BY ORDER OF THE COMMANDER
AIR EDUCATION AND TRAINING COMMAND

AETC INSTRUCTION 63-102

15 SEPTEMBER 2022

Acquisition

AIR EDUCATION AND TRAINING COMMAND TECHNICAL MANUALS (AETCTM)

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ACCESSIBILITY: Publications and forms are available for downloading or ordering on the e-Publishing website at **www.e-Publishing.af.mil**.

RELEASABILITY: There are no releasability restrictions on this publication.

OPR: USAF/19 AF/A4PP

Certified by: 19 AF/A4 (Jay C. Hennette)

Supersedes: AETCI63-102, 19 October 2018

Pages: 34

This instruction implements AFPD 63-1/AFPD20-1, *Integrated Life Cycle Management.* It establishes the system through which AETC technical manuals (AETCTM) are developed, published, issued, and controlled. This system sets procedures, standards, and minimum requirements for the preparation of AETCTM drafts and camera-ready copies. It applies to trainer development activities that manufacture and/or maintain trainers and training devices listed in Federal Stock Class 6900. It applies only to those AETCTMs issued in support of trainers and training devices as described. It does not include trainers covered by the Air Force Technical Order System or supported by Air Force Materiel Command (AFMC). This instruction does not apply to United States Space Force, Air Force Reserve Command or Air National Guard units. Refer recommendations for change or improvement requests to the Office of Primary Responsibility (OPR) using DAF Form 847, *Recommendation for Change of Publication*; route DAF Forms 847 from the field through the appropriate functional chain of command. Refer recommendations for waiver requests to the OPR using DAF Form 679, *Department of the Air Force Publication Compliance Item Waiver Request/Approval.* Waivers/recommended changes must be approved by the group commander (or squadron commander, if not assigned to a group) before forwarding to 19 AF/A4, for action by 19 AF/A4PP. The authorities to waive wing/unit level requirements in this publication are identified with a Tier ("T-0, T-1, T-2, T-3") number following the compliance statement. See DAFMAN 90-161, *Publishing Processes and Procedures*, for a description of the authorities associated with the Tier numbers. Submit requests for waivers through the chain of command to the appropriate Tier waiver approval authority, or alternately, to the requestor's commander for non-tiered compliance items. The use of the name or mark of any specific

manufacturer, commercial product, commodity, or service in this publication does not imply endorsement by the Air Force. Ensure all records generated as a result of processes prescribed in this publication adhere to AFI 33-322, *Records Management and Information Governance Program*, and are disposed in accordance with the Air Force Records Disposition Schedule, which is located in the Air Force Records Information Management System. See **Attachment 1** for a glossary of references and supporting information. This publication may be supplemented at any level.

SUMMARY OF CHANGES

This publication has been revised primarily to update office symbols and publication references. Changes incurred by this revision, do not mandate an automatic retrofit to those technical manuals already produced. They will be updated to align with these changes as they are revised and/or re-written.

Chapter 1

THE AETCTM SYSTEM

1.1. Applicability. AETCTMs include installation, operation, and maintenance procedures for trainers and training devices manufactured by AETC trainer development activities. User Guides may be used in lieu of AETCTMs to meet specific trainer requirements when major portions of a technical manual, such as illustrated parts breakdown, detailed maintenance procedures, and/or drawings or diagrams, are not required. User Guides provide safety information and procedures with warnings and cautions; operational information for start-up, shutdown, and functional use; and instructions for operator care and maintenance. As in Technical Manuals, User Guides may include proprietary commercial information or attachments, for which approval must be obtained from the owning commercial entity. AETCTMs or user guides are not required but may be produced for:

1.1.1. One-of-a-kind trainers or training devices with no moving parts or electrical circuits.

1.1.2. Trainers and training devices supported by AFMC or covered by the Air Force Technical Order System.

1.1.3. Trainers and training devices not included in Federal Stock Class 6900.

1.2. Trainer Development Activity Responsibilities. Operate and maintain all trainers and training devices in AETC according to the appropriate AETCTM procedures, except those excluded by paragraphs 1.1.1-1.1.3. **(T-2)** Each trainer development activity will develop and publish an AETCTM to provide information on the assembly, installation, operation, service, disassembly, overhaul, and reassembly of equipment and identification of parts. **(T-2)** Each AETCTM is a stand-alone publication and will provide maximum base-level repair. Trainer development activities will provide AETCTMs within 180 days after the requester accepts the trainer. **(T-2)** The trainer development activity responsible for the equipment will:

1.2.1. Issue supplements, changes, and revisions as necessary.

1.2.2. Maintain a record set for each of its AETCTMs.

1.2.3. Maintain a complete index of all AETCTMs, including changes, revisions and supplements for which the activity is responsible. Conduct an annual index review and update as applicable. **(T-2)**

1.2.4. Request additional user AETCTMs for another trainer development activity from the AETCTM OPR.

1.3. Recommending Improvements. Send recommendations for improvements to the trainer development activity responsible for the AETCTM. Do not send recommendations to correct spelling, typographical errors, or punctuation unless the meaning of a word or sentence is changed.

1.4. Types of AETCTMs. Manuals authorized by this instruction are limited to those described in paragraphs 1.4.1 through 1.4.3 This includes changes, revisions, and supplements.

1.4.1. Preliminary AETCTM. Prepare in limited quantities for interim use to test and verify procedures against the first test or early production model of a trainer. Preliminary AETCTMs should be limited to support In-Process Reviews (IPRs), contractor certification, and government verification activities. May use unverified data during system Test and Evaluation

on new or modified hardware/software or in the performance of routine maintenance if the intent is to verify the data. Identify preliminary AETCTMs by stamping or typing the word "Preliminary" at the top center of the cover page. Assign a number and a sequential copy number to each preliminary AETCTM. **Example:** Copy 2 of 10 copies.

1.4.2. Time Compliance (Modification) AETCTM. Includes instructions for modifying trainers; performing or initiating special, one-time inspections; or imposing temporary trainer use restrictions.

1.4.3. AETCTM. This manual includes procedures for assembly, disassembly, reassembly, operation, maintenance, service, overhaul, installation, inspection, and identification of trainer parts.

1.5. Numbering AETCTMs:

1.5.1. Precede each number with "AETCTM". For example, AETCTM 20022352-06 identifies the MQ-1B Predator Unmanned Aerial Vehicle (UAV) Trainer manual designed by Sheppard AFB. The first two digits (20) represent the stock record account number base identifier illustrated in **Table 1.1**.

Table 1.1. Stock Record Account Number Base Identifier.

ITEM	A	B
	Stock Record Account Number	**Base**
1	10	Keesler AFB
2	20	Sheppard AFB
3	69	Kirtland AFB
4	89	JBSA-Randolph

1.5.2. The second two digits (02) identify the calendar year of the equipment design, and the next four digits (2352) represent the design sequence number. The two digits (06) after the dash indicate a major equipment type, as illustrated in **Table 1.2**.

Table 1.2. Major Equipment Type Designator.

ITEM	A	B
	Major Equipment Type Number	**Major Equipment Type**
1	01	Part task trainer
2	02	Cockpit familiarization trainer
3	03	Cockpit procedures trainer
4	04	Mission trainer
5	05	Operational flight trainer
6	06	Weapon system trainer
7	07	Missile procedures trainer
8	08	Mobile training sets
9	09	Resident training equipment

10	10	Egress procedures trainer
11	11	Ejection seat procedures trainer
12	12	Academic trainer, aircraft systems
13	13	Space programmed training equipment (SPTE)
14	14-98	Reserved for future requirements (to be assigned by 2 AF/A3OS)
15	99	Miscellaneous type trainer (MTT)

1.5.3. Modification instructions are identified by adding a three-digit number immediately after the major equipment type designator. For example, in AETCTM 89871154-02-101, the last set of three digits represents the modification number. The first digit of the modification number indicates the maintenance level required to accomplish the modification: 1 is field level and 2 is depot (trainer development activity) level. The second and third digits (01-99) indicate the number of modifications issued against the equipment, regardless of what maintenance level accomplished the modification.

Chapter 2

PUBLISHING AETCTMS

2.1. Planning, Developing, and Distributing AETCTMs:

2.1.1. Begin AETCTM planning and development early in the trainer design and development process. In a coordinated effort between the user and trainer development personnel, verify initial AETCTMs during development, test, and evaluation. Verification may continue into operational test and evaluation, if necessary.

2.1.2. Document this process on AETC Form 372, *Technical Manual Validation and Verification Record*. **(T-2)** The user and trainer development representative will sign the form. The trainer development activity will retain the form in the training device jacket file. **(T-2)**

2.1.3. After certification and verification, the OPR will coordinate with 2 AF/A3OS. OPRs may coordinate draft publications physically or electronically, but a completed DAF Form 673, *Air Force Publication/Form Action Request*, and AETC Form 372 must accompany the draft submitted for publication. **(T-2)** See DAFMAN 90-161, *Publishing Processes and Procedures,* for guidance on completing the DAF Form 673. 2 AF/A3OS will return the final draft, with coordination, comments, and approved DAF Form 673, to the trainer development activity. Following coordination, the trainer development activity will publish the AETCTM. Provide at least one copy of the AETCTM for each trainer or training device. **(T-2) Note:** Only civilian employees (not contractors or indirect-hire foreign national employees) and military members may coordinate on AETCTMs.

2.1.4. When AETCTMs require revision, the OPR will send to 2 AF/A3OS for review, coordination, and approval. OPRs may coordinate draft publications using physical or electronic medium. A completed DAF Form 673 must accompany the draft submitted for publication. **(T-2)** 2 AF/A3OS will return the final draft, with coordination, comments, and approved DAF Form 673 to the trainer development activity. Following coordination, the trainer development activity will publish the AETCTM. Provide at least one copy of the AETCTM for each trainer or training device. **(T-2)**

2.2. Preparing AETCTMs:

2.2.1. Writing Style. The main consideration in preparing a technical publication is its technical content. Avoid vague and ambiguous terms. Use the simplest words and phrases that will convey the intended meaning. All essential information must be included, either by direct statements or reference.

2.2.1.1. Use consistent terminology within the same publication or series of AETCTMs for maximum clarity and usefulness.

2.2.1.2. Organize consistently within a publication or series of AETCTMs.

2.2.1.3. Use short, concise sentences.

2.2.1.4. Use punctuation that aids reading and avoids misinterpretation. Well planned sentence structure requires minimum punctuation. When punctuation is excessive, rewrite for clarity.

2.2.1.5. Use the U.S. Government Printing Office Style Manual, available at https://www.govinfo.gov/collection/gpo-style-manual?path=/gpo/U.S. Government Publishing Office Style Manual/, as a general guide for capitalization, punctuation, compounded words, numerals, and nontechnical word spellings. Use technical words only when no other word will convey the intended meaning. Do not underscore or use quotation marks for emphasis.

2.2.1.6. Use section and paragraph headings that describe section contents. Avoid the use of words such as general or miscellaneous.

2.2.1.7. Mark pages that include emergency information with a broken black border.

2.2.1.8. Use consistent part nomenclature terminology throughout parts lists, parts breakdown, and other directly related publications for maximum clarity and usefulness.

2.2.1.9. Use specific serial numbers, block designations, specific model designations, or similar identification to explain applicability for individual items of equipment.

2.2.1.10. Do not use such terms as "on later equipment" or "on earlier serial numbers."

2.2.1.11. Make no reference to age, sex, race, or national origin. Use gender neutral terms, avoiding the use of the word person. For example, use the nouns firefighter and worker. **Note:** Use of the terms Airman, manpower, man-year, and man-day are authorized.

2.2.1.12. When graphics or illustrations are necessary to convey technical information or understanding, use gender neutral human figures that reflect a cross section of races.

2.2.2. References. The text must refer to:

2.2.2.1. Only models or types covered by the AETCTM. Keep references to a minimum to facilitate later coverage of modified or additional models or types.

2.2.2.2. Measurements in U.S. standard units (ounces, pounds, gallons, inches, feet, knots, miles, etc.) except instances in which metric measurements are required. If the metric system is used, then conversion to U.S. standards will follow in parentheses.

2.2.2.3. Temperature readings as calibrated on the equipment. If other than Fahrenheit, the equivalent in Fahrenheit will follow parenthetically. Use degrees Fahrenheit for general temperature references such as room temperature.

2.2.2.4. Speed, distance, and meter readings as calibrated on the equipment.

2.2.2.5. Switch positions and panel markings exactly as marked on the equipment. **(T-2)** However, symbols on panel markings may spell out the symbols for "Ohm," "infinity," etc.

2.2.2.6. Illustrations by figure number, including section letter and number (when applicable), and the sheet number for multi-sheet illustrations. Refer only to illustrations within the same AETCTM. Include the figure and sheet number in references to multi-sheet illustrations.

2.2.2.7. Index numbers on illustrations first, followed by the figure number. **Example:** 34, FIGURE 2-6.

2.2.2.7.1. When multiple references in a paragraph refer to the same figure, only the first reference needs to indicate the figure number. For example, indicate "Disassembly of Air Valve (FIGURE 5-3). Unscrew safety disc retainer (2) from valve body (1) and remove safety disc (3) and safety disc washer (4)."

2.2.2.7.2. When the sequence is unbroken for procedures requiring two or more pages, repeat the figure number followed by the word "continued'' after the first reference on each succeeding page.

2.2.2.7.3. If two or more figures are involved in the same sequence, cite the figure with the greater number of items as described above.

2.2.2.7.4. Item callouts for items of remaining figures will have the figure number following the item number. **Example:** 21, FIGURE 5-4. In such cases, the paragraph lead-in will include a statement similar to this: Item numbers below refer to FIGURE 5-4 unless otherwise indicated.

2.2.2.8. Parts on diagrams by enough of their reference designation to identify the items. **Example:** B6A11.

2.2.2.9. Tables by table number. Refer only to tables within the same AETCTM.

2.2.2.10. Other supporting paragraphs in the same AETCTM. Use of the word "paragraph" or "subparagraph" before the number is optional. Be consistent in its use or omission. Avoid duplication of material within the manual except when required for clarity or emphasis.

2.2.2.11. Other subparagraphs of the same primary paragraph as "above" or "below".

2.2.2.12. Other publication numbers (omitting dates, page, figure, and paragraph numbers) to avoid duplication of material exceeding two pages. Only reference publications within the publications system authorized at user level. Do not cross-reference when material of two pages or less is involved.

2.2.2.13. Footnotes, when essential for reference, explanation, comments, etc. If footnotes are used in the text, use consecutive numbers beginning with 1. As long as it is consistent, the numbering system may be per page, per section, or per manual. Do not repeat identical footnotes in the unit chosen for numbering (page, section, or manual). Do not use footnotes in the text for mandatory requirements. Number footnote references separately for each table according to the U.S. Government Printing Office Style Manual. Place footnotes to the text at the bottom of the page. Place footnotes to tables below the closing line of the applicable table.

2.2.3. Grammatical Person and Mood. Use the second person imperative mood for procedures (**Example:** Remove test set from carrying case). Use third person indicative mood for description and discussion (**Example:** When switch "A" is in the ON position, lamp 12 lights).

2.2.4. Abbreviations. Keep abbreviations to a minimum, and define each abbreviation the first time it appears in each section. Rule to follow: When in doubt, spell it out.

2.2.5. Military Terms. For military term use, see *DoD Dictionary of Military and Associated Terms,* at **https://jdeis.js.mil/jdeis/index.jsp?pindex=4**.

2.2.6. Mandatory versus Nonmandatory Language. Use “shall,” “will,” or “must” to express a binding provision (**Note:** It may be necessary to use “will” where simple futurity is required; for example, “power for the meter will be supplied by the trainer”.) Use “should” or “may” to express a non-mandatory provision.

2.2.7. Tables, Charts, and Graphs. Present reference data (other than illustrations, drawings, and diagrams) in table, chart, or graph form. Any other type of data that lends itself to a table, chart, or graph may also be presented. Design tables, charts, and graphs so they are easily understood. Charts and graphs are considered illustrations and must be assigned figure numbers.

2.2.8. Tabular Material. Inserting a small amount (determined case-by-case) of tabular information will not require referencing from adjacent. It may be included in a text paragraph without being identified as a table.

Chapter 3

SPECIFICATIONS AND STANDARDS

3.1. Minimum Requirements. This instruction sets minimum requirements for AETCTM drafts, camera ready copy and changes thereto. It includes all technical documents that are assigned an AETC identification number and controlled by 2 AF/A3OS. Each AETCTM must include the information in paragraphs **3.2** through **3.12** of this instruction, and placed in the format specified in Section D. **(T-2)** If an AETCTM covers different models, series, or configurations of equipment, provide differential data sheets or a supplement manual, if needed.

3.2. Front Matter. Front Matter will include, but will not be limited to:

3.2.1. Title Page. Each AETCTM must have a title page which serves as a cover page. **(T-2)** This is an unnumbered page showing the AETCTM number, title, stock number, manufacturer's name and address, publication date, and change number with date. See **Attachment 2** for format and font size.

3.2.2. List of Effective Pages. See **Attachment 3** for an example list of effective pages.

3.2.2.1. This page is the back of the title page and is identified in the lower outer corner by a capital letter "A." When additional space is required, add page "B," "C," etc. The list of effective pages includes all manual pages, including title page, a list of effective pages, blank pages, added pages, deleted pages, and fold-out pages. Place the following statement at the top of page A of the list of effective pages: "Reproduction of the information or illustrations in this publication for non-military use is not permitted." This statement is not required on successive pages of the list of effective pages. Show applicable change or revision numbers and dates on the list of effective pages after this statement: DATES OF ISSUE FOR ORIGINAL AND CHANGED PAGES ARE:

3.2.2.2. Update the list of effective pages for each AETCTM change or revision. Keep the list to a minimum by grouping numbers when applicable. List as separate numbers the printed side of the sheet and the blank number page, even though a double number will appear on the printed side of the sheet. Place the words "added" "deleted" or "blank" beside the page number of applicable pages. Show appropriate change numbers in the "Change No." column.

3.2.3. Table of Contents. For each AETCTM, prepare a table of contents, including a list of illustrations and tables (See **Attachment 4**). Ensure the table of contents lists the sections and paragraphs in the same order and with the exact titles used in the text. Show the page number of each section or paragraph. Omit paragraph titles from the table of contents in publications that include indexes. Show the figure number, title, and page number of each figure. Show the table number, title, and page number of each table.

3.2.4. Introduction. Each AETCTM will contain an introduction or introductory material describing the scope and purpose of the AETCTM and any other information required by the technical content (See **Attachment 6**). Include descriptive information and details of the equipment.

3.2.5. Safety Summary. Include a safety summary in each AETCTM (See **Attachment 5**). Include all general precautions (high voltage warning, warning against servicing alone, and

resuscitation statement), warnings, and cautions. The summary must include shop-related general safety precautions that are not normally repeated in the text, such as use of safety glasses during grinding operations. However, if there is any doubt, include the warning or caution in the text.

3.2.6. List of Proprietary Information. Copyrighted publications must have a copyright release from the publisher when included as an AETCTM insert. Other proprietary information will have a release from the originator. After the introductory paragraphs, list the proprietary information (See **Attachment 6**) and the publisher or originator copyright release.

3.2.7. Reference Publications. If needed for clarity, list publications that relate to the AETCTM subject matter or are specifically referenced in the AETCTM (**Attachment 6**).

3.3. Preparation for Use and Installation Instructions. Provide unusual unpacking and assembling instructions. Explain inspection procedures for in-shipment damage. Provide special installation instructions, such as foundation, ventilation, and clearance requirements; plumbing and electrical connections; mounting details; wiring diagrams; initial lubrication instructions; and alignment procedures, as appropriate.

3.4. Theory of Operation. Provide necessary electrical and general theory of operation instructions for operating and maintenance personnel understanding.

3.5. Operating Instructions. Instructions will include, but will not be limited to:

3.5.1. Explanation of the use and function of each control or instrument.

3.5.2. Initial adjustments and control settings.

3.5.3. Startup.

3.5.4. Normal operation.

3.5.5. Operation under emergency, adverse, or abnormal conditions, if applicable.

3.5.6. Shutdown (normal and emergency).

3.6. Maintenance Instructions (Preventive and Corrective). Annotate use of special tools and test equipment including model or type designation, as appropriate. Include:

3.6.1. Cleaning and Lubrication. Periodic cleaning and lubrication information covering types of cleaning agents or lubricants required, lubrication frequency, and intervals (monthly, quarterly, semiannually, hours of operation, etc.). Identify application points and capacity (required amounts). A pictorial format for lubrication is desirable, but not required. Identify cleaning and lubrication required during repair, replacement, and reassembly operations.

3.6.2. Troubleshooting. Troubleshooting data and fault isolation techniques to correct malfunctions that might occur during equipment operation. Include:

3.6.2.1. The trouble indication.

3.6.2.2. Instructions necessary, including test hookups, to determine the cause.

3.6.2.3. Restoration of the equipment to operating condition. **Note:** Information will be in table format with appropriate headings (See **Attachment 7**).

3.6.3. Inspection. Provide instructions, including scheduling equipment for damage and wear inspection. Table or chart form is preferred, with emphasis on allowable service limits, wear,

backlash, end play, balance, length, and depth of scoring, etc. (**Note:** These tolerances are not to be confused with manufacturing tolerances. Allowable service limits are acceptable wear tolerances that will not impair performance.) This information must be sufficiently comprehensive to serve as a standard for experienced technicians to determine when parts may be continued in service and when they must be replaced.

3.6.4. Performance Verification. When applicable, provide requirements for accuracy verification of equipment measurement devices needed to restore the equipment to original accuracy. These instructions provide complete step-by-step procedures to enable users to check indication or reading accuracy. Also include the locations of test connections and values at these points, and built-in, self-test feature adjustments, if any.

3.6.5. Disassembly, Repair, Replacement, and Reassembly. Give instructions in the proper sequence for disassembling, repairing, replacing, and reassembling the equipment. Include test, adjustment, and checkout data after reassembly. Provide illustrations, including exploded views, as necessary for clarity.

3.7. Preparation for Reshipment Instructions. Include instructions for the disassembly, removal, and separate packing of sensitive or fragile components; use of reusable shipping cases or containers; special cradles; securing; covering and preservation; and precautions for reshipment, shipment, and unloading.

3.8. Storage Instructions. If equipment is subject to be stored, include instructions for indoor and outdoor storage, temperature limitations, storage facilities, dunnage, ventilation, revetting, drainage, staking, grounding, covering, and preservation.

3.9. Parts List. The parts list provides positive identification of parts necessary for equipment support, and sufficient information for personnel to requisition replacement parts.

3.9.1. Parts List Illustrations. Provide clear, legible illustrations to identify component parts and parts relationship. Number and title the illustrations as specified in **paragraph 4.8.1** of this publication.

3.9.2. Use of Index Numbers:

3.9.2.1. Each illustration shows an index number which cross-references the illustrated part to the listed parts. Group parts by assemblies and subassemblies, with detail parts identified to the assembly of which they are components.

3.9.2.2. Indent the subassembly nomenclature one space to the right of the assembly nomenclature. Indent the detail parts nomenclature one space to the right of the subassembly nomenclature. Use dashes to fill the spaces caused by indenting (See **Attachment 8**).

3.9.2.3. Index numbers for each separate figure should start with the Arabic number 1 and continue consecutively. Sequence should be from top to bottom or clockwise when possible (multi-sheet illustration set is one figure).

3.9.2.4. OPRs may use capital alphanumeric suffixes (3A, 3B, etc.) to identify new callouts inserted between items when an illustration is changed and/or in the basic AETCTM when errors are discovered so late in preparation that renumbering all following index numbers would delay publication.

3.9.2.5. Do not eliminate suffixed index numbers solely for a revision unless the illustration is re-accomplished. Identify all functional items shown as exploded views except for exploded views used for disassembly.

3.9.3. Vendor Parts. Identify purchased vendor components, assemblies, parts, and bulk items not of special design (such as bolts, washers, nuts, screws, keys, hinges, wire, cable, gasket material, tubing, hose, etc.) by the vendor's Air Force-Navy part number, military standards part number, or National Aerospace standards part number, as appropriate.

3.9.4. Trainer-Peculiar Parts. Assign a part number to each part the trainer development activity manufactures or exercises design control over, and for which the activity is the logical supplier. This includes vendor or commercial parts that have been altered or modified and can no longer be used in their original configuration. Establish part numbers for these items, using the drawing number and item number from the bill of materials. Asterisk (*) these items in the parts number list following the index number (See **Attachment 8**, Items 1 And 7).

3.9.5. Vendor Code. Include the commercial and government entity (CAGE) code in a separate column after the nomenclature column.

3.10. Illustrations. Each AETCTM must contain enough illustrations (line drawings and/or halftones) to locate and identify all components of operational and maintenance significance and, where necessary for clarity, to show the configuration, and removal and disassembly of parts. When applicable, include exploded views showing the relationship of assemblies, subassemblies, and detail parts; schematic diagrams showing the functional physical arrangement of component devices or parts; wiring diagrams showing the physical electrical connections of the circuit arrangement; and schematic piping diagrams showing the interconnection of piping, tubing, or hose and the direction and sequence of fluid flow.

3.11. Diagrams. Provide circuit or plumbing diagrams to support theory, maintenance, and troubleshooting.

3.12. Warnings, Cautions, and Notes. (See **Attachment 9** for a sample key). Warnings and cautions will precede the text, but follow the paragraph headings to which they apply. Notes may precede or follow the applicable text, depending on the material emphasized. Warnings, cautions, and notes must not contain procedural steps, and do not number headings. Do not repeat the heading WARNING, CAUTION, or NOTE when a warning, caution, or note consists of two or more paragraphs (if it is necessary to precede a paragraph by a warning and a note or a caution and a note, etc., warnings precede cautions and cautions precede notes). Warnings, cautions, and notes must be short, concise, and used only to emphasize important or critical data. OPRs may word warnings and cautions positively or negatively, and must state the hazard and result or reason, unless it is obvious.

Chapter 4

FORMAT REQUIREMENTS

4.1. Preparation. Prepare each AETCTM according to paragraphs **4.2** through **4.12** of this instruction. **(T-2)** Some paragraphs may not be required because of equipment design. In such cases, delete the paragraph that is not required and reformat the package. Do not omit sections no matter how simple they seem to be.

4.2. Front Matter:

4.2.1. Title Page. See **Attachment 2** for an example, format and font size.

4.2.2. List of Effective Pages. See **Attachment 3** for an example and format. The title must be 14 point type. All other type must be 10 point or larger.

4.2.3. Table of Contents. See **Attachment 4** for an example table of contents. The table of contents will include a list of illustrations showing the figure number, title, and page number of each figure and a list of tables showing the table number, title, and page number of each table. The list of illustrations and tables will begin on the page following Section VII in the table of contents. **Note:** When the lists of illustrations and tables are brief, both may be shown on the same page.

4.2.4. Safety Summary. See **Attachment 5** for an example safety summary. Each AETCTM must have a safety summary, which begins at the top of the right-hand page immediately following the list of illustrations and tables.

4.2.5. Introduction. See **Attachment 6** for a sample introduction. Each AETCTM must have an introductory paragraph or section, which starts at the top of a right-hand page immediately following the safety summary.

4.3. Text. Each AETCTM must include the information required by **Chapter 3**, and should be divided into these sections: **(T-2)**

4.3.1. Section I, Description and Leading Particulars. This section provides the scope of the AETCTM, purpose of equipment, leading particulars, controls (location and function), and composite illustrations of the trainer. Show power requirements in a table. Include standby, operating, and surge amperage. Present all controls and their locations and functions in table format.

4.3.2. Section II, Special Tools and Equipment. This section lists all special tools and equipment required to maintain the trainer.

4.3.3. Section III, Preparation for Use and Reshipment. This section describes facilities required, and provides instruction for uncrating, installation, preparation for use, storage (if applicable), and preparation for reshipment. Provide trainer dimensions and weights in table format.

4.3.4. Section IV, Operation. This section covers the theory of operation (mechanical and electrical), safety precautions, power up, operating procedures, and shutdown (emergency and normal) instructions.

4.3.5. Section V, Maintenance. This section provides maintenance requirements and instructions for maintaining the trainer. This includes preventive maintenance, cleaning, lubrication, inspection, troubleshooting, removal and replacement, repairs, and/or adjustments. Provide tables outlining minimum performance standards (may only be an electrical power check), cleaning, refinishing materials and lubricants, and troubleshooting. Present data in table format. The troubleshooting table should list the trouble or malfunction, probable cause, and inspection or remedy (corrective action required).

4.3.6. Section VI, Diagrams. This section includes the schematics or diagrams (wiring, hydraulic, plumbing, etc.) required to maintain the trainer, an explanation of wire numbers or color codes, and a list of diagram data. Include a diagram index showing the figure number and title of each schematic or diagram in a table.

4.3.7. Section VII, Illustrated Parts Breakdown (IPB). This section provides the illustrated parts breakdown, maintenance parts list, and a numerical index (if applicable). Include instructions on how to use the parts list and how to obtain trainer unique items. List manufacturers' names, addresses and CAGE codes if available.

4.4. Final Draft Copy--Preparation Methods. Equipment used to prepare the AETCTM must be able to provide clear, legible publications at the most economical (initial preparation and follow-up) cost, including reproduction, printing, handling, filing, storing, and shipping. Type size must be at least 10 point. Fasten page elements that are not printed on the page, such as corrections, to the page in a manner that will permit repeated handling without losing stripped-in portions. Single space text in a single column with contrasting weight (bold face) or font headings.

4.5. Final Draft Copy--Leading and Spacing. Conserve space without affecting readability or clarity. Avoid blank pages and spaces whenever possible. Use leading and spacing for best legibility and conservation of space. Single space paragraphs. Slight variations are permitted to avoid widows and orphans (first or last line of a paragraph on a different page); side heads that fall on the last line of a page; divided warnings, cautions, and notes; or illustrations and graphics in undesirable locations.

4.6. Margin Copy. Margin copy may consist of the change number, page content or equipment identification, figure number and title, and page number. Mount margin copy on full page illustrations, including those for foldout pages that have been prepared in exact printing size (or in the same size as text pages). Full-page photographs that are oversized must either have the margin copy separate or prepared proportionately oversized and mounted on (included in) the photograph. Do not put margin copy on an overlay (**Note**: Place margin copy outside the portion of the page used for narrative text or full-page illustrations, but within the printing area).

4.7. Identification Number. See **Attachment 2** for location and font size.

4.8. Numbering. Number AETCTMs as described in paragraphs **4.8.1** through **4.8.7**. **(T-2)**

4.8.1. Pages, Paragraphs, Tables, and Illustrations. Number pages, paragraphs, tables, and illustrations consecutively within each section, using two-part Arabic numerals separated by a hyphen. The first numeral is the section number; the second numeral is the order within the section. The page number appears in the lower outer corner of each page. For example, page 5-3 is the third page in section V, while paragraph 5-3 would be the third paragraph in section V. Table 5-3 is the third table in section V (A section may contain both a Figure 5-3 and a Table 5-3). When a section starts with a full-page illustration, the illustration may be placed

on a left-hand page and the page numbered "zero"; for example, 1-0, 3-0, etc. Number multi-sheet illustrations consecutively following the title (**Example:** "Figure 7-2. Seat-man Separator Motor Clutch Assembly. [Sheet 1 of 3 Sheets]"). Number remaining sheets in consecutive order (i.e., Sheet 2, Sheet 3, etc.).

4.8.2. Blank Page. A blank page is accounted for, but the number appears on the preceding or following page. For example, if page 6 of section I is blank, page 5 is numbered 1-5/ (1-6 Blank); or if page 5 of section I is blank, page 6 is numbered (1-5 blank)/1-6. Also, when applicable, an added page, such as 1-6.1, should show that page 1-6.2 is blank.

4.8.3. Title Page. Do not number the title page.

4.8.4. List of Effective Pages. Identify the list of effective pages by the capital letter "A" in the lower left corner. When additional space is required, add pages "B," "C," etc.

4.8.5. Front Matter. Number all front matter pages following the list of effective pages and preceding section I with sequential, lower case Roman numerals (i.e., i, ii, iii, iv, etc.).

4.8.6. Procedural Steps. Identify procedural steps and subordinate steps consecutively. Identify procedural steps by lower case letters (a, b, c, etc.) and sub-steps by Arabic numerals.

4.8.7. Appendixes. When used, identify appendices by capital letters (**Example:** APPENDIX A, APPENDIX B, etc.). Number pages, paragraphs, illustrations, and tables for appendices consecutively in Arabic numerals, separated by a dash and preceded by the capital letter of the appendix. **Example:** A-7 is the seventh page or paragraph in APPENDIX A; Figure B-1 is the first illustration in APPENDIX B; Table C-1 is the first table in APPENDIX C.

4.9. Headings. Center numbers and titles for each section at the top of the first page of text. Start each section on a right-hand page and center the section title two lines below the section number.

4.10. Indentations. Indent all lines of warnings, cautions, and notes 1/2 inch from both left and right margins, with a justified left margin and ragged right margin.

4.11. Tables and Charts. Prepare tables and charts according to paragraphs **4.11.1** through **4.11.4**.

4.11.1. Final Draft Copy. Place a horizontal rule at the beginning (head) and at the end (foot) of a table or chart. Center the table or chart number and title in capital letters above the head rule. Capitalize box head titles. Design tables so related entries in different columns are aligned.

4.11.2. Continued Material. When a chart or table is continued on a following page, repeat the number and title at the head of the columns on all subsequent table pages, followed by a dash and the abbreviation "cont.". Repeat box head titles also. When information opposite an item is continued, repeat the item or its identifying number or letter followed by a dash and the abbreviation "cont.".

4.11.3. Footnotes. Number chart or table independently from text footnotes. Indicate the references by consecutive superior numbers within each chart or table (upper case letters, asterisks, or another designation may be used where numbers would cause confusion). Use footnotes sparingly, as necessary for clarity, and place immediately below the referenced chart or table, on the second line below the closing rule. Notes begin on the left margin and carryover lines return to the number of the note or to the point where the text begins if only one note.

4.11.4. Rules. Tables may be ruled vertically, if necessary for clarity. Place a horizontal rule at the beginning and at the end of each chart or table. Omit the closing rule at the foot of a continued chart or table; omit the opening rule on the continuation.

4.12. Illustration Placement and Legends (Keys):

4.12.1. Illustration Cutline. Indicate the point where an illustration, chart, or table goes with a break in the text, and insert the figure number and title (See **Attachment 10**). Place cutlines at the end of the first paragraph, or subparagraph, to which they pertain. Begin the figure number at the left margin with a 1-inch space above and below the cutline. Place cutlines for fold-out illustrations at the end of the text. For final draft, mount the illustration, chart, or table in place and the cutline will be the figure title.

4.12.2. Figure Titles. Assign each illustration a figure title. Begin the title two spaces to the right of the figure number. Figure titles should begin with an identifying name, such as panel assembly or engine start. Use short titles that describe illustration contents or purpose.

4.12.3. Illustration Key. For final draft, if space permits, place the key on the illustration page. Otherwise, begin it at the top of the page immediately following the illustration. Divide the key into two or more columns to conserve space (See **Attachment 9**).

4.12.4. Divisions. Divide each AETCTM into sections and paragraphs. Title each section and numbered paragraph, except procedural steps or statements that follow a colon. Begin the second and all subsequent subparagraph lines at the left margin. See **Figure 4.1** for breakout example.

Figure 4.1. Breakout Subordination Example.

5-12. NONREVERSIBLE VALUE:
a. Removal.
b. Disassembly.

4.12.4.1. Sections. Number sections consecutively using Roman numerals.

4.12.4.2. Paragraphs. Divide text into primary paragraphs and subordinate paragraphs. Subordinate paragraphs may be further divided into first subordinate paragraphs or procedural steps. Procedural steps may be further divided, if necessary for clarity. Use alphanumeric paragraph numbering.

4.12.4.3. Paragraph Headings. Identify paragraph headings as primary side heads, first subordinate, second subordinate, etc. Periods follow paragraph headings. All numbered paragraphs have a side head. Handle paragraphs without side heads as procedural steps.

4.12.4.4. Primary Side Heads. Primary side heads are normally used to divide text within a section into two or more portions. There should be at least one primary side head in each section. Primary side heads stand alone and should appear in capital letters. They should begin on the left margin and should be underscored or boldfaced.

4.12.4.5. Subordinate Side Heads. Number subordinate side heads and have the order of heading as shown in **Figure 4.2**.

Figure 4.2. Order of Heading.

(1) 1-1. PRIMARY SIDEHEAD

(2) a. First Subordinate Side Head. Xxxx xxx xxxxx x xx xxx xxxxxxx.

(3) (1) First Sub-subordinate Side Head. Xxx xxxx xxx (See note).

OR

(1) 1-1. PRIMARY SIDEHEAD

(2) a. First Subordinate Side Head. Xxxx xxx xx xxxxx xxx xxxx xxxxx.

(3) (1) First Sub-subordinate Side Head. Xxxx xxxx xxx xxx (See note).

Note: Breakdowns beyond the first sub-subordinate paragraph or first subordinate procedural step are not normally required. The number of the first subordinate side head or first procedural step begins in the same position where the text begins in the primary side head. The number of the second subordinate or first subordinate procedural step begins in the same position where the text begins in the first subordinate side head or first procedural step. The second and all following lines of subordinate side heads begin in the same position where the number of the subordinate side head begins. The second and all following lines of procedural steps and subordinate procedural steps begin at the same position where the text begins. Capitalize the first letter of the first word of the title and of each principal word. The text begins on the same line as the title, separated by a period and two spaces.

4.12.4.6. Procedural Steps. Use procedural steps to provide step-by-step instructions, for such tasks as disassembly, reassembly, and adjustment procedures. Steps may be further divided into sub-steps. Number each procedural step.

4.12.4.7. Appendixes. Capitalize and center appendix headings. Appendices immediately follow the last section of the manual. Number pages, paragraphs, and illustrations and identify them as outlined above.

AMY L. GRAVELEY, GS-15, DAF
Director of Logistics, Engineering
and Force Protection

Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

AFI 33-322, *Records Management and Information Governance*, 23 March 2020

AFPD 63-1/AFPD 20-1, *Integrated Life Cycle Management*, 7 August 2018

DAFMAN 90-161, *Publishing Processes and Procedures*, 15 April 2022

Department of Defense Dictionary of Military and Associated Terms, May 2022

U.S. Government Printing Office *Style Manual,* 2016

Prescribed Forms

AETC Form 372, *Technical Manual Validation and Verification Record*

Adopted Forms

DAF Form 673, *Air Force Publication/Form Action Request*

DAF Form 847, *Recommendation for Change of Publication*

DAF Form 679, *Department of the Air Force Publication Compliance Item Waiver Request/Approval*

Abbreviations and Acronyms

AETCTM—Air Education and Training Command Technical Manual

AFMC—Air Force Materiel Command

CAGE—Commercial and Government Entity (Code)

OPR—Office of Primary Responsibility

Terms

Box Head Title—Titles enclosed by rules at the head of table or chart columns.

CAGE Code—Five (5) position code that identifies companies doing or wishing to do business with the federal government. The code format requires the first and fifth positions be numeric. The second, third, and fourth may be any alpha/numeric combination, excluding I and O.

Callout—Items used on an illustration to help identify the objects, such as index numbers, nomenclatures, leader lines, arrows, procedures, and, when placed directly on the illustration, legends (keys).

CAUTION—Operating or maintenance procedure, practice, condition, or statement that, if not strictly observed, could result in equipment damage or destruction, loss of mission effectiveness, or long-term health hazards.

Certification—Contractor written assurance that manuals and source data are current, adequate, accurate, and conform to contract requirements.

Change—Corrected pages to the basic manual totaling 80 percent or less.

Commercial Publication—Manual, booklet, or similar data furnished by commercial manufacturers, which include operation, maintenance, and other instructions for commercial equipment. Commercial manuals are prepared to support the equipment in the commercial market.

Final Draft (Formal or Final Manual)—Final document with illustrations, tables, and charts; ready for printing and publication as an authenticated AETCTM.

Format—The shape, size, binding, typeface, paper, configuration, text layout, and general makeup or arrangement of a publication.

Illustration Cutline—Point where an illustration, table, or chart will be placed; indicated by a break in the text and the insertion of the figure number and title (See **Attachment 10**).

Index Numbers and Letters—Callouts which consist of a number or letter leading to a legend (key) which defines the symbol used.

Layout Page—Blank sheet showing marginal copy only; used by an editor to indicate where text, illustrations, and tabular data will appear on the reproducible copy.

Leader Lines—Line with or without arrowheads extending from the index number, letter, or nomenclature to the item.

Legend (key)—A tabular list of the key numbers or letters and their meaning.

Nomenclature Callout—Nomenclatures or partial nomenclatures placed directly on an illustration. **Example:** "articulated gadget," "1/2-inch widget." **Note:** An essential operating or maintenance procedure, condition, or statement that must be emphasized.

Preliminary AETCTM—For interim test, evaluation, contractor certification, and government verification activities, and training, pending receipt of formal, published AETCTM.

Publication Date—Date set by the trainer development activity after which no additions, deletions, or changes will be made to the publication material. In all cases this date shall be later than all previously released increments (Basic, Revisions, Changes, and Supplements).

Revision—Second or subsequent edition of an AETCTM that supersedes the preceding edition and has a new basic date. It includes all existing changes. Normally, an AETCTM is revised when the pages affected by existing changes, in addition to pages requiring change, total 80 percent or more of the AETCTM.

Section—Each major functional subdivision of AETCTMs prescribed by this instruction.

Supplement—Subsidiary document that complements information in a manual.

Technical Data—Scientific or technical information, regardless of form or characteristics.

Technical Manual—Publication or other form of documentation that has a description of equipment with instructions for effective use, including initial preparation for use (operation, maintenance, overhaul, parts lists or parts breakdown), and related technical procedures.

Verification—Process by which AETCTMs are tested and proven; conducted in an operational environment to ensure AETCTMs are clear, logical, adequate, accurate, safe, and usable for equipment operation, maintenance; and to verify compatibility with pertinent hardware, tools, and support equipment.

WARNING—Operating or maintenance procedure, practice, condition, or statement that could result in injury or death if not strictly observed.

Attachment 2

SAMPLE TITLE PAGE

Figure A2.1. Sample Title Page.

AETCTM 89871155-10 (14 point)

TECHNICAL MANUAL (14 point)

TRAINER OPERATION AND MAINTENANCE (18 point)

WITH (18 point)

ILLUSTRATED PARTS CATALOG (18 point)

T-38 EGRESS PROCEDURES TRAINER
(24 point)

STOCK NUMBER 6910L100240J (18 point)

TRAINER DEVELOPMENT DIVISION (18 point)

12 MSG/TF (14 point)

RANDOLPH AFB, TEXAS (14 point)

Jul 88 (14 point)

Attachment 3

SAMPLE LIST OF EFFECTIVE PAGES

Table A3.1. Sample List of Effective Pages.

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.

DATES OF ISSUE FOR ORIGINAL AND CHANGED PAGES ARE:

Original …… 0 …… 3 May 2018

Change …… 1 …… 10 Aug 2018

TOTAL NUMBER OF PAGES IN THIS PUBLICATION IS 84, INCLUDING THE FOLLOWING:

Page No	*Change No
Title …….....	1
A …….....	1
1-1...1-6 …….....	0
2-1 …….....	1
2-2 Blank …….....	1
3-1A...3-4 …….....	0
3-5 …….....	1
3-6….3-8 …….....	0
4-1...4-7 …….....	0
4-8 …….....	1
5-1...5-10 …….....	0
6-1...6-4 …….....	0
7-1…7-28 …….....	0

* Zero in this column indicates an original page

Attachment 4

SAMPLE TABLE OF CONTENTS

A4.1. When the list of illustrations and list of tables are brief, both may be shown on the same page.

Figure A4.1. Sample Table of Contents.

TABLE OF CONTENTS

Figure A4.2. Sample Table of Contents, Page 2.

Figure A4.3. Sample Table of Contents, Page 3.

LIST OF ILLUSTRATIONS

LIST OF TABLES

Attachment 5

SAMPLE SAFETY SUMMARY

Table A5.1. Sample Safety Summary.

SAFETY SUMMARY

The following are general safety precautions that are not related to any specific procedures. These are recommended precautions that personnel must understand and apply during many phases of operation and maintenance.

KEEP AWAY FROM LIVE CIRCUITS

Operating personnel must, at all times, observe all safety regulations. Do not replace components or make adjustments inside the equipment with the high voltage supply turned on. Under certain conditions, dangerous potentials may exist when the power control is in the OFF position due to charges retained by capacitors. To avoid casualties, always remove power and discharge and ground a circuit before touching it.

DO NOT SERVICE OR ADJUST ALONE

Under no circumstances will any person reach into or enter the enclosure for the purpose of servicing or adjusting the equipment except in the presence of someone who is capable of rendering aid.

RESUSCITATION

Personnel working with or near high voltages should be familiar with modern methods of resuscitation. Personnel performing maintenance above the user level (which requires working near high voltages) must be a graduate of an approved cardiopulmonary resuscitation course.

WARNING

To prevent injury to personnel and damage to equipment, be sure that all electrical power is removed from the facility power box before proceeding.

WARNING

In case of emergency that could cause injury to personnel or damage to equipment, press the EMERGENCY POWER OFF switch.

WARNING

To prevent injury to personnel or damage to equipment, power must not be applied while performing the following procedures.

WARNING

Disconnect all electrical power before cleaning with any liquid cleaning agent. Injury to personnel and damage to trainer due to short circuit or fire may result. When cleaning with solvent, be sure the area is well-ventilated to prevent concentrations of fumes which may be poisonous or explosive.

WARNING

High voltages which can cause death or injury are present in the seat and canopy.

Attachment 6

SAMPLE INTRODUCTION

Table A6.1. Sample Introduction.

INTRODUCTION

1. PURPOSE OF THIS MANUAL. This manual provides operation and maintenance information on the F-16 Cockpit Familiarization Trainer (CFT), Stock Number 6910L100210J, Design Number 89-94-1117, designed and fabricated by the Trainer Development Flight, Randolph Air Force Base, . The trainer simulates the cockpit of the F-16 aircraft.

2. CONTENTS OF THIS MANUAL. This manual is divided into seven sections for ease in locating the type of information desired. Information pertaining to trainer-peculiar systems, components, or operation is presented in the following sections:

Section I, Description and Leading Particulars, includes the scope of the manual, purpose of equipment, description, leading particulars, control location and function, and a composite illustration of the trainer.

Section II, Special Tools and Equipment, lists special tools and support equipment required to maintain the trainer.

Section III, Preparation for Use and Reshipment, describes the facilities required for the trainer, installation, preparation for use, and preparation for reshipment. A table is included which lists dimensions and weight of trainer.

Section IV, Operation, provides theory of operation, safety precautions, and operating procedures.

Section V, Maintenance, describes the maintenance required for the trainer.

Section VI, Diagrams, includes the schematics, diagrams, and explanations (wiring, hydraulic, plumbing, etc.) required to maintain the trainer.

Section VII, Illustrated Parts Breakdown, contains the illustrated parts breakdown, maintenance parts list, numerical index, and the reference designation index.

3. USE OF THIS MANUAL. A table of contents indicates section, paragraph, title, and page number to facilitate location of information. Illustrations, tables, and diagrams are located throughout the publication to supplement the text. Schematics and wiring diagrams are included to facilitate part replacement, troubleshooting, and testing. A list of illustrations and tables indicates number, title, and location. Abbreviations, phrases, and words on a decal, placard, or an engraving are set forth in the text exactly as they appear on a decal, placard, or engraving.

4. REPAIR KITS. None are required.

5. CHANGE RECOMMENDATIONS. Proposed changes to this manual should be submitted through command channels to:

12 MSG/TF
660 A Street West
Randolph AFB TX 78150-4515

6. RELATED PUBLICATIONS. This manual includes copyright material and release letters for Attachments 1 and 2, which are on file at the Randolph Trainer Development Flight, 12 MSG/TF, Randolph AFB TX 78150. Copyright material is used with the permission of:

Bell and Cossett Holman Inc.

8200 Austin
Morton IL 60143

15378 Cypress Park
Fort Wayne IN 61512

7. REFERENCE PUBLICATIONS. Listed below are publications related to the subject matter or specifically referenced in this manual:

TO 00-35D-54, *USAF Deficiency Reporting and Investigating System,* 17 May 2007

TO 00-20-1, *Aerospace Equipment Maintenance Inspection, Documentation, Policies, and Procedures,* 30 April 2003

Attachment 7

SAMPLE BOX HEAD TITLES, TABLE RULES, CONTINUED TABLES, TABLE FOOTNOTES, AND COLUMN ENTRIES

Figure A7.1. Sample Box Head Titles, Table Rules, Continued Tables, Table Footnotes and Column Entries.

TABLE 5-3. TROUBLESHOOTING

TROUBLE	PROBABLE CAUSE	INSPECTION/REMEDY
Trainer Power ON, indicator fails to illuminate (see note 1).	a. Power Select Switch not positioned to facility power being used.	a. Position Power Select Switch to proper facility power.

TABLE 5-3. TROUBLESHOOTING-CONT.

TROUBLE	PROBABLE CAUSE	INSPECTION/REMEDY
Trainer Power ON, indicator fails to illuminate. (continued)	e. Faulty Power Select Switch.	c. Remove facility power from trainer. Place Power Select Switch to 110 VAC position. Check for continuity between switch contacts 22-3, 5-6, 8-9, and 11-12. If no continuity between any two contacts, replace switch (see note 2).

NOTES: 1. Ensure indicator bulb is serviceable before troubleshooting.
2. Ensure power is turned off before replacing switch.

Attachment 8

SAMPLE PARTS LIST

A8.1. When illustration is large or detailed, use two pages. Place illustration on left page and text on facing right page (See **Figure A8.1**).

Figure A8.1. Panel Assembly, Air Condition Control Installation.

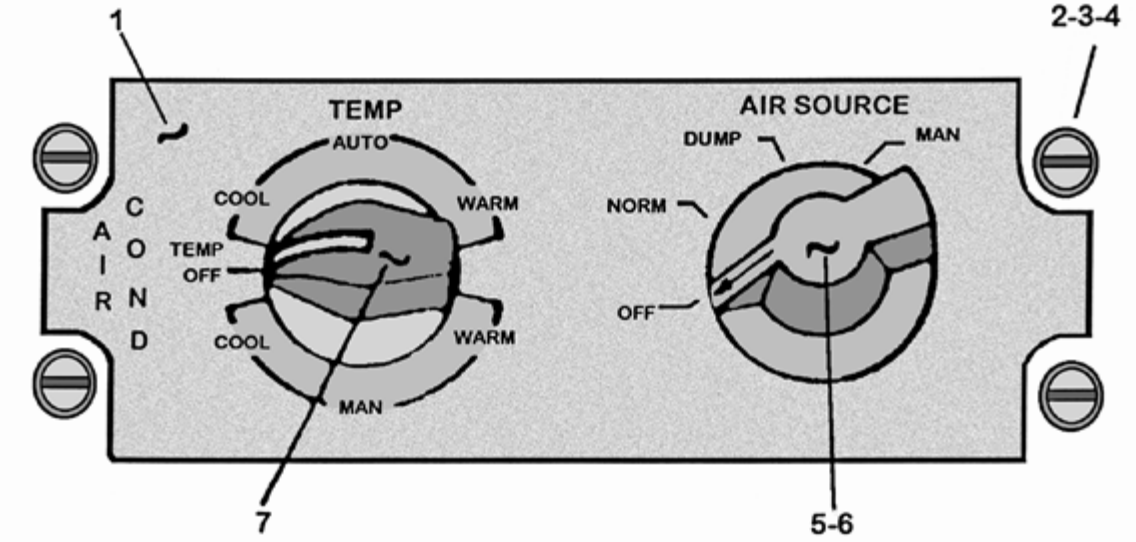

Figure and Index	Part Number	Nomenclature	CAGE	Quality per Assembly
7-59	COA-001-0040	Panel Assembly, Air Condition Control Installation		Reference
-1*	COA-001-0040-01A	Panel Assembly, Air Condition Control	13467	1
-2	PF31/2-38	Stud, Dzus® Fastener Co., Inc.	69573	4
-3	PS31/2	Spring, Dzus® Fastener Co., Inc.	69573	4
-4	PC31/2	Cup, Dzus® Fastener Co., Inc.	69573	4
-5	4A45-01-04N	Switch, Air Source-Grayhill	43210	1
-6	62-9498-1	Knob, Air Source, Systems Eng. Elect. Inc.	74352	1
-7*	COA-001-0051-1	Switch Assembly, Temp. Select Attaching Parts (not shown)	13461	1
	MS35214-27	Screw, Pan Hd.C/R 6-32x .50 lg	96906	2
	AN960C6	Washer, Flat Plain #6	96906	2
	MS21083C06	Nut, Hex, Self locking 6-32	96906	2

Attachment 9

SAMPLE WARNINGS, CAUTIONS, NOTES, AND ILLUSTRATION KEYS

Figure A9.1. Warnings, Cautions, and Notes.

WARNING or WARNING or WARNING

To prevent injury to personnel and damage to equipment, be sure all electrical power is removed from the facility power box before proceeding.

CAUTION

The projector uses a heat-absorbing glass to protect the slides during projection. The glass is subjected to high temperatures, creating tension in the glass. Therefore, handle the glass with extreme care to avoid breakage when removing it from the projector.

NOTE

If a forklift is not available, it will be necessary to raise the trainer with a Johnson bar. Position the bar to raise one corner at a time and install the casters as outlined in Step c.

Figure A9.2. Illustration Key.

KEY TO FIGURE 1-3

1. Panel Assembly	9. Screw
2. Stud	10. Circuit breaker
3. Ring	11. Circuit breaker
4. Spring	12. Holder fuse
5. Circuit breaker	13. Fuse
6. Indicator	14. Door
7. Lamp	15. Switch
8. Circuit breaker	16. Stud

Attachment 10

SAMPLE TYPICAL DRAFT COPY PAGE WITH ILLUSTRATION CUTLINE

Table A10.1. Sample Typical Draft Copy Page with Illustration Cutline.

SECTION I
DESCRIPTION AND LEADING PARTICULARS

1-1. SCOPE OF MANUAL. This manual provides description, operation, maintenance, special tools, support equipment, and illustrated parts breakdown information for the . . . .

1-2. PURPOSE OF EQUIPMENT. The trainer is used to familiarize the student with the location of controls, operation of equipment, procedures, and any other features affecting . . . .

1-3. DESCRIPTION. The trainer (Figure 1.1.) is a . . . .

FIGURE 1.1. T-38 EJECTION SEAT TRAINER (FRONT VIEW).

1-4. POWER REQUIREMENTS. The trainer requires an external source of 115VAC, single-phase, 50/60 Hz electrical power for . . . .