TECHNICAL MANUAL

DIRECT SUPPORT AND GENERAL SUPPORT

MAINTENANCE MANUAL

FOR

CENTRAL, MESSAGE SWITCHING,

AUTOMATIC AN/TYC-39(V)1

AND

CENTRAL OFFICE, TELEPHONE,

AUTOMATIC AN/TTC-39(V)2

AUTOMATIC DATA PROCESSING

ASSEMBLIES

DEPARTMENTS OF THE ARMY, THE NAVY, AND THE AIR FORCE
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DEPARTMENTS OF THE ARMY

THE NAVY, AND THE AIR FORCE

WASHINGTON, DC, *31 January 1983*

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AN/TTC-39(V)2

AUTOMATIC DATA PROCESSING

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REPORTING 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 back of this manual direct to: Commander, US Army Communications-Electronics Command and Fort Monmouth, ATTN: DRSEL-ME-MP, Fort Monmouth, New Jersey 07703.

For Air Force, submit AFTO Form 22 (Technical Order System Publication Improvement Report and Reply) in accordance with paragraph 6-5, Section VI, T.O. 00-5-1. Forward direct to prime ALCIMST.

For Navy, mail comments to the Commander, Naval Electronics Systems Command, ATTN: ELEX 8122, Washington, DC 20360.

In either case, a reply will be furnished direct to you.

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CHAPTER 1

INTRODUCTION

Section I. GENERAL

1-1. Scope

This manual describes the maintenance data for the Automatic Data Processor (ADP) assemblies (figs. 1-1 and 1-2) which function as part of the Automatic Telephone Central Office (AN/TTC-39) Central Processor Group (CPG) and as part of the Automatic Message Switching Central (AN/TYC-39) Central Processor Group (CPG).

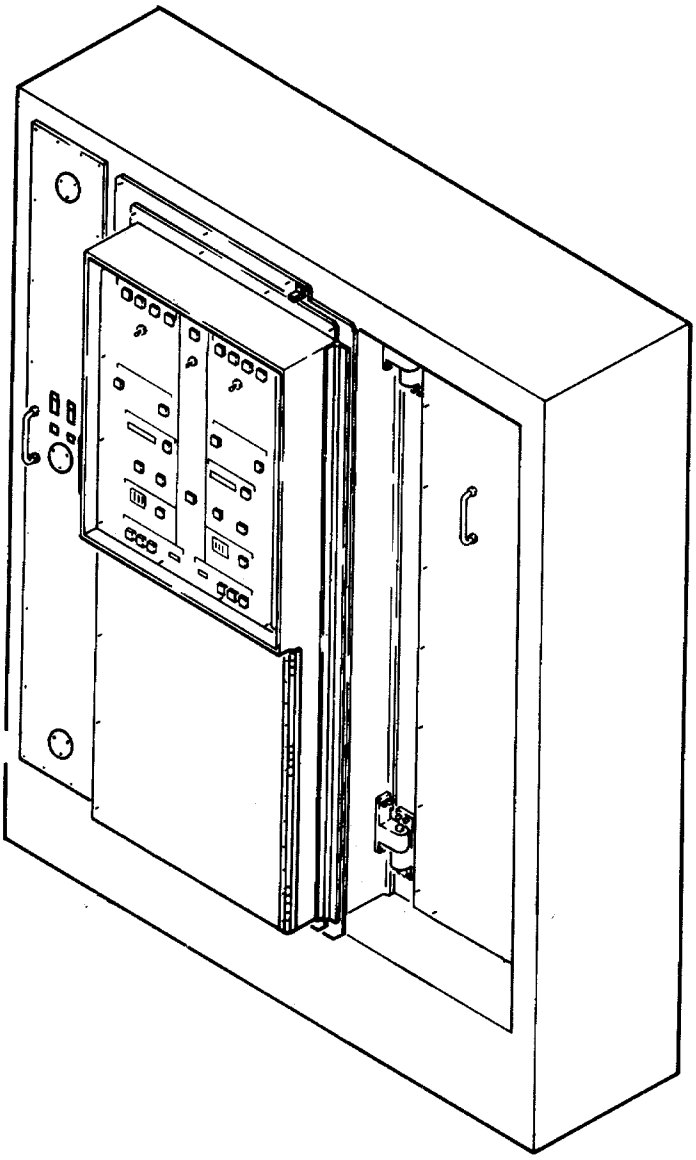

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Figure 1-1. Circuit Switch Automatic Data Processor Assembly.

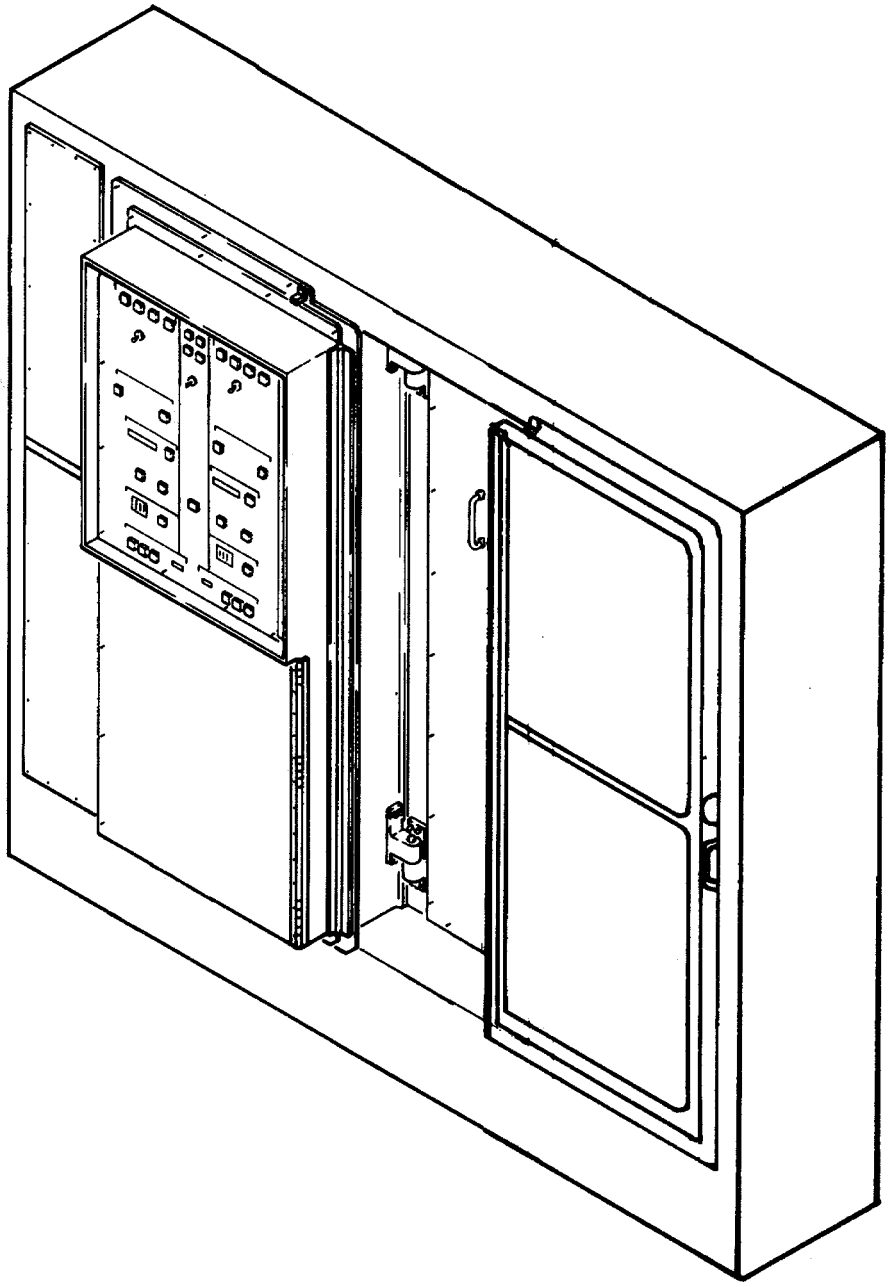

Figure 1-2. Message Switch Automatic Data Processor Assembly.

This manual contains information on the functioning of equipment and direct and general support maintenance instructions. A complete listing of reference publications is provided in Appendix A. The Maintenance Allocation Chart is located in Appendix B of TM 11-5805-681-12-2 and TM 11-5805-683-12-2. The Repair Parts and Special Tools List (RPSTL) is contained in TM 11-5895-856-34P. Throughout this manual, where appropriate, references are made to other publications which cover the installation, operation and maintenance of equipment used in conjunction with the CPG.

1-2. Consolidated Index of Army Publications and Blank Forms

a. Army. Refer to the latest issue of DA Pam 310-1 to determine whether there are new editions, changes or additional publications pertaining to the equipment.

b. Air Force. Use T.O. 0.1-31 Series Numerical Index and Requirements Table (NIRT).

1-3. Maintenance Forms, Records and Reports

a. Reports of Maintenance and Unsatisfactory Equipment. Department of the Army forms and procedures used for equipment maintenance will be those prescribed by TM 38-750, the Army Maintenance Management System. Air Force personnel will use AFR 66-1 for maintenance reporting and TO-00-35D54 for unsatisfactory equipment reporting. Navy personnel will report maintenance performed utilizing the Maintenance Data Collection Subsystem (MDCS) IAW OPNAVINST 4790.2, Vol 3 and unsatisfactory material/conditions (UR submissions) IAW OPNAVINST 4790.2, Vol 2, Chapter 17.

b. Report of Packaging and Handling Deficiencies. Fill out and forward SF 364 (Report of Discrepancy (ROD)) as prescribed in AR 735-11-2/DLAR 4140.55/NAVMATINST 4355.73/AFR 400-54/MCO 4430.3E.

c. Discrepancy in Shipment Report (DISREP) (SF 361). Fill out and forward Discrepancy in Shipment Report (DISREP) (SF 361) as prescribed in AR 55-38/NAVSUPINST 4610.33B/AFR 75-18/MCO P4610.19C and DLAR 4500.15.

1-4. Reporting Equipment Improvement Recommendations (EIR)

a. Army. If your Automatic Data Processor assembly needs improvement, let us know. Send us an EIR. You, the user, are the only one who can tell us what you don't like about your equipment. Let us know why you don't like the design. Put it on an SF 368 (Quality Deficiency Report). Mail it to Commander, US Army Communications-Electronics Command and Fort Monmouth, ATTN: DRSEL-ME-MP, Fort Monmouth, New Jersey 07703. We'll send you a reply.

b. Air Force. Air Force personnel are encouraged to submit EIRs in accordance with AFM 900-4.

c. Navy. Navy personnel are encouraged to submit EIRs through their local Beneficial Suggestion Program.

1-5. Administrative Storage

Refer to TM 11-5805-681-12-1 or TM 11-5805-683-12-1, Administrative Storage, for information covering the administrative storage requirements of this system.

1-6. Destruction of Army Electronics Materiel

Destruction of Army electronics materiel to prevent enemy use shall be in accordance with TM 750-244-2.

Section II. DESCRIPTION AND DATA

1-7. Description

Refer to Operator's and Organizational Maintenance Manual TM 11-5805-681-12-1 or TM 11-5805-683-12-1 for general description and illustration of the CPG.

1-8. Technical Characteristics

a. Central Processor Unit.

(1) Processing of arithmetic, logical, data handling and control instructions.

(2) Arithmetic and logical operations on bits, bytes (8 bits), half words (16 bits), and full words (32 bits) with I/O operations on bytes and full words.

(3) Privileged instructions to permit control of memory protection, I/O operations, real-time clock, and interrupts. Unauthorized use of a privileged instruction causes an interrupt.

(4) Semiprivileged instructions to permit control of program level communication. Unauthorized use of a semiprivileged instruction causes an interrupt.

(5) Priorities for up to 64 program levels with the capability to change from one level to another in response to an interrupt.

(6) A queue table that permits stacking of interrupts.