click the OK button.

**Table A-3. Updating Equipment Part Numbers in the JCALS Index (Version 2.0, 10 Sep 03)**

Step	Screen	Field
1	JCALs Session Manager	Select TM Tools
2	TM Tools	Select TM Process
3	TM Processes Type	Select Manage TM Index
4	TM Index TM Processes Sub-Type	Select Update TM Index Entry and Click the OK button.
5	The Choose Publication Screen will display. In the Search Criteria section of the screen	Enter publication number in the Publication No field for the equipment P/N you choose to update and Click the Apply button.
6	The following fields will display in the Results section of the Choose Publication Screen: Publication No, Pub Stock No, Media Type, Pub Date, Rev No, Change No, Change Date, and Publication Title.	Highlight the TO version you choose to update and Click the OK button.
7	The Update TM Index Screen will display.	From the Options Menu, Select Update Index Data, Select Update Publication, Management and Stock Data.
8	The Update Publication, Management and Stock Data Screen will display.	Select the Multiple Items to Pub Assoc Tab.
9	The Multiple Items to Pub Assoc Screen will display Weapon System, Equipment Items, NSN Items, and Publication Index.	Click on the Choose button to the right of the Equipment Items field.
10	The Choose Equipment Item Screen will display from the Search Criteria section of the screen.  <b>NOTE</b>  You may use the “%” in your search criteria.	Enter equipment part number in the Equipment/Model No field.  Click the OK button.

Table A-3. Updating Equipment Part Numbers in the JCALS Index (Version 2.0, 10 Sep 03) - Continued

Step	Screen	Field
11	<p>The results will display in the Choose Equipment Item Screen in the Results field.</p> <p><b>NOTE</b></p> <p>If the part number and nomenclature are not available in the results field CANCEL out of this process and follow the instructions on Page 2 of this document for "Adding New Equipment Part Numbers to JCALS." The Technical Content Manager (TCM)/Equipment Specialist (ES) is normally the source for providing you with the equipment part number and equipment nomenclature, as designated in the D043.</p>	Highlight the Result you want to update the TO Index with and Click the OK button.
12	<p>The Update Publication, Management and Stock Data, Multiple Items to Pub Assoc Screen will display.</p> <p><b>NOTE</b></p> <p>To add multiple part numbers repeat Steps 9-11.</p>	If you made a selection from the results in the previous screen, then your selection will display. Click the OK button.
13	The Update TM Index Screen will display with the Request field populated.	<p>Highlight the Result.</p> <p>From the Options Menu, select - Approve.</p> <p>To exit this process go to the File Menu and Click on Close.</p>



## GLOSSARY

### A

**AIR LOGISTIC CENTER (ALC)** — The AFMC component having responsibility for the sustainment phase of a system or commodity life cycle, including the related TOs. ALCs perform depot-level maintenance on assigned systems and commodities during sustainment. (Some Product Centers have assumed cradle-to-grave life cycle management of specific weapon systems.)

**ABEYANCE** — Compliance with TCTOs and ITCTOs may be suspended by the Technical Content Manager (TCM)/ Production Management Specialist (PMS) when safety hazards or possible equipment-damaging problems are discovered with the TCTO procedures. When this occurs, TCTOs are said to be in abeyance. TCTOs cannot be held in abeyance past the rescission date, and cannot be extended unless the suspension has been lifted. ITCTOs may only be held in abeyance for 90 days, after which the TCTO must either be rescinded or released for compliance.

### B

**BAILMENT** — Temporary transfer of government equipment to another agency for use, modification, test or maintenance. Bailment does not change ownership of the assets.

**BASELINE** — A configuration identification document or set of such documents formally designated and fixed at a specific time during a configuration item life cycle. Baselines, plus approved changes from baselines, constitute the current configuration identification.

### C

**COMMODITY** — A designated item, subsystem, or system which is not identified as a weapon or military system. Commodities are grouped into Product Groups or Materiel Groups which possess similar characteristics and applications benefiting from similar developmental, acquisition, and logistics support management processes.

**COMPUTER PROGRAM (CP)** — The software (code) containing a sequence of operating instructions or data in a format suitable for use with a particular computer system, provided on magnetic tapes, floppy disks, or other physical or electronic media.

**CONFIGURATION** — The functional and/or physical characteristics of hardware and software as set forth in technical documentation and achieved in a product.

**CONFIGURATION CHANGES** — Alteration of the form, fit or function of a configuration item.

**CONFIGURATION CONTROL** — The systematic evaluation, coordination, and approval or disapproval of all proposed changes in the configuration of a baselined Configuration Item (CI), and implementation of approved changes.

**CONFIGURATION CONTROL BOARD (CCB)** — A board composed of representatives from program or project functional areas such as engineering, configuration management, procurement, production, test, logistic support, training activities and using and supporting organizations. The board approves or disapproves Engineering Change Proposals (ECPs), approves conversion of ECPs to TCTOs if applicable, and issues implementation instructions.

**CONFIGURATION ITEM (CI)** — An aggregation of hardware and/or software, or any portion thereof, that satisfies a function and is designated for configuration control. Items that reflect the current approved configuration of military systems

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and/or commodities currently in the Air Force operational inventory. Operation and maintenance of a CI requires the use of the latest TO information listed in the TO Catalog.

**CONFIGURATION MANAGEMENT** — A discipline applying technical and administrative direction and surveillance to (1) identify and document the functional and physical characteristics of a CI, (2) control changes to those characteristics, and (3) record and report change processing and implementation status.

**CONTRACT MAINTENANCE** — The maintenance of systems or commodities performed by commercial organizations (including prime contractors) under contract on a one-time or continuing basis without distinction as to level of maintenance accomplished.

**CUMULATIVE TCTO SUPPLEMENT** — This type of TCTO supplement is issued to make corrections to an existing TCTO Supplement. The cumulative supplement replaces the affected supplement, and is basically the same supplement with changed or added information included. The changes are indicated by change symbols.

**D**

**DEPOT-LEVEL MAINTENANCE** — The level of maintenance consisting of those on- and off-equipment tasks performed using highly specialized skills, sophisticated shop equipment, or special facilities of an ALC, centralized repair activity, contractor facility, or, in some cases, by field teams at an operating location. Maintenance performed at a depot also includes those organizational and intermediate-level tasks required to prepare for depot maintenance, and, if negotiated between the depot and the operating command, scheduled field-level inspections, preventative maintenance or TCTOs which come due while equipment is at the ALC for PDM.

**DEVELOPMENT SYSTEM MANAGER (DSM)** — The lead individual at a Product Center (PC) when a PM located at an ALC delegates a specific development task to the Product Center. The DSM reports directly to the PM.

**DISTRIBUTION STATEMENT** — A statement used in marking a technical document, regardless of publication media or form, to denote the extent of its availability for distribution, release, and disclosure without additional approvals and authorizations from the controlling DoD office. See DoDD 5230.24 and AFI 61-204.

**E**

**ENGINEERING CHANGE PROPOSAL (ECP)** — A proposed engineering change and the documentation that describes and suggests the change. ECPs are submitted to the PM by contractors or from internal Air Force sources.

**EQUIPMENT END ITEM** — A component or components and necessary assemblies, subassemblies, and parts connected or associated to perform an operational function and which may or may not need to be installed or used with other items to fulfill an operational mission.

**EQUIPMENT SPECIALIST (ES)** — The individual or position responsible for assisting the acquisition team during the development/production phase and for technical management of a system, subsystem or commodity during the sustainment phase of a program.

**F**

**FIELD-LEVEL MAINTENANCE** — On- or off-equipment maintenance performed at an operating location. Field level includes the traditional Organizational-level and portions of Intermediate-level maintenance under the Two-level maintenance concept (the rest of intermediate-level maintenance is covered under depot-level maintenance).

**FORMAL TCTO** — MILSPEC-developed TCTOs approved for operation and maintenance that are printed and available for distribution in the Air Force Standard TO Management System. Formal TCTOs also apply to commercial manuals that have been assigned a TO number following review and acceptance by the Air Force.

**FORM, FIT, AND FUNCTION** — The physical and functional characteristics of an end item, but not the characteristics of any of the item components.

## G

**GIDEP** — A cooperative activity between government and industry seeking to reduce or eliminate expenditures of resources by sharing technical information essential during research, design, development, production and operational phases of the life cycle of systems, facilities and equipment.

**GROUP A KIT** — The items, parts, or components to be permanently or semi-permanently installed in a CI to support, secure, interconnect, or accommodate the equipment provided in the modification Group B kit.

**GROUP B KIT** — The equipment which, when installed in a CI with a Group A kit, completes a modification. These kits are normally removable.

## I

**INITIATOR** — The individual who develops TCTO documentation and manages TCTO development and compliance.

**INTEGRATED WEAPON SYSTEM MANAGEMENT (IWSM)** — Empowering a single manager (SM) with authority over the widest range of military system program decisions and resources to satisfy customer requirements through the life cycle of that system. This is the Air Force (AF) management philosophy for all military systems and commodities.

**INTERMEDIATE-LEVEL MAINTENANCE** — Those off-equipment tasks performed at the base level under the 3-level maintenance concept, usually in a maintenance shop environment.

**ITEM MANAGER** — An individual within an organization assigned management responsibility for one or more specific items of hardware.

## L

**LEAD COMMAND** — The Air Force assigns responsibility for overall management of each system to a “lead command” to ensure that all requirements associated with every system receive comprehensive and equitable consideration. This lead command provides a primary input into the process of developing and maintaining a force structure with a balance of complementary capabilities, and the command establishes a basis for rational allocation of scarce resources among competing requirements. When only one command possesses a system or commodity, that command is automatically assigned as Lead Command. See AFPD 10-9, Lead Operating Command Weapon Systems Management and AFI 10-901, Lead Operating Command – Communications and Information Systems Management for Lead Command assignments on shared systems.

## M

**MAINTAINABILITY** — The measure of the ability of an item to be kept in or restored to a specified condition when maintenance is performed by personnel having specified skill levels, using prescribed procedures and resources, at each prescribed level of maintenance and repair.

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**MAJOR COMMAND (MAJCOM)** — The activity at the higher echelon responsible for management and command control of systems or commodities. For purposes of this TO, “MAJCOM” includes Field Operating Agencies (FOAs) and Direct Reporting Units (DRUs).

**MILITARY SYSTEM** — The generic phrase used to describe the systems developed and supported by AFMC and to which IWSM is applicable. The specific definition is “A discrete stand-alone collection of systems and related resources which, in conjunction with user support and operation, provides a capability to accomplish a specific military mission.”

**MODIFICATION** — Any change, either retrofit or updating, to the configuration of a CI.

**N**

**NON-CONFIGURED EQUIPMENT** — Equipment that is representative of but does not reflect the current configuration of vehicles or systems in the Air Force operational inventory (e.g., a prototype of a new aircraft which will not be updated to the final approved configuration, or a test-bed aircraft used to flight test and evaluate aeronautical commodities and subsystems.) The latest issues of the TO information compatible with the specific items of equipment are mandatory for use with this equipment; this technical data might not be listed in the TO Catalog.

**O**

**OFF-EQUIPMENT MAINTENANCE** — Maintenance tasks that are not or cannot be effectively performed on the military system or commodity end item, but require the removal of the component to a repair shop and the use of repair shop resources. Does not include end items such as aircraft engines or electronic countermeasures, gun pods, etc.

**ON-CONDITION MAINTENANCE** — Application of inspection and testing procedures and techniques without removal or disassembly that allow the condition of the equipment to dictate the need for maintenance or the extent of repair or overhaul required to restore serviceability. Upon failure or through attrition is not authorized.

**ON-EQUIPMENT MAINTENANCE** — Maintenance tasks that are or can be effectively accomplished on the military system or commodity end item.

**OPERATING COMMAND** — The MAJCOM(s) responsible for operating a system, subsystem, or commodity end item. Generally, the term applies to those commands or organizations designated by the USAF to conduct or participate in operations or operational testing.

**OPERATING LOCATION** — Generally, a physical location where military systems or commodities are assigned, operated, and maintained.

**ORGANIC MAINTENANCE** — Maintenance performed by the government under military control, using government-owned or controlled facilities, tools, test equipment, spares, repair parts, and military or civilian personnel.

**ORGANIZATIONAL-LEVEL MAINTENANCE** — The level of maintenance consisting of those on-equipment tasks normally performed using the resources of a using command at an operating location.

**P**

**PRODUCT GROUP** — A compilation of several specific commodities in all life-cycle phases, characterized by an ongoing development requirement and a much larger cumulative sustainment effort. A Product Group consists of commodities that can benefit from common management practices.

**PRODUCT GROUP MANAGER (PGM)** — The Program Manager for a Product Group, who has the same responsibilities as a System Program Director for the assigned products.



**PRODUCTION CHANGE** — A configuration change effected during the manufacture (production) of a CI, which may result in a retrofit change to units of the CI already deployed.

**PRODUCTION MANAGEMENT ACTIVITY (PMA)** — The program office that has responsibility for the acquisition and/or sustainment of a weapon system or commodity.

**PROGRAM MANAGER (PM)** — PM as used in this manual encompasses the terms Single Manager (SM), System Program Manager (SPM), System Program Director (SPD), System Support Manager (SSM) and Development System Manager (DSM) in accordance with DoDD 5000.1.

**PRODUCTION MANAGEMENT SPECIALIST (PMS)** — The individual responsible for insuring the accuracy of the modification documentation packages (i.e. AFTO Forms 873, 874, and 875), modification coordination and document processing, TCTO extension/rescission notifications, compliance with the TCTO, installation schedules, and depot field team support.

**PROTOTYPE** — A model or preliminary design of a system or commodity suitable for evaluation of design, performance, and production potential.

**PROGRAM MANAGEMENT DIRECTIVE (PMD)** — The PMD is the official Air Force document used to direct program responsibilities to the appropriate MAJCOMs, Program Executive Officer (PEO), Product Center Commander (CC), or appropriate organization for a specific system/subsystem development, modification, acquisition or directed procurement effort.

## Q

**QUICK MODIFICATION CONCEPT** — MAJCOMs, within organizational capabilities, design, develop, prototype, test, and draft changes to documentation for proposed modifications.

## R

**RELIABILITY** — The probability that a system, subsystem, commodity, component, or part will perform a required function under specified conditions without failure for a specified period of time.

**RETROFIT CHANGE** — Modification of a deployed CI to incorporate changes made on the production line for later items, or after production has ended.

## S

**SINGLE MANAGER (SM)** — The System Program Director (SPD) or PGM in charge of a weapon/military system or product group.

**SOFTWARE-ONLY CHANGE (TCTO)** — Changes (or TCTOs) to a computer program configuration item (CPCI) which do not affect system or commodity hardware or TO procedures.

**SUPPLY CHAIN MANAGER (SCM)** — Designated individual(s) at an ALC responsible for managing a line of National Stock Number (NSN)-coded items. SCM functions include requirements determination; cataloging, standardization and engineering data management; stock control and distribution; technical management functions; and pricing for assigned items. SCMs report to ALC Commanders, but are responsible for supplying, repairing, and managing material to support SMs.

**SYSTEM** — A final combination of equipment items, technical data, supply support, transportation, policies and procedures which make up a self-sufficient entity designed to perform a specific mission.

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**SYSTEM PROGRAM DIRECTOR (SPD)** — The individual in an AFMC System Program Office (SPO) who is ultimately responsible and accountable for decisions and resources in overall program execution. The single face to the user who oversees the seamless process. SPD is the designated title for the single manager of a program who reports to a Program Executive Officer (PEO) or Designated Acquisition Commander (DAC).

**SYSTEM PROGRAM OFFICE (SPO)** — The integrated AFMC organization responsible for cradle-to-grave management of a military system or product group.

**SYSTEM SUPPORT MANAGER (SSM)** — The lead individual at the ALC responsible for support when the SM is located at a PC. The SSM reports directly to the SM.

**T**

**TECHNICAL CONTENT MANAGER (TCM)** — The individual, usually an Equipment Specialist (see definition) or Engineer, responsible for maintaining the accuracy, adequacy, modification, classification, review and currency of the technical content of TOs and TCTOs supporting assigned systems, commodities or processes. TCMs are not generally responsible for style and format or other non-technical aspects of manuals.

**TECHNICAL ORDER COMPLIANCE (TOC)(AFMAN 23-110, VOL. 1, PART 1, ATTCH 1A-1)** — That state in which, according to USAF technical order or other military department modification orders, an otherwise serviceable article must be processed by a maintenance activity for the periodic inspection, calibration, test, modification, change, or alteration prior to shipment, issue, or the preparation for initial or continued storage.

**TIME COMPLIANCE TECHNICAL ORDER (TCTO) PROCESS** — This process is a subset of the overall TO Publication System prescribed by AFPD 21-3, Technical Orders. The TCTO process consists of those policies and procedures used to establish, procure, develop, manage, verify, reproduce, stock, store, issue, comply with and document TCTOs and associated TO Changes and modification kits and special tools, as specified in this TO. The process also involves procedures in the base supply system, the AF Modification Management system, and the Maintenance Documentation system.

**TO MANAGER** — The individual who manages TOs and TCTOs related to systems and commodities assigned according to the D086, Mission Workload Assignments System. Management encompasses all activities (except content management) from acquisition through disposal of TOs after the systems or commodities they support exit the Air Force inventory.

**U**

**UPDATING CHANGE** — A modification to equipment to correct deficiencies identified prior to transition from the Development/Production phase to the Sustainment phase.

**USING COMMAND** — See Operating Command.

**V**

**VERIFICATION** — Verification is the process through which Air Force personnel evaluate and prove TOs are accurate, adequate, safe, and usable to support the using command operational and maintenance concepts. TCTO verification establishes validity of the technical instructions and any required modification parts. Newly developed associated manuals and/or updates for those manuals affected by the TCTO will be normally verified at the same time. Verification is required by DoD 5010.12-M, Procedures for the Acquisition and Management of Technical Data and AFPD 21-3.

**W**

**WORK STOPPAGE** — Work stoppage refers to the inability to proceed with production on a repair or modification of an end item or commodity, or where a given process stops due to nonconforming material, inadequate technical data, or lack of

proper parts, materials, components, tooling or facilities. Halted production of a component or part that prevents the repair or continued scheduled production flow of an end item constitutes a work stoppage.

