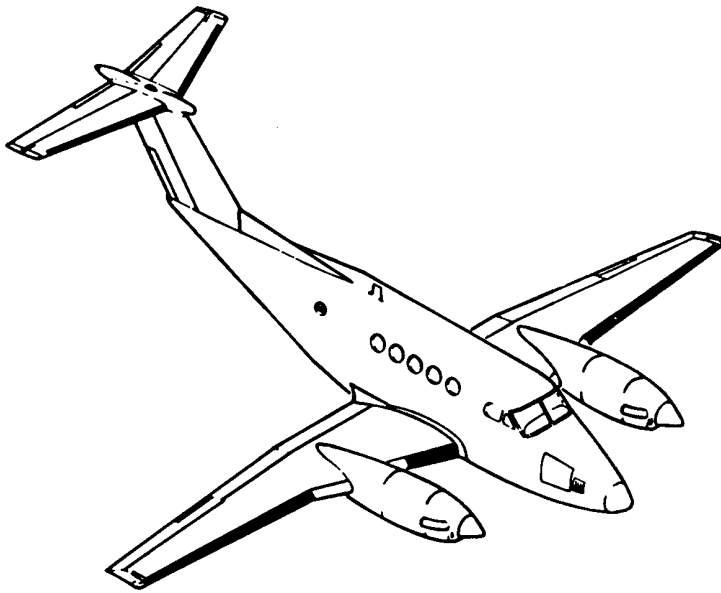


TECHNICAL MANUAL

OPERATOR'S MANUAL
FOR
ARMY C-12C AIRCRAFT
NSN 1510-01-070-3661

ARMY C-12D AIRCRAFT
NSN 1510-01-087-9129

ARMY C-12T AIRCRAFT
NSN 1510-01-470-0220



Distribution statement A: Approved for public release, distribution is unlimited.

*This manual supersedes TM 55-1510-218-10 dated 22 April 1985, including all changes.

HEADQUARTERS
DEPARTMENT OF THE ARMY

4 SEPTEMBER 2001

WARNING DATA

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OPERATOR'S MANUAL FOR ARMY C-12C, C-12D, C-12T1, AND C-12T2 AIRCRAFT

REPORTING OF ERRORS AND RECOMMENDING IMPROVEMENTS

You can help improve this manual. If you find any mistakes or if you know of a way to improve the procedures, please let us know. Mail your letter, DA Form 2028 (Recommended Changes to Publications and Blank Forms) or DA Form 2028-2 located in the back of this manual directly to: Commander, US Army Aviation and Missile Command, ATTN: AMSAM-MMC-MA-NP, Redstone Arsenal, AL 35898-5230. A reply will be furnished to you. You may also send your comments electronically to our e-mail address, 2028@redstone.army.mil or by fax 256-842-6546 / DSN 788-6546. Instructions for sending an electronic 2028 may be found at the back of this manual immediately preceding the hard copy 2028.

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CHAPTER 1

INTRODUCTION

1-1. GENERAL.

These instructions are for use by the operator. They apply to the G12C, G12D1, G12D2, G12T1, and C-12T2 model aircraft.

1-2. WARNINGS, CAUTIONS, AND NOTES.

Warnings, cautions, and notes are used to emphasize important and critical instructions and are used for the following conditions:

WARNING

An operating procedure, practice, etc., which, if not correctly followed, could result in personal injury or loss of life.

CAUTION

An operating procedure, practice, etc., which, if not strictly observed, could result in damage to or destruction of equipment.

NOTE

An operating procedure, condition, etc., which is essential to highlight.

1-3. DESCRIPTION.

This manual contains the best operating instructions and procedures for the aircraft under most circumstances. The observance of limitations, performance, and weight/balance data provided is mandatory. The observance of procedures is mandatory except when modification is required because of multiple emergencies, adverse weather, terrain, etc. Basic flight principles are not included. THIS MANUAL SHALL BE CARRIED IN THE AIRCRAFT AT ALL TIMES. Manuals printed from CD must be on standard 8 1/2 x 11 paper.

Users are authorized to remove the chapters that are not applicable to their aircraft model and are not required to carry those chapters on-board.

1-4. APPENDIX A, REFERENCES.

Appendix A is a listing of official publications cited within the manual applicable to and available for flight crews.

1-5. APPENDIX B, ABBREVIATIONS AND TERMS.

Appendix B is a listing of abbreviations and terms used throughout the manual.

1-6. INDEX.

The index lists, in alphabetical order, every titled paragraph, figure, and table contained in this manual.

1-7. ARMY AVIATION SAFETY PROGRAM.

Reports necessary to comply with the safety program are prescribed in AR 385-40.

1-8. DESTRUCTION OF ARMY MATERIEL TO PREVENT ENEMY USE.

For information concerning destruction of Army materiel to prevent enemy use, refer to TM 750-244-1-5.

1-9. FORMS AND RECORDS.

Army aviators' flight records and aircraft maintenance records, which are to be used by crewmembers, are prescribed in AR 95-1 and DA PAM 738-751 respectively. Weight and balance requirements are prescribed in AR 95-1 with procedures found in TM 55-1500-342-23.

1-10. EXPLANATION OF CHANGE SYMBOLS.

a. General. Change symbols show current changes only. Change symbols are not used to indicate changes in the following: introductory material; indexes and tabular data where the change cannot be identified; blank space resulting from the deletion of text, an illustration or a table; or correction of minor inaccuracies, such as spelling, punctuation, relocation of material, etc., unless correction changes the meaning of instructive information and procedures.

b. Text and Table Changes. Changes to text and tables, including new material on added pages, are indicated by a vertical line in the outer margin extending close to the entire area of the material affected.

c. Illustration Changes. A miniature pointing hand symbol is used to denote a change to an illustration. However, a vertical line in the outer margin, rather than miniature pointing hands, is used

when there have been extensive changes made to an illustration.

1-11. AIRCRAFT DESIGNATION SYSTEM.

a. Example C-12C:

C – Basic mission and type symbol (Cargo)

12 – Design number

C – Series symbol

1-12. AIRCRAFT EFFECTIVITY DESIGNATORS AND SERIALIZATION.

The aircraft effectivity for content within this manual will be designated by the following symbols: C, D, D1, D2, T, T1, and T2. These symbols may be used individually or in groups.

C All C-12C aircraft.

D All C-12D aircraft.

D1 C-12D aircraft with serial numbers prior to 84-24375.

D2 C-12D aircraft with serial numbers 84-24375 and subsequent.

T All C-12T1 and C-12T2 aircraft.

T1 C-12T1 aircraft with serial numbers 85-51262 through 85-51268 and 85-51270 through 85-51272 modified with the cockpit and digital engine instrument upgrade.

T2 C-12T2 aircraft with serial numbers 86-60084 through 86-60089, 87-70160, and 87-70161 modified with the cockpit and digital engine instrument upgrade.

The effectivity symbols listed are used in conjunction with paragraph titles, text content, performance charts and graphs, tables, figure titles, and specific items on illustrations to show proper effectivity of the material as applicable. If the material applies to all models within the manual, no effectivity designators are used. Where practical, to avoid duplication, descriptive information is written to apply to all models and split series effectivities. Table 2-1 lists the most significant differences between models including the split series effectivities.

Aircraft serial numbers are used only where needed for clarification. Paragraphs, figures, tables, and charts that apply to specific model(s) have the

corresponding model designator(s) placed following the paragraph or figure title. Model and serial effectivity designators are also placed within tables, charts, and text where applicable. No effectivity designator is used if a paragraph, figure, table, or chart is common to all models.

1-13. USE OF WORDS SHALL, SHOULD, AND MAY.

Within this technical manual, the word "shall" is used to indicate a mandatory requirement. The word "should" is used to indicate a nonmandatory, but preferred, method of accomplishment. The word "may" is used to indicate an acceptable method of accomplishment.

1-14. PLACARD ITEMS.

Placard items (switches, controls, etc.) are shown throughout this manual in boldface capital letters.

1-15. AVIONICS CHAPTERS.

This manual contains four Avionics chapters entitled as follows.

Chapter 3 Avionics – Avionics common to all C-12C C-12D1/D2, and C-12T1/T2 Aircraft

Chapter 3A Avionics – C-12C and C-12D1 Aircraft

Chapter 3B Avionics – C-12D2 Aircraft

Chapter 3C Avionics – C-12T1/T2 Aircraft

1-16. PERFORMANCE CHARTS/GRAPHS.

This manual contains two performance data chapters entitled as follows.

Chapter 7 Performance – C-12C and C-12D1 Data Aircraft

Chapter 7A Performance – C-12D2 and C-12T1/T2 Data Aircraft

1-17. NORMAL PROCEDURES.

This manual contains two Normal Procedures chapters entitled as follows.

Chapter 8 Normal – C-12C and C-12D1/D2 Aircraft Procedures

Chapter 8A Normal – C-12T1/T2 Aircraft Procedures