TECHNICAL MANUAL

AIR FORCE
TIME COMPLIANCE TECHNICAL ORDER
PROCESS

(ATOS)

This publication supersedes TO 00-5-15 dated 1 May 1997.

Published under authority of the Secretary of the Air Force

27 MARCH 2001

INSERT LATEST CHANGED PAGES. DESTROY SUPERSEDED PAGES.

LIST OF EFFECTIVE PAGES

NOTE: The portion of the text affected by the changes is indicated by a vertical line in the outer margins of the page. Changes to illustrations are indicated by miniature pointing hands. Changes to wiring diagrams are indicated by shaded areas.

Dates of issue for original and changed pages are:

Original ..... 0..... 27 March 2001

TOTAL NUMBER OF PAGES IN THIS PUBLICATION IS 62, CONSISTING OF THE FOLLOWING:

Page No.	*Change No.	Page No.	*Change No.	Page No.	*Change No.
Title	0				
A	0				
i - iii	0				
iv Blank	0				
1-1 - 1-8	0				
2-1 - 2-8	0				
3-1 - 3-4	0				
4-1 - 4-5	0				
4-6 Blank	0				
5-1 - 5-8	0				
6-1 - 6-5	0				
6-6 Blank	0				
7-1 - 7-2	0				
8-1 - 8-4	0				
A-1 - A-3	0				
A-4 Blank	0				
Glossary 1 - Glossary 6	0				

*Zero in this column indicates an original page

TABLE OF CONTENTS

Section/Para		Page
1	INTRODUCTION	1-1
1-1	The Time Compliance Technical Order (TCTO) Process	1-1
1-2	Documentation	1-2
1-3	Distribution Statements	1-2
1-4	TCTO, TCTO Kit and TO Update Funding	1-2
1-5	Reporting Deficiencies in TCTO Instructions or Kits	1-3
1-6	Preliminary TCTOS	1-3
2	TCTOS	2-1
2-1	Modification Types	2-1
2-2	TCTO Categories, Types and Levels	2-1
2-3	Immediate Action TCTOS	2-1
2-4	Urgent Action TCTOS	2-1
2-5	Routine Action TCTOS	2-2
2-6	Inspection TCTOS	2-2
2-7	Record TCTOS	2-2
2-8	Companion TCTOS	2-3
2-9	TCTO Supplements	2-3
2-10	Interim TCTO (ITCTO)	2-4
2-11	Designated Level of Accomplishment	2-4
2-12	Format	2-4
2-13	Non-TCTO Modification Instructions	2-4
2-14	Retrofit Changes	2-5
2-15	Special Weapons Retrofit Orders	2-5
2-16	Coordination of TCTOS	2-5
2-17	TCTO Documentation and Tracking	2-5
3	TCTO, KIT, AND DATA CODE NUMBERS	3-1
3-1	Time Compliance Technical Order (TCTO) Numbering	3-1
3-2	Numbering Kits	3-2
3-3	TCTO Data Code Numbers	3-2
4	TCTO KITS	4-1
4-1	Content of Kits	4-1
4-2	Waivers to Complete Kit Concept	4-2
4-3	Assembly of TCTO Kits	4-2
4-4	Depot Storage of Kits	4-3
4-5	Distribution of TCTO Kits	4-3
4-6	Depot Level Kits	4-4
4-7	Reporting of TCTO Kits in Supply	4-4
4-8	Disposition of TCTO Kits	4-4
5	TCTO VERIFICATION, RELEASE OF TCTOS, KITS AND TECHNICAL DATA	5-1
5-1	Time Compliance Technical Order (TCTO) Verification	5-1
5-2	Applicability	5-1
5-3	Requirements	5-1
5-4	Responsibilities	5-2
5-5	Procedures	5-3
5-6	Release of TCTOs	5-4
5-7	Release of Kits	5-4
5-8	Release of TO Updates	5-5

TABLE OF CONTENTS - Continued

Section/Para — Page

6 COMPLIANCE WITH TCTOS 6-1
6-1 Time Compliance Technical Order (TCTO) Compliance 6-1
6-2 Operating Activities 6-1
6-3 Air Force Materiel Command 6-1
6-4 Waivers To TCTO Compliance 6-1
6-5 Compliance Period 6-1
6-6 Remove From Service Date 6-2
6-7 Extending A Compliance Period 6-2
6-8 TCTO Compliance on Spares in Stock and War Reserve Material (WRM) 6-2
6-9 Contractors 6-2
6-10 Compliance with Rescinded TCTOS 6-2
6-11 TCTO Compliance on Transient Aircraft 6-3
6-12 TCTO Compliance on Deployed Aircraft 6-3
6-13 Security Assistance Program (SAP) Countries Compliance with Air Force TCTOS 6-3
6-14 New Production Systems or Commodities 6-3
6-15 Systems or Commodities in Operational Inventories 6-3
6-16 Preparation of Systems or Commodities for Depot Work 6-3
6-17 TCTO Suspension (Abeyance) and Demodification of Items 6-3
6-18 Management Coding of Supply Records (AFMAN 23-110, Vol 3, Part I, Chapter 11) 6-4
6-19 Maintenance Records 6-4
6-20 Reliability and Maintainability Information System (REMIS) (TO 00-20-2) 6-4
6-21 Comprehensive Engine Management System (CEMS) (TO 00-25-254-CD-1) 6-5

7 RESCISSION, EXTENSION, REINSTATEMENT AND REPLACEMENT OF TCTOS 7-1
7-1 Rescission of Time Compliance Technical Orders (TCTOS) 7-1
7-2 Rescission Dates 7-1
7-3 Extending Rescission Dates 7-1
7-4 Reinstatement of TCTOS 7-2
7-5 Replacement of TCTOS 7-2

8 INTERIM TCTOS 8-1
8-1 General 8-1
8-2 Applicability 8-1
8-3 Authorization for ITCTOs 8-1
8-4 Notification and Issue of ITCTOs 8-2
8-5 Suspension and Rescission 8-2
8-6 Indexing ITCTOs 8-2
8-7 ITCTO Procedures to Remove Systems or Commodities From Service 8-2
8-8 Address Lists for ITCTO Distribution 8-2

A LIST OF ACRONYMS A-1

GLOSSARY ..... Glossary 1

LIST OF ILLUSTRATIONS

Figure	Title	Page
1-1	TCTO Development Flow Diagram	1-4
1-2	TCTO Implementation Flow Diagram	1-5
3-1	TCTO Kit Identification Number Data Fields	3-3
4-1	Message Format for Reporting Kit Shortages	4-5
5-1	AFTO Form 82, TCTO Verification Certificate	5-6
5-2	Preparation Instructions for AFTO Form 82	5-8
6-1	Sample Format for Extended Compliance Period Request	6-5
8-1	Sample Format - ITCTO Message	8-3
8-2	Sample Format - ITCTO Supplement Message	8-4

LIST OF TABLES

Number	Title	Page
1-1	List of Related Publications	1-6
1-2	List of Applicable Forms	1-8
2-1	TCTO Matrix Chart	2-6
3-1	Rules for Assigning TCTO Numbers, Data Code Numbers and Dates	3-4

CHAPTER 1

INTRODUCTION

1-1 THE TIME COMPLIANCE TECHNICAL ORDER (TCTO) PROCESS.

1-1.1 This technical order (TO) prescribes policies and procedures for the Air Force TCTO process (see figures 1-1 and 1-2). Other publications which apply in specific areas, such as AFMAN 23-110 for materiel management, AFMCI 21-302 for Interim TCTO procedures and AFMCMAN 21-1 for AFMC TO System procedures, remain the source document for their particular processes. TO 00-5-15 repeats coverage as necessary to assist management, and references to the source documents are made throughout this text as appropriate. Tables 1-1 and 1-2 provide publication and forms titles for those cited in this TO. The procedures described in this TO shall be used as a guide for Major Command-approved modifications.

1-1.2 HQ USAF/ILMM is responsible for establishing basic TCTO policy and for approving policy and procedure changes. Recommended changes will be submitted via AFTO Form 22 or the Joint Computer-aided Acquisitions and Logistics Support (JCALS) "Recommend a TM Change" process through the parent Major Command (MAJCOM) headquarters to the TO Manager, WR-ALC/TILT, 420 2nd St, Ste 100, Robins AFB, GA 31098-1640. MSG/MMF, 4375 Chidlaw Rd Ste 6, WPAFB OH 45433-5006, is the technical content manager (TCM) and will review submissions and recommend approval or disapproval. When the recommended change involves policy, it must also be reviewed by the Air Force Centralized TO Management (CTOM) Committee, and approved by HQ USAF/ILMM.

NOTE

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

1-1.3 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 TO 00-5-1. They provide instructions for modifying military systems or commodities within specified time limits, initiate special "one time" inspections, or impose temporary restrictions on systems or commodities. TCTOs may be used to notify affected personnel of Computer Program Identification Number (CPIN) item changes.

1-1.3.1 Software-only changes to baseline computer programs are normally announced by TCTO (reference this TO and TO 00-5-17). When multiple CPINs apply to a series of system technical orders (i.e., 12P3-2ALQ172 series) they may be included in one TCTO.

1-1.3.2 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.

1-1.3.3 Alternative methods used to announce software-only changes include message, letter of transmittal or electronic bulletin board. If these methods are used, the Single Manager (SM), CPIN or Technical Content Manager (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.

1-1.4 The TCTO process applies to all Air Force agencies, including the Air Force Reserve Command (AFRC) and Air National Guard (ANG). It does not apply to civil engineering or medical equipment, or general-purpose (GP) vehicles. Special purpose vehicles (e.g., Fire Trucks, 463L Loaders) are modified using the TCTO process. Vehicular TCTOs are exempt from the Configuration Control Board (CCB) process. 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 this point.

1-1.5 Responsibilities.

1-1.5.1 The Air Force Material Command (AFMC) Single Manager (SM) has management responsibility for assigned configuration items. These responsibilities include modification management and implementation (see AFPD 63-11 and AFI 63-1101).

1-1.5.2 The SM will ensure that prime contractors with active Air Force contracts for development, use or modification of SM systems or commodities establish continuing requirements for applicable TCTO-series headers, so that 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.

1-1.5.3 Systems and commodities managed at an Air Logistics Center (ALC) may undergo modifications which will require major development. In these cases, the SM may elect to transfer modification management to a Product Center (PC); however, the SM will retain overall program responsibility.

1-1.5.4 The modification Program Management Directive (PMD) will contain funding direction, assign responsibilities for budgeting resources and specify arrangements for the management of the program.

1-1.6 Modifications to nonstandard cryptologic equipment will be directed and implemented by HQ Air Intelligence Agency (AIA).

1-1.7 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.

1-2 DOCUMENTATION.

All changes must be supported by concurrent changes to operational and logistic support elements related to the change, such as support equipment, training equipment, technical data, spares, etc.

1-2.1 Proposed modifications are submitted to the Lead Command via an AF Form 1067. The proposals must be technically validated by the responsible SM. 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 SM for action. The SM generates an ECP to document the required configuration changes and the modification implementation approach, and submits the ECP to the SM CCB for approval. CCB decisions are documented on an AF Form 3525, In Accordance With (IAW) AFI 63-1101, or an AFMC Form 518, IAW AFMCPAM 63-104. Approved ECPs provide the authorization to incorporate configuration changes into Technical Orders.

1-2.2 When the CCB directs a modification to be accomplished by TCTO, the TCTO is developed and formatted according to MIL-PRF-38804. The development process and TCTO content are managed and controlled through the AFMC Forms 873, 874, and 875 (AFMCMAN 21-1). If other TOs must be updated as a result of the TCTO, the changes are developed by the modification manager and submitted through the JCALS "Prepare a TM Change Package" process. TCTO verification is performed by a team comparable to those who will accomplish the TCTO and is documented on the AFTO Form 82 (figure 5-1).

1-3 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 DODD 5230.24 and MIL-PRF-38804. See chapter 8 for message format.

1-4 TCTO, TCTO KIT AND TO UPDATE FUNDING.

1-4.1 The project funding the modification shall also fund the TCTO, any kits and support equipment (SE) required, and all related TO updates according to AFI 65-601V1. The Technical Content Manager (TCM) or Integrated Logistics Support Manager (ILSM) responsible for the modification is responsible for developing a budget (lead-time away) covering all aspects of the related TCTO.

1-4.2 Funding for the TCTO includes development, prototyping, verification, publishing and distribution of the TCTO and any changes required during the period of performance.

1-4.3 Funding for TCTO kit requirements includes material and distribution. Paragraph 4-2.2 covers MAJCOM reimbursement for kits with approved waivers to the complete kit concept.

1-4.4 Funding for TO updates as a result of a modification must include the following costs:

- 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).

1-4.5 Funding for Inspection TCTOs will be taken from the SM TO sustainment budget.

1-5 REPORTING DEFICIENCIES IN TCTO INSTRUCTIONS OR KITS.

1-5.1 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. Safety deficiencies will be reported by EMERGENCY recommended change. All other technical deficiencies will be reported as URGENT.

1-5.2 When a deficiency is noted in a TCTO kit, the deficiency will be reported in accordance with the kit instructions in TO 00-35D-54.

1-5.3 TCTO kit shortages will be reported to the appropriate SM by supply TCTO kit monitors, using the message format in figure 4-1. DO NOT report kit shortages according to TO 00-35D-54.

1-6 PRELIMINARY TCTOS.

1-6.1 The TO Manager, with the mutual written agreement of the SM and Lead Command, may authorize the use of verified preliminary TCTOs.

1-6.2 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 TO Manager, SM and Lead Command.

1-6.3 The TO Manager's authorization letter or message will identify the coordinating offices and will be maintained in the TO Distribution Office (TODO) of the using organizations.

1-6.4 The use of preliminary verified technical orders is covered in TO 00-5-1.

1-6.5 The use of preliminary depot-level TCTOs must be approved by the SM and affected Technology Repair Center (TRC) Maintenance Division Chief.

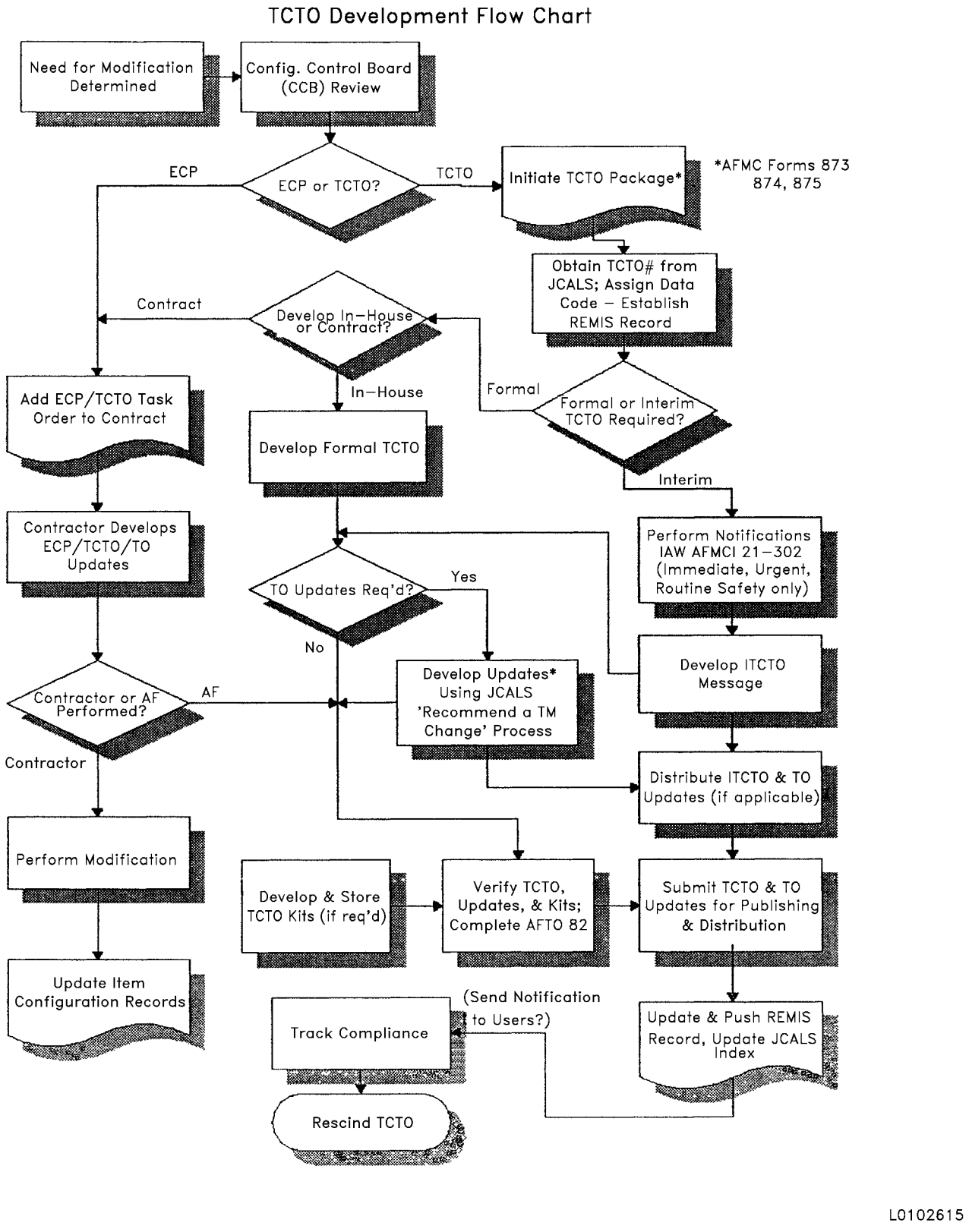

Figure 1-1. TCTO Development Flow Diagram

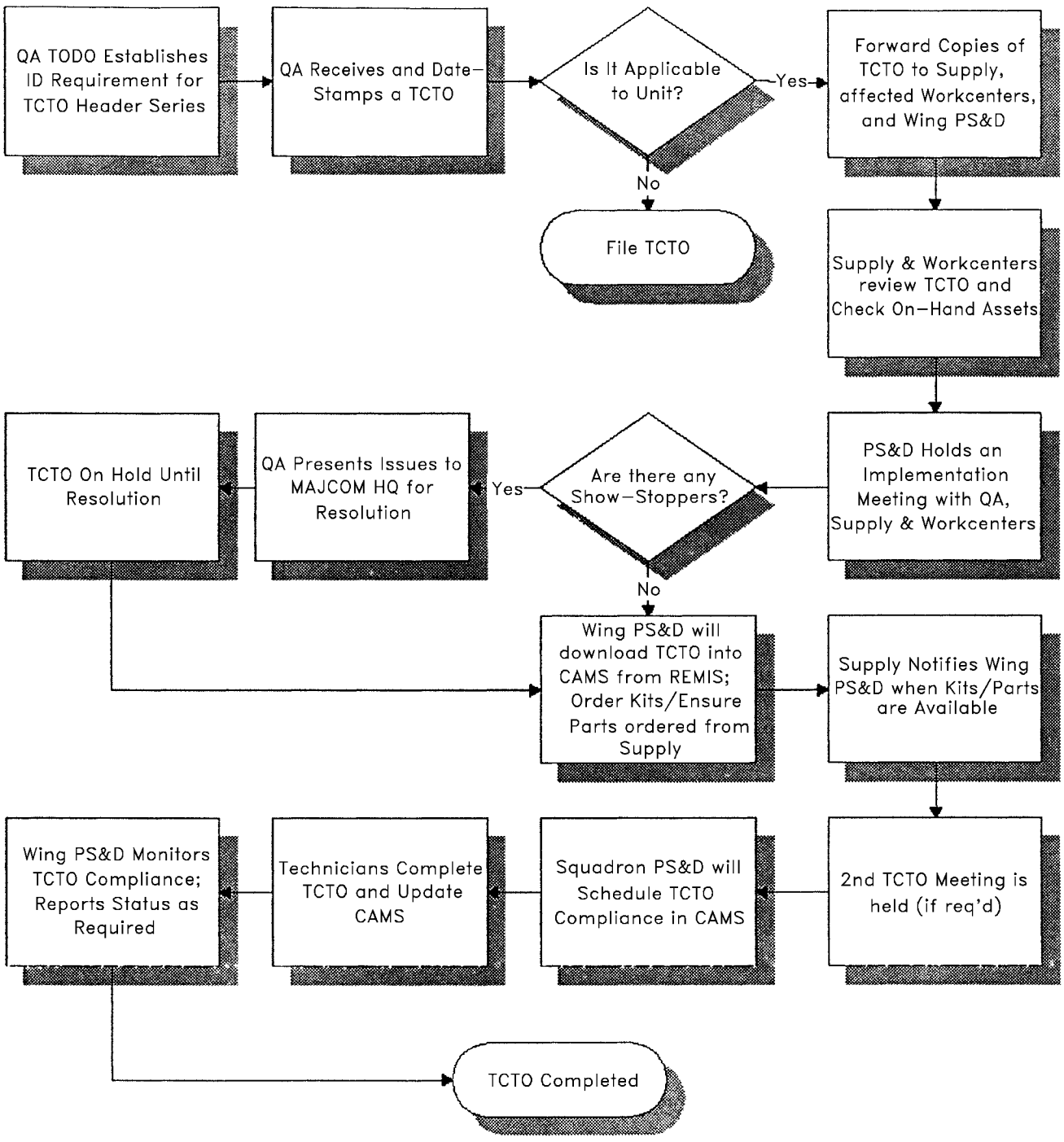

Figure 1-2. TCTO Implementation Flow Diagram

Table 1-1. List of Related Publications

Publication Number	Title
DODD 5230.24	Distribution Statements on Technical Documents
AFPD 10-9/AFI 10-901	Lead Operating Command Weapon Systems Management/Lead Operating Command-Communications and Information Systems Management
AFI 21-101	Maintenance Management of Aircraft
AFI 21-103	Aircraft, Missile and Equipment Accountability
AFI 21-104	Selective Management of Selected Gas Turbine Engines
AFMAN 23-110	United States Air Force (USAF) Supply Manual
AFI 24-303	Command/Air Force Vehicle Integrated Management System and Consolidated Analysis and Reporting
AFI 25-101	Instructions for War Reserve Material
AFMAN 33-326	Preparing Official Communications
AFI 33-360V2	Forms Management Program
AFMAN 36-2108	Airman Classification Manual
AFPD 63-11/AFI 63-1101	Modification Systems/Modification Management
AFI 65-601, Vol 1	USAF Budget Policies and Procedures
AMCI 21-112	G081 System Management Procedures
AFCSM 25-534	Reliability and Maintainability Information System (REMIS) User Manuals - 7 Vols
AFCSM 21-568, Vol 2	Core Automated Maintenance System (CAMS) Time Compliance Technical Order Software User Manual
AFMCI 21-302	Processing Interim Technical Orders
AFMCMAN 21-1	AFMC Technical Order System Procedures
AFMCPAM 63-104	Integrated Weapon System Management (IWSM) Configuration Management Implementation Guide
TO 0-1-11N	Joint Nuclear Weapons Publication Systems
TO 0-1-71	Consolidated Security Assistance Technical Order Index
TO 00-5-1	AF Technical Order System
TO 00-5-2	Technical Order Distribution System

Table 1-1. List of Related Publications - Continued

Publication Number	Title
TO 00-5-3	AF Technical Manual Acquisition Procedures
TO 00-5-17	User Manual - USAF Computer Program Identification Numbering (CPIN) System
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 General Policy 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 00-20-5	Aerospace Vehicle Inspection and Documentation
TO 00-20K-1	Inspection and Control of USAF Shelf-Life Equipment
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-CD-1	Comprehensive Engine Management System (CEMS) (D042)
TO 00-35D-54	USAF Materiel Deficiency Reporting and Investigating
MIL-PRF-38804	Time Compliance Technical Orders, Preparation of

Table 1-2. List of Applicable Forms

Form Number	Title
AFTO 22	Technical Manual Change Recommendation and Reply
AFTO 82	TCTO Verification Certificate
AF 105F-1	Stock Control Record
AFMC 173	Mission Design Series (MDS) Project Operation Assignment
AFMC 203	Technical Order Numbering, Indexing and Control Record
AFMC 252	Technical Order Publication Change Request
AFTO 349	Maintenance Data Collection Record
AFMC 518	Configuration Control Board Directive
AFTO 781A	Maintenance Discrepancy and Work Document
AFMC 873	Time Compliance Technical Order Requirements
AFMC 874	Time Compliance Technical Order Supply Data Requirements
AFMC 875	Time Compliance Technical Order Programming Document
AF 1067	Modification Proposal
AF 3525	CCB Modification Requirements and Approval Document

CHAPTER 2

TCTOS

2-1 MODIFICATION TYPES.

2-1.1 Modifications may be of two types, permanent (P) or temporary (T). Only permanent modifications will be documented through Time Compliance Technical Order (TCTO)s. Permanent modifications may change, add, or delete any configuration item. Test Bed aircraft modified with temporary changes or permanent changes issued as TCTOs which affect aircraft emergency rescue procedures must be reported to HQ AFCESA/CEXF according to AFMCMAN 21-1.

2-1.2 Permanent (Safety) modifications are routine modifications with safety implications. The TCTOs developed from 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 urgency, but is used when the risks are too high if the hazard is not corrected within the compliance period.

2-2 TCTO CATEGORIES, TYPES AND LEVELS.

Each TCTO is assigned a category, type and level at the time of Configuration Control Board (CCB) or Software Configuration Control Sub-Board (SCCSB) approval. Three categories are authorized: immediate, urgent, and routine action. The degree of urgency is indicated in the instructions by specifying when compliance is to be accomplished (table 2-1, TCTO Matrix Chart). These categories are further divided into types and levels, such as Inspection, Safety, Organizational/Intermediate (O/I) Level, etc. All TCTOs are issued by the responsible TCTO/Modification Manager under the authority of the responsible Single Manager (SM).

2-3 IMMEDIATE ACTION TCTOS.

2-3.1 Immediate action TCTOs are issued under the governing factors of safety conditions, the uncorrected existence of which could result in fatality or serious injury to personnel or extensive damage to or destruction of valuable property. Issue is through Interim TCTO (ITCTO) messages (figures 8-1 & 8-2), using the highest authorized message precedence In Accordance With (IAW) AFMAN 33-326. If a formal publication of this TCTO is issued, the words Immediate Action are printed in red at the top center of the first page and a series of red Xs (XXXX) are printed around the border of the first page.

2-3.2 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 (SE), personal equipment, or munitions. When possible, corrective actions are included in immediate action TCTOs.

2-3.3 Commanders shall ensure distribution to all affected personnel within four hours after receipt because of the TCTO's critical nature.

2-4 URGENT ACTION TCTOS.

2-4.1 Urgent action TCTOs are issued under the governing factors of combat necessity or potentially hazardous conditions which could result in injury to personnel, damage to property, or unacceptable reductions in combat efficiency. They may be issued as a formal or an interim TCTO (ITCTOs will use the highest authorized message precedence).

2-4.2 The urgency of these TCTOs requires compliance within specified time limits. If compliance is not accomplished by expiration of the time limit, these 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 red diagonals alternately spaced with red Xs (/ X / X / X) are printed around the border of the first page.

2-4.3 Commanders shall ensure distribution is made to all affected personnel within 24 hours of receipt.

2-5 ROUTINE ACTION TCTOS.

2-5.1 Routine action TCTOs are issued for any conditions not covered under immediate or urgent action TCTOs.

2-5.2 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.

2-5.3 Routine action TCTOs may also provide enhancements to equipment or system capabilities.

2-5.4 The procuring activity is authorized to withhold the release of non-safety routine action TCTOs for a maximum of ninety 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.

2-6 INSPECTION TCTOS.

CAUTION

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.

Inspection TCTOs are non-configuration change TCTOs which direct a one-time inspection to determine equipment condition or configuration, and are approved by the appropriate Technical Content Manager (TCM) division. They may be issued as Immediate Action, Urgent Action, or Routine Safety Category TCTOs. They are either performed outside the normal periodic inspection schedule for the equipment or provide inspection criteria not covered in existing Technical Order (TO)s. These TCTOs may require inspection only, inspection and replacement of hardware with like serviceable items, inspection with repair in accordance with repair manuals, or similar requirements which do not change form, fit, or function. Logistics requirements for access and button-up of inspection areas will only be provided in TCTO kits when such requirements are not commonly available 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. An AFMC Form 874 is only required for inspection TCTOs if kits, special tools, etc., not commonly available at the performing units are required.

2-6.1 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.

2-6.2 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.

2-7 RECORD TCTOS.

These TCTOs do not contain step-by-step instructions in the "how work is accomplished" paragraph. They 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 retrofit changes:

2-7.1 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.

2-7.2 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.

2-7.2.1 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.

2-7.2.2 Affected TO updates to support a prototype installation must be agreed to by the applicable Major Command (MAJCOM) directorate. These TOs may be verified preliminary TOs or supplemental data, but the data must be in a changeable format.

2-8 COMPANION TCTOS.

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.

2-8.1 If a commodity TCTO is depot-level-only accomplishment, write an Organizational/Intermediate (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.

2-8.2 If a commodity TCTO is for O/I 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.

2-8.3 In the case of a commodity item modification, it is preferable 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.

2-8.4 The only exception is for aircraft engines tracked in the Comprehensive Engine Management System (CEMS). An engine TCTO may be issued as a single TO Category 2 (Airborne Engines - see TO 00-5-18) TCTO, which will contain instructions for modifying the engine, whether or not it is installed in the aircraft. This method will only be used if it will accommodate all CEMS, Core Automated Maintenance System (CAMS), and G081 (CAMS for Mobility) tracking and reporting functions supporting field and depot activities. If the TCTO is applicable to a commodity installed on the engine, it will be issued in the appropriate commodity TO category, with a companion TO Category 2 TCTO (to provide engine configuration tracking information) for removal of the unmodified item and installation of the modified item.

2-9 TCTO SUPPLEMENTS.

TCTO Supplements are used to change or amend the basic TCTO. Revisions or numbered changes shall not be issued or used with TCTOs.

2-9.1 If the size of a supplement approaches the size of the basic TCTO, a replacement basic TCTO may be prepared in lieu of a supplement.

2-9.2 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.

2-9.3 Supplements which require additional work shall contain a statement regarding additional manhours 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.

2-9.4 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 basic TCTO to which they apply.

2-9.5 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.

2-9.6 Formal supplements will not be issued solely to correct the compliance period, rescission date, or man-hour accomplishment time of a TCTO.

2-10 INTERIM TCTO (ITCTO).

When circumstances preclude the timely publication of emergency instructions as formal TCTOs, they are issued by electronic means. The processing and distribution of the ITCTO or ITCTO supplement will be accomplished in accordance with chapter 8, AFMCI 21-302, and TOs 00-5-1 and 00-5-2. Message precedence and delayed delivery provisions are provided by TO 00-5-1. ITCTOs issued under the criteria of this technical order may be formalized.

2-11 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 organizational/intermediate level accomplishment does not prohibit accomplishment by depot level maintenance. The designation of depot level does prohibit accomplishment by organizational or intermediate level maintenance unless current and specific authority is possessed by the activities' MAJCOM. The SM, in coordination with the using command, determines the TCTO level of accomplishment. The following criteria apply:

2-11.1 Organizational or intermediate level accomplishment will normally be designated when TCTOs are immediate, urgent or safety, 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 its assigned equipment. Designation of TCTOs for organizational or intermediate level accomplishment will be with the using command's agreement to accomplish the work within the compliance period. TCTOs exceeding eight clock hours or 25 manhours will not be classified as organizational or intermediate level. Exceptions to the above may be negotiated on individual TCTOs between the using command and the SM.

2-11.2 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 skills. 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.

2-11.3 The basic processes and procedures for the development of a TCTO under the two level maintenance concept are unchanged. The SM CCB is responsible for planning, in coordination with the using command, for modification funding and accomplishment.

2-12 FORMAT.

The format of all formal TCTOs (contractor or organically prepared) shall be according to military specification MIL-PRF-38804. Borders and identification markings printed in red are used to focus attention on the more urgent TCTOs. ITCTO format shall be according to chapter 8.

2-13 NON-TCTO MODIFICATION INSTRUCTIONS.

2-13.1 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. Any activity receiving other than authorized instructions will notify the MAJCOM weapon system manager and request disposition instructions. The TO Manager/Flight Manual Manager reviews these publications and, if approved, processes them as an attachment to a formal published TCTO. 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.

2-13.2 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. WR-ALC/LVR will take necessary action to ensure that

the government continues to receive service bulletins for such vehicles after they enter the Air Force inventory. When required, WR-ALC/LVR 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 their 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).

2-14 RETROFIT CHANGES.

2-14.1 Retrofit changes that affect spares in stock or War Reserve Material (WRM) (AFI 25-101), will identify each affected item by national stock class (NSC), part number (PN), and nomenclature.

2-14.2 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.

2-15 SPECIAL WEAPONS RETROFIT ORDERS.

For information on these publications, refer to TO Index 0-1-11N, Joint Nuclear Weapons Publication Systems.

2-16 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. Due to the nature of immediate and urgent action TCTOs, formal coordination will not be accomplished; however, the Lead Command System Manager 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. TCTO technical evaluation, adequacy and conformance to Military Specification (MILSPEC) format is the responsibility of the TCM. To ensure this is accomplished, the final draft of formal TCTOs will be coordinated with the TCM and TO Manager prior to publication.

2-17 TCTO DOCUMENTATION AND TRACKING.

All TCTOs, depot and field level, are managed in the Joint Computer-aided Acquisitions and Logistics Support (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), Core Automated Maintenance System (CAMS - G054), and G081 (CAMS for Mobility) (TO 00-20-2).

2-17.1 Upon approval of the TCTO by the Single Manager's (SM's) 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 Office of Prime Responsibility (OPR)s for TCTO writing, coordination, kit assembly, verification and approval.

2-17.2 When TCTO publication is assured, the SM's TCTO/Modification Manager or Production Management Specialist (PMS) will insure that a REMIS TCTO Master Record is established and "pushed" to the bases affected by the TCTO when Initial Distribution (ID) has been made. The Master Record for an ITCTO will be established and pushed within 24 hours after ITCTO transmittal. 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.

2-17.3 Data on TCTO compliance, reported by performing organizations through the CAMS/G081/REMIS interface, will be used to help determine the need for compliance period or rescission date extensions (see chapters 6 & 7). TCTO compliance will be reported to REMIS by Air Logistics Center (ALC) depot or field team maintenance when they perform TCTOs. Technology Repair Center (TRC) compliance with engine TCTOs will be documented in CEMS by the agency performing the work.

2-17.4 The results of compliance with Inspection TCTOs will be documented as "Pass/Fail" in accordance with TO 00-20-2.

Table 2-1. TCTO Matrix Chart

CATEGORY & TYPE OF TCTO	COMPLIANCE PERIOD (Note 1)	REMOVE FROM SERVICE (Note 2)	MAXIMUM RESCISSION DATE (Note 3)
IMMEDIATE ACTION TCTO:			
All Categories (Note 4)	Immediately	Immediately	1 year after issue
URGENT ACTION TCTO:			
All Categories	From 1 to 10 days	Upon expiration of compliance period	1 year after issue
INTERIM ROUTINE ACTION, O/I LEVEL SAFETY INSPECTION TCTO:			
All Categories	From 11 to 35 days	Upon expiration of compliance period	1 year after issue
ROUTINE ACTION, O/I LEVEL SAFETY TCTO:			
Category 1-Aircraft; Category 2-Airborne Engines; Category 31-Ground C-E Eqpmt; Aerospace and Non-Aerospace Commodities	From 11 to 90 days	Upon expiration of compliance period	2 years after issue
Category 14-Life Support	From 11 to 120 days	Upon expiration of compliance period	2 years after issue
Category 21-Guided Missiles; Category 35-SE (LGM only)	From 11 to 270 days	Upon expiration of compliance period	2 years after issue
ROUTINE ACTION, O/I LEVEL TCTO:			
Category 1-Aircraft; Category 2-Airborne Engines; Category 31-Ground C-E Eqpmt; Aerospace and Non-Aerospace Commodities	From 90 to 270 days	Upon expiration of compliance period	3 years after issue
Category 21-Guided Missiles; Category 35-SE (LGM only)	From 90 to 540 days	Upon expiration of compliance period	3 years after issue

Table 2-1. TCTO Matrix Chart - Continued

CATEGORY & TYPE OF TCTO	COMPLIANCE PERIOD (Note 1)	REMOVE FROM SERVICE (Note 2)	MAXIMUM RESCISSION DATE (Note 3)
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 SM with MAJCOM 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 SM with MAJCOM approval	5 years after issue
ROUTINE ACTION, DEPOT LEVEL SAFETY TCTO (Note 5):			
All Categories	From 11 to 90 days	Upon expiration of compliance period	1 year after issue
ROUTINE ACTION, DEPOT LEVEL TCTO (Note 6 & 7):			
All Categories	Upon Depot Maintenance (if scheduled)	Until completion of Depot Maintenance	10 years after issue

Table 2-1. TCTO Matrix Chart - Continued

CATEGORY & TYPE OF TCTO	COMPLIANCE PERIOD (Note 1)	REMOVE FROM SERVICE (Note 2)	MAXIMUM RESCISSION DATE (Note 3)
ROUTINE ACTION, DEPOT LEVEL RECORD TCTO:			
All Categories	Upon Depot Maintenance (if scheduled)	Until completion of Depot Maintenance	10 years after issue

NOTES:

1. The compliance period may be any number of days between the days indicated in this column. It represents the time allowed to accomplish a TCTO upon receipt of special tools, kits, parts, TCTO, and affected manuals; or TCTO only if kits are not required.

2. For all TCTO Categories and Types, other than Immediate Action, the Remove from Service date is as specified, **OR** 60 days prior to the TCTO Rescission Date, whichever comes first.

3. 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, SA-ALC/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.

4. Commodity category TCTOs will not be used as the means of initially removing a system from service. In this instance, 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.

5. Routine Action, Depot Level, Safety TCTOs shall not exceed the Routine Action, Organization/Intermediate Level, Safety TCTO matrix elements. When a deviation to this policy appears to be necessary the Configuration Control Board (CCB) with written coordination from the affected commands, may authorize a waiver.

6. 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 SM and MAJCOM concur.

7. 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 3

TCTO, KIT, AND DATA CODE NUMBERS

3-1 TIME COMPLIANCE TECHNICAL ORDER (TCTO) NUMBERING.

Technical Order (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 (AFMCMAN 21-1 and TO 00-5-2) for each classification of TCTO to be issued (see the Joint Computer-aided Acquisitions and Logistics Support (JCALS) Desktop Instructions for procedures). When a new individual TCTO number is required, the TO Manager obtains it from JCALS. Data codes are assigned from a block of numbers provided by OC-ALC/TILUB to each program office.

3-1.1 TCTO series headers are set up to collect distribution 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.

3-1.2 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-52, 1C-141, 1F-16, 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).

3-1.3 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.

3-1.4 TCTOs involving airframes, control surfaces, basic structure, and peculiar contractor furnished equipment in National Stock Class (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 Communications-Electronics (C-E) (D086, Mission Workload Assignments System), are numbered in the appropriate series within the missile, aircraft or C-E category.

3-1.5 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 applicability 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.

3-1.6 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.

3-1.7 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.

3-1.8 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 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.

3-1.9 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.

3-2 NUMBERING KITS.

TCTO kit identification number instructions are prescribed by AFMAN 23-110V3P1, chapter 11, and are developed as follows (see figure 3-1):

3-2.1 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.).

3-2.2 The fifth position is occupied by the letter K, denoting a kit.

3-2.3 The sixth through twelfth positions are occupied by the seven-digit data code number.

3-2.4 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, War Reserve Material (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, it 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.

3-2.5 The fourteenth and fifteenth positions are AFMAN 23-110 assigned management codes corresponding to the Air Logistics Center (ALC) managing the kit (D086, Mission Workload Assignments System).

3-3 TCTO DATA CODE NUMBERS.

3-3.1 A seven digit Reliability and Maintainability Information System (REMIS)-identifiable data code is assigned to each TCTO. This code provides a link between a TCTO and its kits, which use the data code as part of the NSN. This data code appears in the upper right corner of the first page and below the TO number on all TCTOs and supplements. See table 3-1 for when to issue new data codes for supplements. REMIS provides a cross-reference between data code numbers and TCTO numbers.

3-3.2 The first two digits identify the equipment's 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 and issued through the TO Manager.

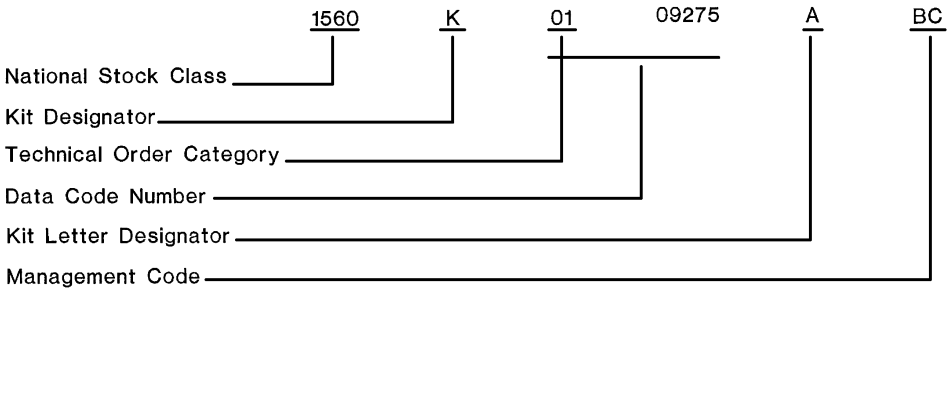

Figure 3-1. TCTO Kit Identification Number Data Fields

3-3.3 Core Automated Maintenance System (CAMS) Procedures. The seven-digit data code is the key data element used to maintain TCTO records in the CAMS database (the data code cannot be changed). For TCTO supplements with no additional work (no new data code), the CAMS user updates the changed data from the supplement in CAMS. The TCTO number remains the same (e.g., 1F-16-1314 does NOT change to 1F-16-1314C). The TCTO numbers in CAMS and REMIS must match.

3-3.4 TCTO supplements that require additional work will have a new data code. The CAMS 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 their history.

Table 3-1. Rules for Assigning TCTO Numbers, Data Code Numbers and Dates

TYPE OR KIND OF TCTO	TCTO NUMBER		DATA CODE NUMBER		ISSUE DATE		RESCISSION DATE[1]	
	NEW	OLD	NEW	OLD	NEW	OLD	NEW	OLD
1. Basic formal TCTO	X		X		X		X	
2. Formal TCTO supplement	Suffix[2]		X[3]		X			X[4]
3. Basic TCTO replacement	X		X		X		X	
4. Basic Interim TCTO (ITCTO)	X		X		X		X	
5. ITCTO Supplement	Suffix[2]		X[3]		X			X[4]
6. Replacement ITCTO	X		X		X		X	
7. Replacement supplement (either TCTO or ITCTO)	Suffix[2]		X[3]		X			X[4]
8. Reinstated TCTO		X		X	X		X	

NOTE:

1. Rescission dates are entered in JCALS, REMIS, and in the TCTO. JCALS index data is shown in the Internet TO Catalog (URL http://www.pdsm.wpafb.af.mil/toprac/catalog. htm).

2. Supplements are numbered by addition of a suffix to the basic TCTO number.

3. 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). They 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.

4. Supplements carry the same rescission as the basic, unless they explicitly change the date.

CHAPTER 4

TCTO KITS

4-1 CONTENT OF KITS.

CAUTION

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

4-1.1 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. The kit will contain a bill of materials identifying the parts and materials. A copy of the TCTO will not be included in the kit. Kit requirements are specified in AFMAN 23-110, Volume 3, Part 1, Chapter 11. 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. Inspection TCTOs are an exception to the complete kit concept (see paragraph 2-6).

4-1.2 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 Air Logistics Center (ALC) assigned management responsibility of the TCTO kit's National Stock Class (NSC) or Materiel Management Aggregate Code (MMAC).

4-1.3 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. Cut raw stock, with a maximum of prefabrication accomplished, will be included in kits.

4-1.4 Items subject to restrictive physical characteristics (i.e., shelf-life or flammable items, explosives, or medical material) will be included in kits, but may require separate containers, packaging, shipment, and/or storage.

4-1.5 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.

4-1.6 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.

4-1.7 Activities accomplishing a TCTO are authorized to accept substitute parts for installation, provided substitute parts are properly tagged and authorized by the Federal Logistic Data system (Fed Log).

4-1.8 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.

4-1.9 Computer software (i.e., tapes, cards, disks) required to support retrofit changes (NOT revised Computer Program Identification Number (CPINs) distributed by TCTO) will be issued prior to, or concurrently with kit delivery to users.

4-1.10 If special tools are required to effect accomplishment of a TCTO, they 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.

4-1.11 TCTO kits issued for modification of funded ground training aircraft are furnished in the same manner as for operational aircraft.

4-2 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 reimbursement 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:

4-2.1 Non-kitted material requirements must be minimal, consisting of common items which are in stock at bases involved. The Single Manager (SM) 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. Waivers are NOT required if the only omitted items are Petroleum/Oil/Lubricant (POL) products.

4-2.2 The SM 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 Facsimile (FAX). 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 SM 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.)

4-2.3 In cases of depot level TCTOs, the SM must negotiate and obtain documented agreement with the TRC Maintenance Division Chief that the deviation is economically feasible and that materials required are in stock or obtainable at the maintenance location involved. The SM then approves the waiver.

4-2.4 When waivers are granted, subparagraph 1.3 of the TCTO shall include the office symbol, e-mail address and Defense Switched Network (DSN) number of the Lead Command Point of Contact (POC) or depot maintenance office authorizing the waiver from the complete kit concept.

4-2.5 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.).

4-2.6 TCTOs for distribution of computer program changes (CPIN items) will be non-kit type TCTOs. Initial distribution of TCTOs to authorized program users will be accompanied by the CPIN item on the appropriate medium.

4-3 ASSEMBLY OF TCTO KITS.

4-3.1 Depot Assembly. 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:

4-3.1.1 Verify the quantity of kits required.

4-3.1.2 Screen the list of kit components for proper identification, and where not indicated, insert National Stock Numbers (NSNs - AFMAN 23-110).

4-3.1.3 Prepare and forward authorization for kit assembly to the distribution activity responsible for kit assembly, with the following essential information:

4-3.1.3.1 Quantity of kits to be assembled.

4-3.1.3.2 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 item control processing code (TO 00-20K-1) 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.

4-3.1.3.3 Any data previously obtained relative to the availability of required items.

4-3.1.3.4 The applicable fund citation.

4-3.1.4 The distribution activity will be responsible for assembly of TCTO kits in accordance with paragraph 4-1. The activity will requisition all parts and materials for kit assembly through or from the appropriate Stock Record Account Number (SRAN).

4-3.1.5 When sufficient parts and materials have been accumulated and the required kits assembled, they will be transferred to the TCTO kit unit for management.

4-3.2 Contractor Assembly (AFMAN 23-110, Vol 1, Pt 1, Chap 9, Section H). When a contractor will assemble kits, they shall do so 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.

4-4 DEPOT STORAGE OF KITS.

4-4.1 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. Active TCTO kits will not be disassembled and the component parts placed in stock under their individual part or stock numbers, nor will these kits be issued for any reason other than TCTO compliance.

4-4.2 Parts subsequently required for service maintenance of the initial TCTO will be requisitioned from the appropriate commodity class in accordance with current supply procedures.

4-4.3 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 (figure 4-1), tagged "Incomplete" and immediately processed in accordance with AFMAN 23-110.

4-4.4 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 report coded as "incomplete" and a replacement component will be ordered.

4-5 DISTRIBUTION OF TCTO KITS.

4-5.1 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.

4-5.2 Immediately upon receipt of the TCTO, personnel responsible for its accomplishment will either check their configuration management records or perform a physical check of affected aircraft, missiles, ground Communications-Electronics (C-E) or commodities to determine total requirements for compliance. They will then notify the base supply activity, who will submit kit requisitions to the designated source of supply.

4-5.3 Under no circumstances will TCTO kits, parts or tools, be shipped directly to a performing work center without prior coordination with the appropriate Major Command (MAJCOM) weapons systems office. The MAJCOM weapon systems office is responsible for obtaining the shipping information from each affected wing. The United States Air Force (USAF) agency responsible for the development of a TCTO will obtain these shipping instructions from the MAJCOM weapons systems office, and provide them to any agency(s) contracted to ship TCTO kits, parts or tools to a USAF unit.

4-5.4 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.

4-5.5 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, and concurrently to the ALC TCTO kit manager.

4-5.6 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 apply concerning TCTO kits to be retained or forwarded.

4-5.7 All TCTO kits on hand which represent unaccomplished retrofit changes on aircraft systems or commodities which have departed station for depot modification or Program Depot Maintenance (PDM) will be retained until the system or commodity is returned, or action to ship kits to the depot becomes appropriate.

4-5.8 Activities receiving assets requiring TCTO compliance, not accompanied by necessary TCTO kits, will requisition the necessary kits.

4-6 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.

4-7 REPORTING OF TCTO KITS IN SUPPLY.

4-7.1 All centrally-procured TCTO kits will have the appropriate Expendability, Recoverability, Repairability Category (ERRC) code assigned (AFMAN 23-110). This code is used in accounting records to ensure that TCTO kits are reported in the Air Force Recoverable Assembly Management System (AFRAMS) without regard for unit cost of management control. MAJCOM directed and assembled TCTO kits shall be given a routing identifier of "JBD" and not reported to ALC managers.

4-7.2 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.

4-8 DISPOSITION OF TCTO KITS.

The base kit monitor 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.

4-8.1 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 base kit monitor will notify the affected wing Division/Group Commander, by kit identification number and TO number, of contemplated action based upon direction in the TCTO.

4-8.2 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 with written certification that the kit in question is not required and that maintenance concurs with disposal or disassembly.

4-8.3 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.

4-8.4 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

L0102614

Figure 4-1. Message Format for Reporting Kit Shortages

CHAPTER 5

TCTO VERIFICATION, RELEASE OF TCTOS, KITS AND TECHNICAL DATA

5-1 TIME COMPLIANCE TECHNICAL ORDER (TCTO) VERIFICATION.

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 (SE) performs satisfactorily, tooling requirements are provided, proper modification marking instructions are included, the modification can be installed within the intended environment, and associated Technical Order (TO) updates are correct. 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, except for Immediate and Urgent action TCTOs, unless a verification waiver is approved. Inspection TCTOs and Modification TCTOs not verified by performance will receive a Desk-Top Analysis.

5-2 APPLICABILITY.

All TCTOs will be verified on each Mission/Design/Series (MDS) to which they apply. The following types of modification orders are exempt from verification by performance: (1) Federal Aviation Administration (FAA) certified changes; (2) reinstatement of rescinded TCTOs when the kit production source remains unchanged; (3) Contractor Logistics Support (CLS)-maintained system TCTOs performed by the contractor; and (4) approved service bulletins (TCTOs) which have been previously accomplished on commercial systems which the Air Force has maintained in identical configuration. Even when the TCTO itself is exempt from verification, any associated Air Force TO changes must be verified.

5-2.1 Verification accomplishment data shall be included in the TCTO as specified by MIL-PRF-38804.

5-2.2 A completed AFTO Form 82 (figure 5-1) will be permanently maintained on file documenting TCTO verification accomplishment, disapproval, or waiver.

5-2.2.1 The AFTO Form 82 will be completed by the Technical Content Manager (TCM), or in the absence of the TCM, the performing unit, in accordance with figure 5-2. The original completed copy will be forwarded to the TCM responsible for the TCTO within 10 workdays after completion of the verification.

5-2.2.2 The AFTO Form 82 is available in electronic format (EF), or may be computer generated (CG) according to AFI 33-360V2.

5-2.3 TCTO Verification Waivers. A waiver to TCTO verification by performance may be approved by the responsible Single Manager (SM) with the concurrence of the Lead Command system manager or equivalent 3-letter office. When the urgency of need dictates, initial coordination may be via telecon, but must be confirmed by written correspondence. Desktop Analysis must be performed.

5-2.3.1 When the performing activity is an Air Logistics Center (ALC), the SM will authorize the waiver in coordination with Technology Repair Center (TRC) maintenance supervision.

5-2.3.2 The TO Manager or TCM, in conjunction with the Lead Command, may waive verification by performance for TCTOs which use existing TO procedures.

5-2.3.3 Document approved waiver coordination and authority on both the AFMC Form 873 and the AFTO Form 82.

5-3 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 they are produced using a detail specification.

5-3.1 Verification will be accomplished and/or certified by the ultimate installer as noted in the TCTO (paragraph 4, By Whom to be Accomplished). It is imperative that the lowest skill level expected to perform the TCTO in the field is used in the verification effort.

5-3.2 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 (OPR)), Major Command (MAJCOM) representatives, and contractor personnel if applicable.

5-3.3 If organic depot skills are required, TRC personnel should accomplish the verification.

5-3.4 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's TCTO prototyping (provided production-configured kits are available) or during a separate government verification/operational checkout.

5-3.5 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.)

5-3.6 Government verification will be accomplished prior to acceptance or issue of organically-performed TCTOs and kits from a contractor.

5-3.7 Verification will be certified by the installing agency using an AFTO Form 82, and may be accepted or rejected by the agency having management responsibility for the system or commodity TCTO. The following minimum requirements must be verified during TCTO verification:

5-3.7.1 All parts furnished must fit properly, without force, except where noted.

5-3.7.2 All special tools and test equipment provided must fit without force, and do the job for which intended.

5-3.7.3 Installation instructions and related drawings must be accurate and adequate to perform the TCTO.

5-3.7.4 The parts listed in the verified copy of the TCTO must agree with the actual items provided in the TCTO kit without exception.

5-3.7.5 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.

5-3.7.6 TCTO accomplishment must be within the capability of the organizations and individuals where it will be accomplished, 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.

5-3.7.7 After completion of verification, the modified system or commodity must perform to the criteria prescribed.

5-3.7.8 When an updating change or modification results in a significant effect upon the system or commodity, the TCTO must clearly describe the impact.

5-3.7.9 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 (AFMAN 36-2108).

5-3.7.10 Changes to software must be compatible with test equipment and the modified commodity.

5-3.7.11 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.

5-4 RESPONSIBILITIES.

5-4.1 Air Force Materiel Command:

5-4.1.1 The responsible SM's TCM will ensure that updating changes and modifications are verified and corrections incorporated prior to release of TCTOs and kits to the installing activities.

5-4.1.2 Responsible activities will actively manage verification of change and modification TCTOs that are to be contractually or depot installed.

5-4.1.3 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.

5-4.1.4 The SM will provide engineering assistance to the using commands for the organic accomplishment of verification of updating changes and modifications.

5-4.2 Lead and Using Commands:

5-4.2.1 The Lead Command will monitor the TCTO verification process on assigned weapon systems and commodities. Using Commands will:

5-4.2.2 Provide required facilities, housekeeping, tools, and personnel to ensure the successful verification of those TCTOs to be accomplished at the Organizational/Intermediate level.

5-4.2.3 Verify Organizational/Intermediate level TCTOs as negotiated with the SM's TCM, and complete the required certification forms, including evaluation comments as appropriate.

5-5 PROCEDURES.

5-5.1 The manager responsible for a TCTO program, normally the TCM, will finalize and document plans for verification prior to presentation of the proposed TCTO to the applicable Configuration Control Board (CCB). 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.

5-5.2 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.

5-5.3 The SM 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.

5-5.4 The following procedures shall be followed during verification:

5-5.4.1 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's Product Improvement (PI) or equivalent quality assurance function, to supervise the verification.

5-5.4.2 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.

5-5.4.3 The verification team will review the TCTO and any changed TO procedures to ensure they are understood. Then the lowest skill-level team member(s) will perform the TCTO procedures exactly as written.

5-5.4.3.1 Any kit(s) will be checked for completeness, identification of parts, and ease of part installation.

5-5.4.3.2 After completion of the modification, TCTO test procedures will be performed to verify the successful completion.

5-5.4.3.3 The associated changed technical data (TOs, drawings, etc.) shall be reviewed and verified according to TO 00-5-1. If verification must be delayed, the TCM responsible for the TCTO must schedule it in time to support the concurrent release concept for TCTOs, kits and related TO updates.

5-5.4.4 All problems and deficiencies will be documented on the AFTO Form 82. When applicable, marked-up copies of the TCTO and TO updates will accompany the form.

5-5.4.5 Verification will be certified by the signatures of the VTM in Block 13A, PI representative in Block 13B, and the SM's representative in Block 13C of the AFTO Form 82.

NOTE

All signature blocks should include name, title, agency, office symbol, e-mail and Defense Switched Network (DSN).

5-5.4.6 The original AFTO Form 82, red-lined TCTO and any TO updates, as applicable, will be permanently maintained by the TCM.

5-5.5 Verification Failure. If TCTO verification fails any of the above criteria, or if safety hazards are encountered, the verification will be halted by the unit performing the verification 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 they cannot be corrected on scene, the modification asset will be returned to its original configuration and released back to the owning unit. After the problems are corrected, a new verification effort will be scheduled.

5-5.6 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.

5-5.7 The agency responsible for the system or commodity will take action to resolve all deficiencies noted in Block 12 (including rescheduling of the verification if it was disapproved) prior to release of the TCTO and kits to installing activities.

5-6 RELEASE OF TCTOS.

5-6.1 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 2-1). Prior to release, the SM and Lead Command will determine who will perform any performance verification required.

5-6.2 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 2-1). This policy provides advance notice of the safety implications of the TCTO and maintenance scheduling information prior to kit availability. Prior to release, the SM and Lead Command will determine who will perform any performance verification required.

5-6.3 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).

5-6.4 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.

5-6.5 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/Production Management Specialist (PMS)/TO Manager based on the release date.

5-6.6 Record TCTOs will be released in support of TCTO prototyping installation and depot level or contractor TCTO accomplishment only.

5-7 RELEASE OF KITS.

5-7.1 All TCTO kits will be requisitioned from the supply activity designated in the TCTO. Kits will be issued as directed by the SM, based on depot responsibility for the system/commodities involved.

5-7.2 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.

5-7.3 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.

5-7.4 Kits will not be released until affected TO updates are ready for distribution.

5-8 RELEASE OF TO UPDATES.

5-8.1 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.

5-8.2 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.

TCTO VERIFICATION CERTIFICATE

1. ☐ UPDATING CHANGE ☐ MODIFICATION ☐ INSPECTION ☐ CPIN
2. ☐ KIT ☐ 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. ☐ APPROVED ☐ APPROVED WITH CONDITIONS NOTED ☐ WAIVER OF VERIFICATION BY PERFORMANCE ☐ 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 L9302497

Figure 5-1. AFTO Form 82, TCTO Verification Certificate (Sheet 1 of 2)

14. T.O. VERIFICATION	
T.O. NUMBER / TITLE	VERIFICATION RESULTS

AFTO FORM 82, JAN 96 *(EF-V2) (PerFORM PRO) (Reverse)* L9302498

Figure 5-1. AFTO Form 82, TCTO Verification Certificate (Sheet 2 of 2)

Block 1.	**Check appropriate block to indicate type of TCTO.**
Block 2.	**Check appropriate block to indicate if the TCTO is a kit or a no kit TCTO.**
Block 3.	**Enter appropriate command document control number.**
Block 4.	**Enter title of TCTO.**
Block 5.	**Enter appropriate TCTO number and data code number.**
Block 6.	**Enter kit data code number (separate AFTO Forms 82 may be required for multi-kit TCTOs).**
Block 7.	**Enter system/commodity designation and serial number on which verification is being accomplished.**
Block 8.	**Enter site or location of verification.**
Block 9.	**Enter date of verification.**
Block 10.	**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.**
Block 11.	**Check to show approval, approval with conditions, disapproved, or waiver of the TCTO verification performance.**
Block 12.	**Enter any comments/recommendations pertinent to verification. A continuation sheet may be used if required.**
Block 13.	**Enter signature in appropriate blocks as noted.**
Block 14 (on reverse)	**Enter the TO numbers, titles, and verification results for all TO updates verified at the time of TCTO verification.**

L9302499

Figure 5-2. Preparation Instructions for AFTO Form 82

CHAPTER 6

COMPLIANCE WITH TCTOS

6-1 TIME COMPLIANCE TECHNICAL ORDER (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.

6-2 OPERATING ACTIVITIES.

6-2.1 The Operations, Logistics or Communications Group Commanders or equivalent at all United States Air Force (USAF) organizational and intermediate level maintenance activities will establish a TCTO control program according to AFIs 21-101 and 21-116.

6-2.2 Activities shall provide facilities for depot or contractor field team accomplishment of TCTOs on systems and commodities at each host base.

6-2.3 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.

6-2.4 Upon transfer of aircraft, section 5 on Transfer Documents in TO 00-20-1 will apply.

6-3 AIR FORCE MATERIEL COMMAND.

6-3.1 Technology Repair Centers (TRCs) will perform:

6-3.1.1 TCTOs designated for depot level accomplishment.

6-3.1.2 Immediate and urgent action organizational and intermediate level TCTOs received while the military system or commodity is undergoing depot-level maintenance or modification.

6-3.1.3 Current outstanding routine organizational and intermediate level TCTOs for which kits are available and which have been negotiated in the work package.

6-3.2 The TRC maintenance activity will contact the Single Manager (SM) 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 before leaving the depot.

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. A copy of the waiver will be attached to the AFTO Form 781A and may be removed only upon completion of the TCTO in accordance with TO 00-20-1.

6-3.3 If organizational and intermediate level accomplishment capability is exceeded by a released TCTO backlog, action will be taken to provide Air Logistics Center (ALC) assistance to reduce the backlog to manageable limits according to TOs 00-25-107 or 00-25-108.

6-4 WAIVERS TO TCTO COMPLIANCE.

TCTO compliance may be waived under specific conditions and criteria prescribed in TO 00-5-1. 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 SM must evaluate whether or not depot compliance with a TCTO should be waived.

6-5 COMPLIANCE PERIOD.

The compliance period is the time allowed to accomplish the TCTO. It is determined by the SM's Technical Content Manager (TCM) or Production Management Specialist (PMS) based on the TCTO objectives and guidelines in table 2-1. The compliance period start date for an inspection TCTO is upon receipt of the

TCTO itself, and it 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, 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 SM approval.

6-6 REMOVE FROM SERVICE DATE.

The Remove-From-Service date is the expiration of the TCTO's compliance period **OR** 60 days prior to the rescission date, whichever comes first. Remove-From-Service dates are specified in table 2-1. The affected system or equipment may not be used after this date until the TCTO is accomplished.

6-7 EXTENDING A COMPLIANCE PERIOD.

6-7.1 If a unit cannot accomplish the TCTO on all of its affected assets prior to expiration of the compliance period, they must request an extended compliance period from the SM through their Major Command (MAJCOM) channels. See figure 6-1, Extended TCTO Compliance Period Request.

6-7.2 If the request is approved, the SM's 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.

6-7.3 The SM's TCM or PMS will notify affected units via message/e-mail/letter of the approved extension. Supplements will not be issued solely to extend compliance periods for individual units. Library custodians will annotate their copies of the TCTO with the new compliance period, the date received, and the file location of the source document.

NOTE

To document TCTO compliance in Core Automated Maintenance System (CAMS) after the compliance period/rescission date have passed, the unit must extend the "Rescission Date" and "Ground Date" for the TCTO in CAMS, comply with the TCTO and document the compliance, then return the TCTO dates to original. A Reliability and Maintainability Information System (REMIS) error message will be generated, but may be deleted.

6-8 TCTO COMPLIANCE ON SPARES IN STOCK AND WAR RESERVE MATERIAL (WRM).

6-8.1 Air Force units will comply with outstanding TCTOs on spares in stock and War Reserve Materiel (WRM) assets as directed by a TCTO.

6-8.2 For all organizational and intermediate and depot-level TCTOs, take immediate action to place spares in stock and WRM assets in Time Order Compliance (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 TO 00-5-1. All such releases require TCM approval.

6-9 CONTRACTORS.

6-9.1 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.

6-9.2 Contractors performing maintenance services will accomplish TCTOs as directed by the statement of work (SOW). The assigned manager will require that contractors perform the same TCTOs that the Technology Repair Center (TRC) would accomplish if they were doing the task.

6-10 COMPLIANCE WITH RESCINDED TCTOS.

Air Force units will not accomplish a rescinded TCTO without prior approval of the appropriate SM's TCM. If it is essential that the TCTO be accomplished, the unit will provide justification through command channels to the appropriate SM's 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 SM's TCM can approve accomplishment by message/e-mail/letter. See paragraph 6-7.3 NOTE for CAMS documentation procedures.

6-11 TCTO COMPLIANCE ON TRANSIENT AIRCRAFT.

Normally, only immediate or urgent action TCTOs will be accomplished on transient aircraft (TO 00-20-5).

6-12 TCTO COMPLIANCE ON DEPLOYED AIRCRAFT.

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.

6-13 SECURITY ASSISTANCE PROGRAM (SAP) COUNTRIES COMPLIANCE WITH AIR FORCE TCTOS.

It is USAF policy to provide Air Force system or commodity TCTOs approved for release to SAP customers. Compliance with Air Force TCTOs will be in accordance with TO 00-5-19.

6-14 NEW PRODUCTION SYSTEMS OR COMMODITIES.

All approved engineering change proposals (ECPs) affecting items in production shall be incorporated on the first possible item produced. 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.

6-15 SYSTEMS OR COMMODITIES IN OPERATIONAL INVENTORIES.

6-15.1 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 Readiness Spares Package (RSP) assets.

6-15.2 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 Reparable This Station (NRTS)" rates and the TCTO compliance period, the user will develop a base plan to rotate the assets through the TRC (or to a depot repair team) for modification with minimal impact to the unit's 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.

6-16 PREPARATION OF SYSTEMS OR COMMODITIES FOR DEPOT WORK.

To achieve minimum depot support flow time, Organizational/Intermediate (O/I)-level TCTO kits which will be installed by the TRC under the provisions of TO 00-25-4 will be forwarded to the TRC. 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 TRC in time to avoid unnecessary delays.

6-17 TCTO SUSPENSION (ABEYANCE) AND DEMODIFICATION OF ITEMS.

6-17.1 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 Technical Order (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 CAMS if they have a message from the ALC/MAJCOM placing the TCTO in abeyance.

6-17.2 Suspended TCTO rescission dates can only be extended one time, not to exceed 50% of the original period, unless the suspension has been lifted. 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 reaccomplished before reinstating a suspended TCTO. The appropriate SM shall be notified if the TCTO is suspended.

6-17.3 A modified end item or component can only be demodified with the specific written approval of the owning MAJCOM and the SM.

6-18 MANAGEMENT CODING OF SUPPLY RECORDS (AFMAN 23-110, VOL 3, PART I, CHAPTER 11).

6-18.1 Supply must establish procedures to ensure that parts affecting safety or hazardous conditions replaced by a TCTO are not reissued for the same application. 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.

6-18.2 Upon receipt of TCTO, material control will query supply about the availability of spares in stock for modification. Expedient action will be taken to have the spares modified concurrently with and in proportion to operational system or commodity TCTO modifications, and to annotate records for review purposes prior to spares issue. Mechanized base supply accounts will assign an Issue Control Code (ICC) to manage stock numbers (items) designated by the TCTO as requiring special management procedures to prevent issue to previously-modified systems or commodities. External reference(s) to the applicable TCTO will be maintained to explain proper ICC application. Manual stock record accounts will annotate applicable National Stock Number (NSN) items designated as critical in the TCTO with a note on the AF Form 105F-1 to caution against issue of affected items for specific uses. **EXAMPLE:** (Note: Do Not Use On B-52H after completion of TCTO 1B-52H-502).

6-18.3 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.

6-19 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 Forms 349, AFMC Form 173, CAMS/REMIS/CEMS/G081, etc.) and compliance reports.

6-20 RELIABILITY AND MAINTAINABILITY INFORMATION SYSTEM (REMIS) (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.

6-20.1 REMIS will interface with and accept inputs from the Core Automated Maintenance System (CAMS) and G081 (CAMS for Mobility) through the Defense Data Network (DDN). Other interfaces use the Air Force Material Command (AFMC) Local Area Network (LAN) or Defense Commercial Telecommunications Network (DCTN).

6-20.2 There are three application subsystems of REMIS: Equipment Inventory, Multiple Status, Utilization Reporting Subsystem (EIMSURS); Product Performance Subsystem (PPS); and Generic Configuration Status Accounting Subsystem (GCSAS). They will provide uniform user interface, processing and reporting capabilities.

6-20.3 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

(SCMS), Advanced Configuration Management System (ACMS), Commodity Configuration Management System (CCMS), and B-1B Configuration Status Accounting System (CSAS), and provides Computer Program Identification Number (CPIN) tracking and status checking.

6-20.4 GCSAS will:

6-20.4.1 Provide cradle-to-grave tracking of serially controlled configuration items.

6-20.4.2 Initialize TCTO and baseline configuration records in order to provide all organizational levels the capability to manage their respective equipment.

6-20.4.3 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.

6-20.4.4 Facilitate approved part replacement checks.

6-21 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. CEMS interfaces with the Core Automated Maintenance System (CAMS) and G081 (CAMS for Mobility), and will interface with REMIS. CEMS identifies owning Stock Record Account Number (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.

Extended TCTO Compliance Period Request

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 compiled 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 Defense Switched Network (DSN) number)

L0102634

Figure 6-1. Sample Format for Extended Compliance Period Request

CHAPTER 7

RESCISSION, EXTENSION, REINSTATEMENT AND REPLACEMENT OF TCTOS

7-1 RESCISSION OF TIME COMPLIANCE TECHNICAL ORDER (TCTOS).

TCTOs are rescinded for Air Force use when TCTO completion is reported on the applicable United States Air Force (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 Security Assistance Program (SAP) use. These TCTOs are identified by listing them in TO 0-1-71 (TO 00-5-19). Notification of all TCTO rescissions is effected by entries in the Technical Order (TO) catalog. Air Force units will not accomplish a TCTO on which the rescission date has passed, without obtaining approval from the Technical Content Manager (TCM) through command channels. TCTOs will not be removed from TO files until listed as rescinded in the TO catalog.

7-2 RESCISSION DATES.

The TCM will assign a rescission date for each TCTO based on the categories and types in table 2-1. This will normally be the maximum time frame allowed. The TCM or Production Management Specialist (PMS) can extend the initial rescission period beyond these limits if necessary, with Single Manager (SM) approval. Rescission dates are based on the TCTO's issue date, and will be listed on the title page in accordance with MIL-PRF-38804.

7-3 EXTENDING RESCISSION DATES.

7-3.1 Air Force Material Command (AFMC) TO Managers must periodically use the Joint Computer Aided Logistics Support (JCALS) "Perform Post Publication Review" function (DI, TCTO Rescission Review) to monitor rescission dates on their TCTOs. Any TCTOs within 150 days of rescission will be identified to the TCM and Production Manager for review. The TCM will recommend that the TO Manager either rescind the TCTO or extend the rescission date in the JCALS Pub Index, based on compliance status (see AFMCMAN 21-1).

7-3.2 The SM's 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.

7-3.2.1 Extensions will be updated in Reliability and Maintainability Information System (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.

7-3.2.2 Library custodians will annotate their copies of the TCTO with the new rescission date and the source of the update (REMIS/JCALS/TO Catalog).

7-3.3 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, War Reserve Material (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 Core Automated Maintenance System (CAMS).

7-3.3.1 When the determination is made to return the assets to operational status, the owning unit will go through their Major Command (MAJCOM) to request written Air Logistics Center (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 it to the owning unit for compliance. If the TCTO is still loaded in CAMS, the performing activity will document compliance using the procedures in the note following paragraph 6-7.3. If the TCTO has been

purged from CAMS, 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.

7-3.3.2 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.

7-4 REINSTATEMENT OF TCTOS.

When it is necessary to reinstate a TCTO (table 3-1) which has been rescinded, a reinstating TCTO will be issued and initial distribution (ID) will be made in the same manner as for a new 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 its 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 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."

7-5 REPLACEMENT OF TCTOS.

7-5.1 A TCTO will be replaced with a new TCTO under the following conditions:

7-5.1.1 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.

7-5.1.2 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.

7-5.2 When it is necessary to replace a TCTO:

7-5.2.1 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.

7-5.2.2 Black line symbols indicating changes are authorized for use in replacement TCTOs.

CHAPTER 8

INTERIM TCTOS

8-1 GENERAL.

When circumstances preclude timely publication of a formal Time Compliance Technical Order (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. Interim TCTO (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, they will be provided either in an ITCTO Supplement or a replacing ITCTO. AFMCI 21-302 provides requirements, responsibilities, and procedures for preparing, coordinating and distributing Interim TCTOs (ITCTOs) and ITCTO Supplements.

8-1.1 Message precedence and delayed delivery provisions are provided by TO 00-5-1. ITCTOs are distributed according to TO 00-5-2.

8-1.2 Immediate Action, Urgent Action, and Routine Safety Inspection TCTOs with less than 35 day compliance periods are normally issued as ITCTOs.

8-1.3 Routine TCTOs for InterContinental Ballistic Missiles (ICBMs) and associated Support Equipment (SE) (when required to prevent contractor work stoppage during modifications, installations and checkout) (see NOTE) and Routine Software-only TCTOs may be issued as ITCTOs.

NOTE

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 must be performed within one to thirty days; and (c) 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.

8-1.4 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.

8-2 APPLICABILITY.

These procedures and policies apply to both United States Air Force (USAF) and Security Assistance Program (SAP) country systems and commodities. 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 North Atlantic Treaty Organization (NATO) or other foreign governments by the responsible Foreign Disclosure Office (FDO).

8-3 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.

8-4 NOTIFICATION AND ISSUE OF ITCTOS.

8-4.1 When an ITCTO must be issued, perform the notifications required by AFMCI 21-302. Ensure that HQ USAF/ILM is included in these notifications.

8-4.2 ITCTOs are issued by the Single Manager (SM) responsible for the system or commodity affected by the modification or inspection, in accordance with AFMCI 21-302. The issuing activity ensures the ITCTO is assigned a message precedence commensurate with the urgency of need for the data In Accordance With (IAW) AFMAN 33-326.

8-4.3 ITCTOs must be coordinated and approved prior to issue as specified in AFMCI 21-302.

8-5 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 (paragraph 6-17).

8-6 INDEXING ITCTOS.

Technical Order (TO) Managers will index ITCTOs and ITCTO Supplements before, or as soon as possible after, they 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 (Point of Contact (POC) office symbol, name and Defense Switched Network (DSN) shown in the interim message)."

8-7 ITCTO PROCEDURES TO REMOVE SYSTEMS OR COMMODITIES FROM SERVICE.

8-7.1 Notification of pending ITCTO issue to cause removal from service actions shall be in accordance with AFMCI 21-302.

8-7.2 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 AFMCI 21-302.

8-7.2.1 A maximum of 24 hours for immediate and 48 hours for urgent action ITCTOs is allowed for a fix to be developed before issuing the ITCTO. If a fix cannot be developed within those times, the ITCTO will provide instructions to safe the system or commodity until a fix can be developed and issued as an ITCTO supplement.

8-7.2.2 Prepare the ITCTO according to the formats in figures 8-1 or 8-2.

8-8 ADDRESS LISTS FOR ITCTO DISTRIBUTION.

The responsible activity will establish and maintain address lists for ITCTO distribution according to AFMCI 21-302. Include OC-ALC/TILUB (TO Repository) as an addressee on all ITCTO messages. Include HQ USAF/ILMY as an addressee on Immediate and Urgent Action ITCTO messages only. During the development/production phase of a program, the address list will either be developed by the TO manager or an existing addressee list verified based on known users of the TO series involved. During the sustainment phase, the TO Manager will obtain a Joint Computer-aided Acquisitions and Logistics Support (JCALS) report of Initial Distribution (ID) by TO Number identifying users with established requirements for specific TO or TCTO series for use in preparing/updating the address list. TODOs on ID for TCTO series headers are responsible for periodically checking applicable address lists to ensure their units are included (TO 00-5-2).

NOTE

- Base Administrative Management functions are not responsible for distributing ITCTOs to units on their bases that are assigned a Technical Order Distribution Office (TODO) code by OC-ALC. Air Force Material Command (AFMC) TODOs affected by an ITCTO are to be included in individual mail lists 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.

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).

L9302501

Figure 8-1. 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).

L9302502

Figure 8-2. Sample Format - ITCTO Supplement Message

APPENDIX A

LIST OF ACRONYMS

ACMS	Advanced Configuration Management System
AF	Air Force
AFMC	Air Force Materiel Command
AFRAMS	Air Force Recoverable Assembly Management System
AFRC	Air Force Reserve Command
AFTAC	Air Force Technical Applications Center
AIA	Air Intelligence Agency
ALC	Air Logistics Center
ANG	Air National Guard
C-E	Communications-Electronics
CAMS	Core Automated Maintenance System
CARS	Consolidated Automated Reporting System
CCB	Configuration Control Board
CCMS	Commodity Configuration Management System
CEMS	Comprehensive Engine Management System
CG	Computer Generated
CI	Configuration Item
CII	Configuration Item Identifier
CLS	Contractor Logistic Support
CP	Computer Program
CPCI	Computer Program Configuration Item
CPIN	Computer Program Identification Number
CSAS	Configuration Status Accounting System
CTOM	Centralized TO Management
DAC	Designated Acquisition Commander
DCTN	Defense Commercial Telecommunications Network
DDN	Defense Data Network
DIFM	Due In From Maintenance
DRU	Direct Reporting Units
DSM	Development System Manager
DSN	Defense Switched Network
ECMS	Engine Configuration Management System
ECP	Engineering Change Proposal
EF	Electronic Format

EIMSURS	Equipment Inventory, Multiple Status, Utilization Reporting Subsystem
ERRC	Expendability, Recovery, Reparability Category
ES	Equipment Specialist
EWO	Emergency War Order
FAA	Federal Aviation Administration
FAX	Facsimilie
FDO	Foreign Disclosure Office
FED LOG	Federal Logistics Data
FOA	Field Operating Agency
GCSAS	Generic Configuration Status Accounting Subsystem
GP	General Purpose
HAZMAT	Hazardous Material
IAW	In Accordance With
ICBM	Intercontinental Ballistic Missile
ICC	Issue Control Code
ICSTCTO	Interim Country Standard TCTO
ID	Initial Distribution
ILSM	Integrated Logistics Support Manager
IOS	Interim Operational Supplement
ISS	Interim Safety Supplement
ITCTO	Interim TCTO
IWSM	Integrated Weapon System Management
JCALS	Joint Computer-aided Acquisitions and Logistics Support
JEIM	Jet Engine Intermediate Maintenance
LAN	Local Area Network
MAJCOM	Major Command
MDS	Mission Design Series
MGM	Materiel Group Manager
MILSPEC	Military Specification
MILSTRIP	Military Standard Requisitioning & Issue Procedures
MMAC	Material Management Aggregate Code
NATO	North Atlantic Treaty Organization
NRTS	Not Repairable This Station
NSC	National Stock Class
NSN	National Stock Number
O/I	Organizational/Intermediate
O&M	Operation and Maintenance
OCM	On Condition Maintenance

ODS	Ozone Depleting Substance
OPR	Office of Primary Responsibility
PC	Product Center
PDM	Program Depot Maintenance
PEO	Program Executive Officer
PGM	Product Group Manager
PI	Product Improvement
POC	Point of Contact
POL	Petroleum/Oil/Lubricant
PMD	Program Management Directive
PMS	Production Management Specialist
PN	Part Number
PPS	Product Performance Subsystem
PS&D	Plans, Scheduling & Documentation
QA	Quality Assurance
REMIS	Reliability and Maintainability Information System
RSP	Readiness Spares Package
SAP	Security Assistance Program
SCCSB	Software Configuration Control Sub-Board
SCMS	Standard Configuration Management System
SE	Support Equipment
SM	Single Manager
SOW	Statement of Work
SPD	System Program Director
SPO	System Program Office
SRAN	Stock Record Account Number
SSM	System Support Manager
TCM	Technical Content Manager
TCTO	Time Compliance Technical Order
TO	Technical Order
TOC	Time Order Compliance
TODO	Technical Order Distribution Office
TRC	Technology Repair Center
USAF	United States Air Force
VTM	Verification Team Manager
WFM	Work Flow Manager
WRM	War Reserve Material

GLOSSARY

A

AIR LOGISTIC CENTER (ALC)--The Air Force Material Center (AFMC) component having responsibility for the sustainment phase of a system or commodity's life cycle, including the related Technical Order (TOs). ALCs perform depot-level maintenance on assigned systems and commodities during sustainment.

ABEYANCE--Compliance with Time Compliance Technical Order (TCTOs) and Interim TCTOs (ITCTOs) may be suspended by the Technical Content Manager (TCM)/ Production Management Specialist (PMS) when safety hazards or possible equipment-damaging processes 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 they must be either rescinded or released for compliance.

B

BAILMENT--Temporary transfer of government equipment to another agency for use, modification, 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's 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 (codes) containing a sequence of operating instructions or data in a format suitable for use with a particular computer system, provided on a deck of punch cards, magnetic or paper 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 and/or commodities currently in the Air Force operational inventory. CIs require the use of the latest TO information listed in the appropriate TO Index.

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.

GLOSSARY - Continued

C (Cont)

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 Program Depot Maintenance (PDM).

DEVELOPMENT SYSTEM MANAGER (DSM)--The lead individual at a Product Center (PC) when an Single Manager (SM) located at an ALC delegates a specific development task to the Product Center. The DSM reports directly to the SM.

E

ENGINEERING CHANGE PROPOSAL (ECP)--A proposed engineering change and the documentation that describes and suggests it. ECPs are submitted to the SM by contractors or from internal Air Force sources.

EQUIPMENT END ITEM--A component or components and necessary assemblies, sub-assemblies, 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.

F

FIELD-LEVEL MAINTENANCE--On- or Off-Equipment maintenance performed at an operating location. It 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).

FORM, FIT, AND FUNCTION--The physical and functional characteristics of an end item, but not the characteristics of any of the item's components.

G

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.

GLOSSARY - Continued

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 it establishes a basis for rational allocation of scarce resources among competing requirements. When only one command possesses a system or commodity, it is automatically assigned as Lead Command. See AFPD 10-9 and AFI 10-901 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.

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).

MATERIEL GROUP--A Materiel Group consists of those systems, subsystems and items which do not fall into the categories of Weapon or Military Systems or Product Groups. They are primarily differentiated from Product Group assets in that they do not require a standing development capability. Materiel Groups are normally assigned consolidated sustainment management to achieve economies of scale and specialization of technical and engineering expertise.

MATERIEL GROUP MANAGER (MGM)--The single manager for a Materiel Group, who has the same responsibilities as a System Program Director or Product Group Manager for the assigned materiel.

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.

GLOSSARY - Continued

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; publication date will not necessarily be listed in the TO Index.

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, sub-system, or commodity end item. Generally, it applies to those commands or organizations designated by the United States Air Force (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 on-going development requirement and a much larger cumulative sustainment effort.

PRODUCT GROUP MANAGER (PGM)--The single manager for a Product Group, who has the same responsibilities as a System Program Director or Materiel Group Manager 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 SPECIALIST (PMS)--The individual responsible for insuring the accuracy of the modification documentation packages (i.e. AFMC 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.

GLOSSARY - Continued

P (Cont)

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), Designated Acquisition Commander (DAC), or appropriate organization for a specific system/subsystem development, modification, acquisition or directed procurement effort.

Q

QUICK MODIFICATION CONCEPT--MAJCOMs, within their organizational capability, 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), PGM or Material Group Manager (MGM) in charge of a weapon/military system, product group, or materiel 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.

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.

SYSTEM PROGRAM DIRECTOR (SPD)--The individual in an AFMC 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 military system, product group or materiel group management.

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)--(Also known as an Equipment Specialist (ES))\The individual responsible for the accuracy, adequacy, classification and review of TO procedures, engineering data and the related technical contents of TOs supporting assigned system or equipment items. The TCM assists the acquisition team during the development/production phase of a program and is responsible for technical management of a system, subsystem or commodity and the related TOs during the sustainment phase of a program. TCMs are not generally responsible for style and format or other non-technical aspects of TOs.

GLOSSARY - Continued

T (Cont)

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 their associated TO Changes and modification kits and special tools, as specified in this TO, AFMCI 21-302, and AFMCMAN 21-1. The process involves associated processes in the base supply system, the AF Modification Management system, and the Maintenance Documentation system (see table 1-1 for associated publications).

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's 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 and AFPD 21-3.