#### **TECHNICAL MANUAL**

#### OPERATOR, ORGANIZATIONAL, DIRECT

SUPPORT, AND GENERAL SUPPORT MAINTENANCE MANUAL

(INCLUDING DEPOT MAINTENANCE REPAIR PARTS AND SPECIAL TOOLS LIST)

**FOR** 

#### DATA ANALYSIS CENTRAL

AN/TYK-10A

NSN 5895-00-256-6330

This publication is not available through AG Publications Center.

Requisition through Commander US Army Electronics Materiel

Readiness Activity, Vint Hill Farms Station, Warrenton, VA 22186.

This copy is a reprint which includes current pages from Change 1.

DECEMBER 1979

#### WARNING

#### SHOCK HAZARD

This equipment contains dangerous voltages which can cause injury or death by severe electrical shock. Be extremely careful when making voltage measurements or other checks with the equipment connected to the power source during troubleshooting. Always disconnect the power source before making any continuity tests.

#### **TECHNICAL MANUAL**

## OPERATOR, ORGANIZATIONAL, DIRECT SUPPORT, AND GENERAL SUPPORT MAINTENANCE MANUAL (INCLUDING DEPOT MAINTENANCE REPAIR PARTS AND SPECIAL TOOLS LIST)

**FOR** 

# DATA ANALYSIS CENTRAL AN/TYK-10A NSN 5895-00-256-6330

**CURRENT AS OF 5 AUGUST 1979** 

This publication is not available through AG Publications Center. Requisition through Commander, US Army Electronics Materiel Readiness Activity, Vint Hill Farms Station, Warrenton, VA 22186.

This manual supersedes TM 32-5895-219-ESC, 12 July 1974

HEADQUARTERS, DEPARTMENT OF THE ARMY

17 DECEMBER 1979
1 DECEMBER 1981

#### LIST OF EFFECTIVE PAGES

#### INSERT LATEST CHANGED PAGES, DESTROY SUPERSEDED PAGES.

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

#### Dates of issue for original and changed pages are:

#### TOTAL NUMBER OF PAGES IN THIS PUBLICATION IS 59 CONSISTING OF THE FOLLOWING:

Page	*Change	Page	*Change
No.	No.	No.	No.
Title		54 Blank	0
Α	1	6-1	0
i	0	6-2 Blank	0
ii - iii	1	A-1 - A-2	1
1-0		B-1	0
1-0.1 - 1-0.2 .	1	B-2	1
1-1 - 1-2		C-1 - C-2	1
1-2.1 - 1-2.2	1	D-1 - D-2	0
2-1 - 2-2.1	1	D-3 - D-5	1
2-2.2 Blank		D-6 Blank	0
3-1 - 3-2		E-1	0
3-3	0	E-2	1
3-4		E-3 - E-12	0
4-1 - 4-3	0	B-12.1 - E-12.2	1
4-4		E-13 - E-14	0
4-5	0	E-15	1
4-6 Blank	0	E-16 Blank	0
5-1 - 5-3	0	F-1 - F-2	0

\*Zero in this column indicates an original page.

A Change 1 USA

#### **RECORD OF CHANGES**

Change No.	Date	Title or Brief Description	Entered By
-			
ŕ			
		•	
:			
		7.8	

TM 32-5895-219-14&P

### OPERATOR, ORGANIZATIONAL, DIRECT SUPPORT, AND GENERAL SUPPORT MAINTENANCE MANUAL (INCLUDING DEPOT MAINTENANCE REPAIR PARTS AND SPECIAL TOOLS LIST)

#### **FOR**

#### DATA ANALYSIS CENTRAL AN/TYK-10A NSN 5895-00-256-6330

#### Current as of 5 August 1979

#### 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 the back of this manual directly to: Commander, US Army Electronics Materiel Readiness Activity, ATTN: SELEM-ME-E, Vint Hill Farms Station, Warrenton, VA 22186. A reply will be furnished to you.

		Paragraph	Page
CHAPTER 1.	INTRODUCTION		
Section I.	General	1-1	1-1
II	Description and Data	1-7	1-1
CHAPTER 2.	SERVICE UPON RECEIPT AND INSTALLATION		
Section I.	Site and Shelter Requirements	2-1	2-1
II.	Service Upon Receipt of Materiel	2-3	2-1
III.	Installation Instructions	2-4	2-1
CHAPTER 3.	OPERATING INSTRUCTIONS		
Section I.	Controls and Instruments	3-1	3-1
II.	Operation Under Usual Conditions	3-2	3-1
III.	Operation Under Unusual Conditions	3-5	3-4
IV.	Preparation For Movement	3-9	3-4
CHAPTER 4.	OPERATOR/CREW MAINTENANCE INSTRUCTIONS		
Section I.	Tools and Equipment	4-1	4-1
II.	Lubrication Instructions	4-2	4-1
III.	Preventive Maintenance Checks and Services (PMCS)	4-3	4-1
IV.	Troubleshooting	4-4	4-3
CHAPTER 5.	ORGANIZATIONAL MAINTENANCE INSTRUCTIONS		
Section I.	Tools and Equipment	5-1	5-1
II.	Repainting and Refinishing Instructions	5-2	5-1
III.	Lubrication Instructions	5-4	5-1
IV.	Preventive Maintenance Checks and Services (PMCS)	5-5	5-1

<sup>\*</sup>This manual supersedes TM 32-5895 -219-ESC, 12 July 1974.

		Paragraph	Page
V.	Troubleshooting	5-6	5-3
VI.	Maintenance of Data Analysis Central AN/TYK-10A	5-7	5-3
CHAPTER 6.	DIRECT SUPPORT AND GENERAL SUPPORT MAINTENANCE INSTRUCTIONS		
Section I.	General	6-1	6-1
APPENDIX A.	REFERENCES		A-1
B.	COMPONENTS OF END ITEM LIST		B-1
C.	ADDITIONAL AUTHORIZATION LIST		C-1
D.	MAINTENANCE ALLOCATION CHART		D-1
E.	REPAIR PARTS AND SPECIAL TOOLS LIST		E-1
Section I.	Introduction		E-1
II.	Repair Parts List		E-3
	Group 00 Data Analysis Central		E-3
	Group 01 Storage Cabinet		E-5
	Group 02 Blank Panel, 5-1/4 in. X 19 in.		E-6
	Group 03 Recorder Reproducer Set, Sound		E-7
	Group 04 Typewriter Mounting Shelf		E-8
	Group 05 Typewriter Shelf		E-9
	Group 06 Paper Tray Assembly		E-10
	Group 07 Shelf		E-11
	Group 08 Blank Panel, 10-1/2 in. X 19 in.		E-12
	Group 09 Equipment Rack R-442/VRC		E-12.1
	Group 10 Equipment Rack RT-524/VRC		E-12.2
III.	Special Tools List		E-13
IV.	National Stock Number and Part Number Index		E-14
APPENDIX F	EXPENDARI E SUPPLIES AND MATERIALS LIST		F-1

#### LIST OF ILLUSTRATIONS

Figure No.	Title	Page
1-1	Data Analysis Central AN/TYK-10A	1-0
1-2	Data Analysis Central AN/TYK-10A, Roadside and Rear Walls	1-0 1-0.1
1-2.1 1-2.2	Data Analysis Central, Front View	1-0.1
2-1	Data Analysis Central, Curbside View	2-2
2-1 2-1.1	Cabling Diagram for AN/VRC-47.	2-2.1
3-1	Power Distribution PaneI	3-2
3-1	DC Power Supply and Control Switches	3-2
3-3	Light Switches	3-3
3-4	Door, Interior View	3-3
E-1	Data Analysis Central AN/TYK- 10A Rack-Mounted Equipment	E-3
E-2	Storage Cabinet CY-7181/G	E-4
E-3	Blank Panel	E-6
E-4	Recorder-Reproducer Set, Sound AN/UNH-17A	. E-7
E-5	Typewriter Mounting	E-8
E-6	Typewriter Shelf	E-9
E-7	Paper Tray Assembly	E-10
E-8	Shelf	E-11
E-9	Blank Panel	E-12
E-10	Equipment Rack R-442/VRC	E-12.1
E-11	Equipment Rack RT-524/VRC	E-12.2
	LIST OF TABLES	
Table No.	Title	Page
1-1	Items Comprising an Operable Equipment	1-2
3-1	Operator/Crew Controls for the Shelter	3-1
4-1	Operator/Crew Preventive Maintenance Checks and Services	. 4-2
4-2	Operator/Crew Troubleshooting	4-3
5-1	Organizational Preventive Maintenance Checks and Services	5-2

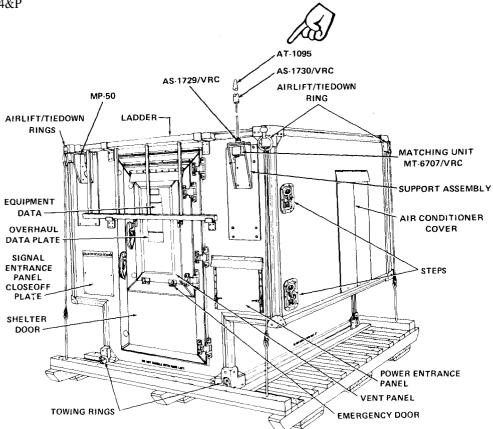


Figure 1-1. Data Analysis Central AN/TYK-10A

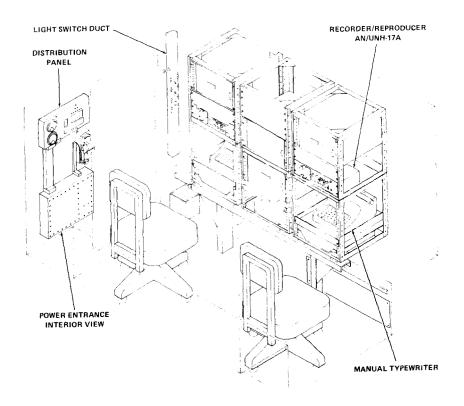


Figure 1-2. Data Analysis Central AN/TYK-10A Roadside and Rear Walls

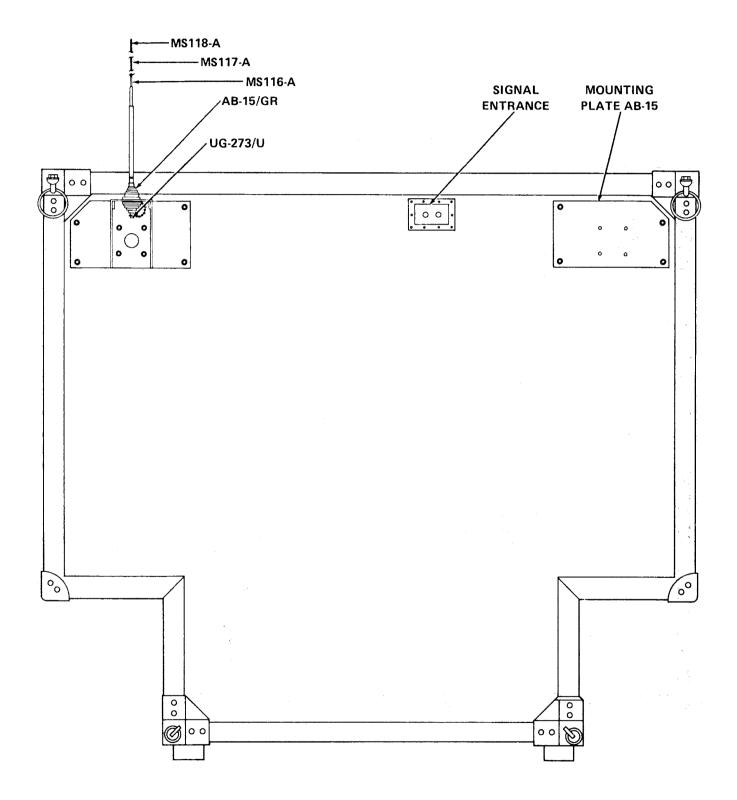


Figure 1-2.1. Data Analysis Central, Front View

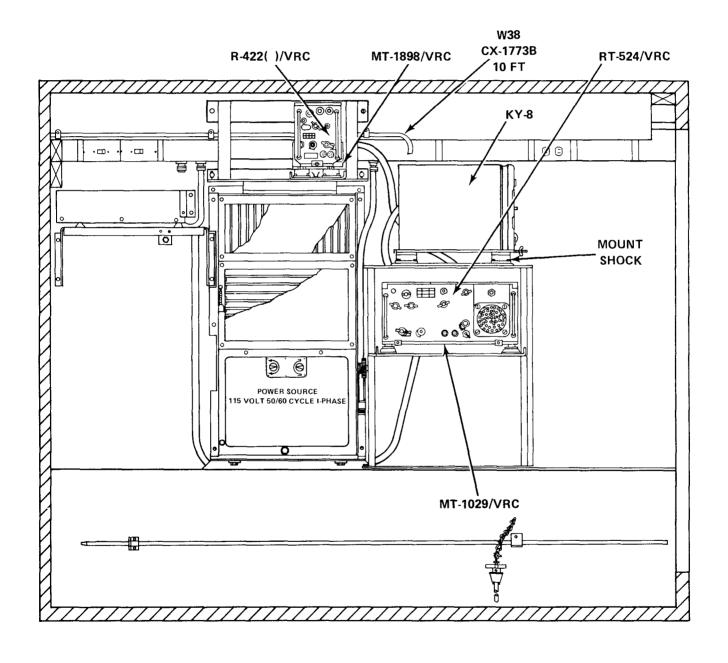


Figure 1-2.2. Data Analysis Central Curbside View

#### INTRODUCTION

#### Section I. GENERAL

- 1-1 **SCOPE.** This manual provides operator/crew, organizational, direct support, and general support instructions for the installation and maintenance of the Data Analysis Central AN/TYK-10A. A depot repair parts and special tools list is also included.
- 1 2 MAINTENANCE FORMS AND RECORDS. Department of the Army forms and procedures used for equipment maintenance will be those prescribed by TM 38-750, The Army Maintenance Management System (TAMMS).
- 1 3 DESTRUCTION OF ARMY MATERIEL TO PRE-VENT ENEMY USE. The AN/TYK-10A shall be destroyed to prevent enemy use in accordance with instructions provided in TM 750-244-2, Procedures for Destruction of Electronics Materiel to Prevent Enemy Use (Electronics Command).

- 1 4 ADMINISTRATIVE STORAGE. Administrative storage shall be in accordance with instructions provided in TM 740-90-1, Administrative Storage of Equipment.
- 1 5 **CALIBRATION.** No calibration of the equipment in this group is required.
- 1 6 REPORTING EQUIPMENT IMPROVEMENT REC-OMMENDATIONS (EIR's). If your AN/TYK-10A 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. Tell us why a procedure is hard to perform. Put it on an SF 368 (Quality Deficiency Report). Mail it to us at US Army Electronics Materiel Readiness Activity, ATTN: SELEM-ME-F, Vint Hill Farms Station, Warrenton, Virginia 22186. We'll send you a reply.

#### Section II. DESCRIPTION AND DATA

- 1 7 **PURPOSE AND USE**. The Data Analysis Central AN/TYK-10A is a mobile facility used for analyzing and transcribing prerecorded radio transmissions.
- 1-8 DESCRIPTION. The Data Analysis Central AN/TYK-10A is installed in an Electrical Equipment Shelter S-457A/ G (figure 1-1). The equipment end item components consist of two cassette-type recorder-reproducers and two typewriters for transcribing information from magnetic tapes. These components are mounted in electrical equipment racks on the roadside wall of the shelter (figure 1-2). Accessory items such as headsets, extension cords, and microphones are stored in four storage cabinets provided with the rack-mounted positions. These accessories are issued as component items of the equipment end item and are listed in the separate technical manuals for each item of equipment. Two equipment racks are provided on the curb side for mounting of radio communications equipment which is MTOE authorized for the AN/TYK-10A. Antenna mounting plates are provided for receiving and transmitting antennas on the front and rear exterior corners of the

shelter. These items are shown in figures 1-2.1 and 1-2.2. The MTOE radio communications equipment AN/VRC-47/KY-8 is unit-installed upon receipt of the Data Analysis Central AN/TYK-10A and is to be removed when the central is to be turned in. Refer to table 1-1 for items comprising an operable Data Analysis Central AN/TYK-10A.

1 - 9 TABU LATED DATA. The technical characteristics of the AN/TYK-10A are as follows:

Length	86 in.
Width	79 in.
Height	70 in.
Gross weight	1,950 lb.
Power input, external	. 110-120 Vac
Power converter,	
ac to dc	. 110-120 Vac input;
	28 Vdc output
Light, fluorescent	. 115 Vac, 40 watts
Light, incandescent, blackout	115 Vac, 7 watts

#### TABLE 1-1. ITEMS COMPRISING AN OPERABLE EQUIPMENT

NSN	ITEM	QUANTITY
5410-00-165-6345	SHELTER, ELECTRONIC EQUIPMENT S-457A/G, INCLUDING:	1
4120-00-935-1609	AIR CONDITIONER CV-9-1-15-60	1
5805-00-543-0012	TELEPHONE SET TA-312/PT	1
3895-00-498-8343	REEL MACHINE RL-39	1
6445-00-936-8120	CLOCK M-2	1
5995-00-143-7159	CABLE, ASSEMBLY CX-7453ANDRC435C	1
5995-00-935-2686	CABLE, ASSEMBLY CX-7705A/U 15 FT.	
6145-00-226-8812	CABLE, SIGNAL WD-1	AS REQUIRED
5975-00-224-5260	GROUNDING ROD MX-148/G	1
4210-00-555-8837	FIRE EXTINGUISHER	1
	RACK, ELECTRONIC EQUIPMENT	6
6130-01-010-3603	POWER SUPPLY PXS-EE-28VF	1
	BRACKET, WASTE PAPER 0188-2-4085	1
7125-00-139-5023	CABINET, STORAGE CY-7181/G	4
5835-01-023-4332	RECORDER/REPRODUCER SET, SOUND AN/UNH-17A, INCLUDING:	2
5965-00-892-3353	HEADSET H-216	6
5965-01-078-1312	MICROPHONE M-104 (MOD)	2
5985-01-023-4332	CORD, EXTENDER CD-307A	2
5835-00-163-1118	FOOTSWITCH SA-1921	2
7430-00-663-1241	TYPEWRITER, PLATEN	2
5811-00-223-8015	MOUNT, TYPEWRITER MT-4412/G	2
5830-00-537-5031	SHELF MT-1582	1
	TRAY ASSEMBLY, PAPER 009-1-4060	2
5975-00-448-5006	PANEL, BLANK, 5-1/4 IN. X 19 IN. PWH A-131-8GSDS	2
5975-00-937-4583	PANEL, BLANK, 10-1/2 IN. X 19 IN. H6675	1

TABLE 1-1. ITEMS COMPRISING AN OPERABLE EQUIPMENT-CONTINUED

NSN	ITEM	QUANTITY
7110-00-273-8791	CHAIR, ROTARY	2
	RACK EQUIPMENT R-442/VRC 0099-1-3111	1
	RACK EQUIPMENT RT-524/VRC 0099-2-4010	1
5995-00-889-1253	CABLE, POWER CX-4720/VRC 12 FT.	1
5995-00-823-2913	CABLE, POWER CX-4721/VRC4F	1
5995-00-823-2820	CABLE ASSEMBLY, SPECIAL PURPOSE, ELECTRICAL CX-4722/VRC 7 FT.	1
5995-00-823-2991	CABLE ASSEMBLY, RADIO FREQUENCY CG-1773B/U 7 FT.	1
5995-00-823-3073	CABLE ASSEMBLY, RADIO FREQUENCY CG-1773B/U 10 FT.	1
	CABLE, ELECTRICAL CX-12197/U (4 FT.) SC-B-65890	1
	CABLE, ELECTRICAL CX-12349/U (4 FT.) ES-D-202617	1
5820-00-892-0864	RADIO SET, AN/VRC-47 CONSISTING OF:	1
5895-00-985-9024	ANTENNA AS-1729/VRC	1
5985-00-221-5544	BASE MAST AB-15/GR	1
5985-00-199-8831	ANTENNA ELEMENT MS-116A	1
5985-00-115-7149	ANTENNA ELEMENT MS-117A	1
5985-00-238-7474	ANTENNA ELEMENT MS-118A	1
5820-00-497-8544	ANTENNA EQUIPMENT RC-292	1
5835-00-868-8157	COMMUNICATION SECURITY EQUIPMENT TSEC/KY-8	1
5965-00-069-8886	HANDSET H-189/GR	1
5820-00-450-6796	INSTALLATION KIT MX-1226/VRC	1
5965-00-876-2375	LOUDSPEAKER LS-454/U	1
5820-00-892-0624	RECEIVER, RADIO R-442/VRC	1
5820-00-892-0622	RECEIVER, TRANSMITTER RT-524/VRC	1
5821-00-867-7362	MOUNT, SHOCK, ASSEMBLY 18705-1	1
5820-00-893-1323	MOUNTING MT-1029/VRC	1

#### TABLE 1-1. ITEMS COMPRISING AN OPERABLE EQUIPMENT - CONTINUED

NSN	ITEM	QUANTITY
5820-00-893-1324	MOUNTING MT-1898/VRC	1
6115-00-738-6340	GENERATOR SET PU-620M	1

1-2.2 CHANGE 1

#### SERVICE UPON RECEIPT AND INSTALLATION

#### Section 1. SITE AND SHELTER REQUIREMENTS

- 2-1 **GENERAL.** The Data Analysis Central AN/TYK-10A is normally mounted on a 1-1/4-ton truck or installed on the ground.
- 2 2 **SITE SELECTION.** Site selection for AN/TYK-10A installation is determined primarily by application. The selected area must be large enough to permit unhindered

access to, and the proper placement and servicing of, the AN/TYK-10A and the associated equipment required to perform the mission. For ground installation, a single unit requires a  $10 \times 12$  foot level area with natural drainage. Swampy or spongy areas and areas with close-in high ground should be avoided. The central should be placed on cement blocks or wooden beams, if possible.

#### Section II. SERVICE UPON RECEIPT OF MATERIEL

#### 2-3 CHECKING UNPACKED EQUIPMENT.

- a. Inspect the equipment for damage incurred during shipment. If the equipment has been damaged, report the damage on DD Form 6, (Report of Packaging and Handling Deficiencies).
- b. Check the equipment against the component listing in Appendix B of this manual and the packing slip to see if the shipment is complete. Report all discrepancies in accordance with standard procedure. The equipment should be

placed in service even though a minor assembly or part that does not affect proper functioning is missing.

- c. Check to see whether the equipment has been modified. (Equipment which has been modified will have the MWO number on the front panel, near the nomenclature plates.) Check also to see whether all currently applicable MWO's have been applied. Current MWO's applicable to the equipment are listed in DA PAM 310-7.
- d. For dimensions, weights, and volume of packaged items, see SB 700-20.

#### Section III. INSTALLATION INSTRUCTIONS

- 2 4 TOOLS, TEST EQUIPMENT, AND MATERIALS REQUIRED FOR INSTALLATION. The only tool required for installation of the equipment at the mission site is a sledge hammer for driving the ground rod into the soil.
- 2 5 **INSTALLATION INSTRUCTIONS.** All operating equipment in the AN/TYK- 10A is preinstalled in the S-457A/G shelter. To make the central operational, all that is required is to hook up the ground and power connections at the mission site.
- a. Grounding Instructions. Remove the ground rod from its storage location on the curbside lower vertical panel. Using the sledge hammer, drive the rod into the ground until the top of the rod is within 6 inches of the surface. Undo the tiedown holding the cable reel to the shelter floor. Take the reel out and unwind the grounding cable (about 15 feet long) from it. Attach one end of the cable to the ground rod and the other end to the large lug marked "ground terminal" on the power entrance panel.

Saturate the area around the ground rod with water to ensure effective grounding.

b. Power Connection. Make sure all circuit breakers and equipment power switches are in the off position. Unwind the power cable completely off of the reel, straightening it as much as possible.

#### CAUTION

Do not leave power cable coiled on reel while power is connected. Excessive heat could build up, melting the insulation and creating a fire hazard.

Remove the cap from the power entrance receptacle (figure 2-1) and insert one end of the power cable into the power entrance receptacle and lock into place by twisting the connector clockwise until it stops. Connect the other end of the cable to a 110-120 Vac power source, either commercial or field generator, as applicable.

c. Signal Connection. Connect the two signal wires to the A and B terminals of either the telephone or intercom input leads, whichever is needed, on the power entrance

panel. Feed the line off the reel to the signal source and connect into the circuit. Organizational maintenance may be required for telephone hookup.

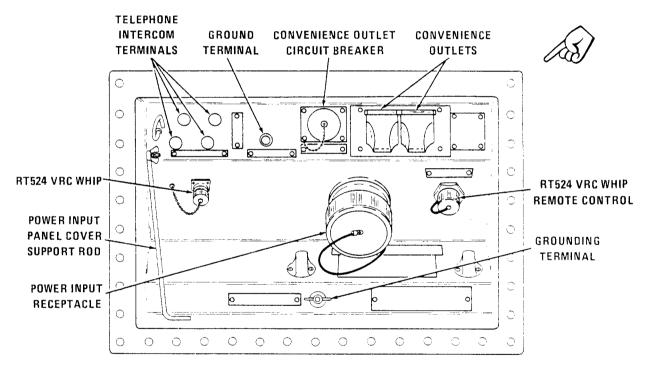


Figure 2-1. Power Entrance Panel

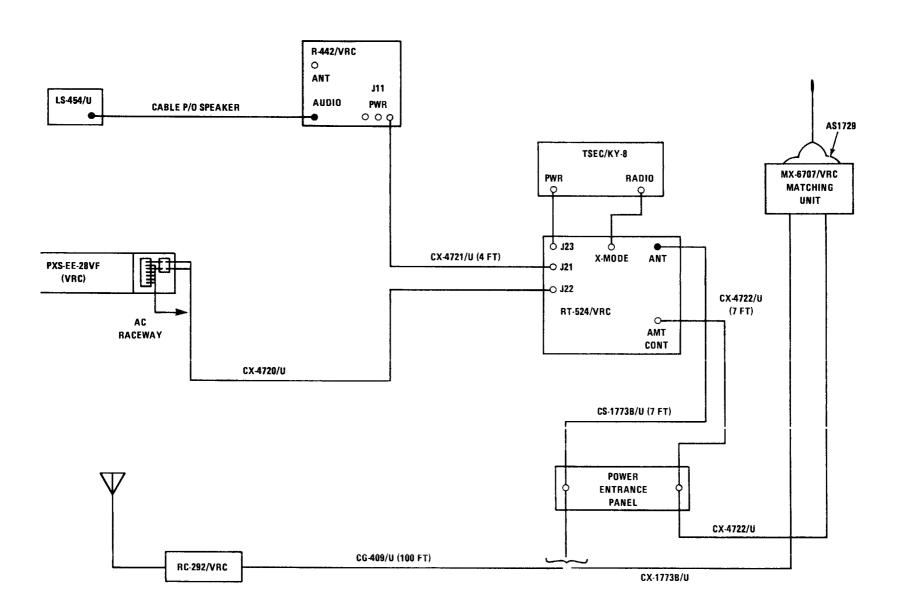


Figure 2-1.1. Cabling Diagram for AN/VRC-47

#### **OPERATING INSTRUCTION:**

#### Section I. CONTROLS AND INSTRUMENTS

3 - 1 **OPERATOR/CREV CONTROLS** Control fo th recorder-reproduces as conditiones typewrites and the telephon se are listed in the operator's manual of a each

item Refer to Appendi 1. for the proper manual pertain in the each unit Control for the S-457A/C shelter are listed in table 3-1 and shown in accompanying illustrations.

Table 3-1. Operator/Crew Controls for the Shelter

Control or indicator	Function	Illustration No.
Main power circuit breaker	Controls all power to central.	3 - 1
Lights circuit breaker	Controls all central lighting.	3 - 1
AC equipment circuit breaker	Controls power to ac convenience outlets.	3 - 1
Heater circuit breaker	Controls power to heater side of air conditioner/heater.	3 - 1
Air Conditioner circuit breaker	Controls power to cooling side of air conditioner/heater.	3 - 1
Convenience circuit breaker	Controls power to outside convenience outlet.	3 - 1
DC PS-1 circuit breaker	Controls power to ac-to-dc convertor.	3 - 1
AC voltmeter	Indicates incoming voltage.	3 - 1
AC ammeter	Indicates current being used.	3 - 1
DC power supply switch	Activates ac to dc power converter.	3 - 2
Blackout defeat switch	Overrides blackout microswitch.	3 - 3
Blackout microswitch	Automatically kills normal lights and engages	3 - 3
	blackout lights when door handle is turned to open position.	
Vent panel	Permits ventilation in climate conditions not requiring heat or air conditioning.	3 - 4
Emergency door handle	For rapid exit from shelter when tailgate of truck is in up position.	3 - 4
Door open-position lockpin	Secures door in open position.	3 - 4

#### Section II. OPERATION HINDE HIGHA CONDITION

- 3-2 PRELIMINAD' STARTING DEOCEDIES Drie + placin th AN/TYK-10, int operation perform the following
- Checothy grounding terminal (+) make any the cortish
- i Mak our a nowe contabe an Lairout breakers or i the of nositio befor activatin the autorn nowe supply
- 3-3 ODEDATING DECCEPTION Operating procedures of

senarat technics manual for the item Sc.) Annendi of for the correct manual to consult for each item. Operatin procedures for the S-457A/(Schalter are

- Switz & mai & nower aircust brooker as
- Curita y lights signed brooker or
- + Turn an abaltar light
- Tues of equipment nower autitables of
- Switz th convenience a equipmen de PS-1 and are conditioning already threads at

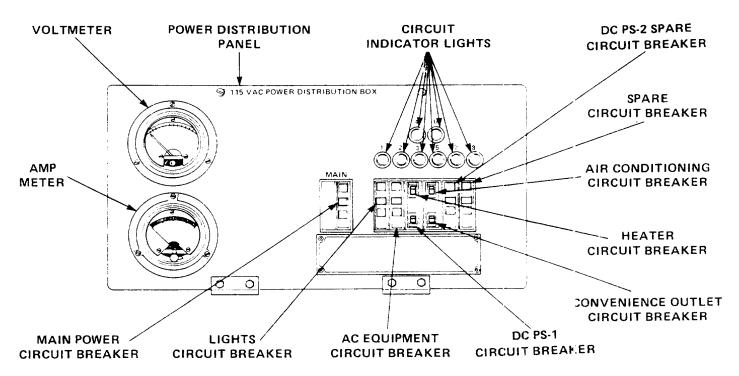


Figure 3-1. PonPower Distribution Panel

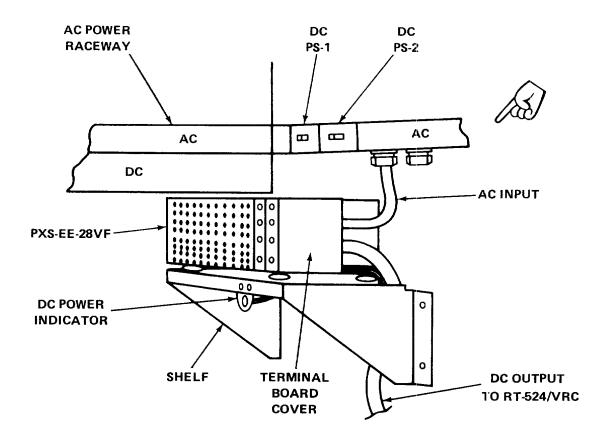


Figure 3-2. DC Power Supply and Control Switches

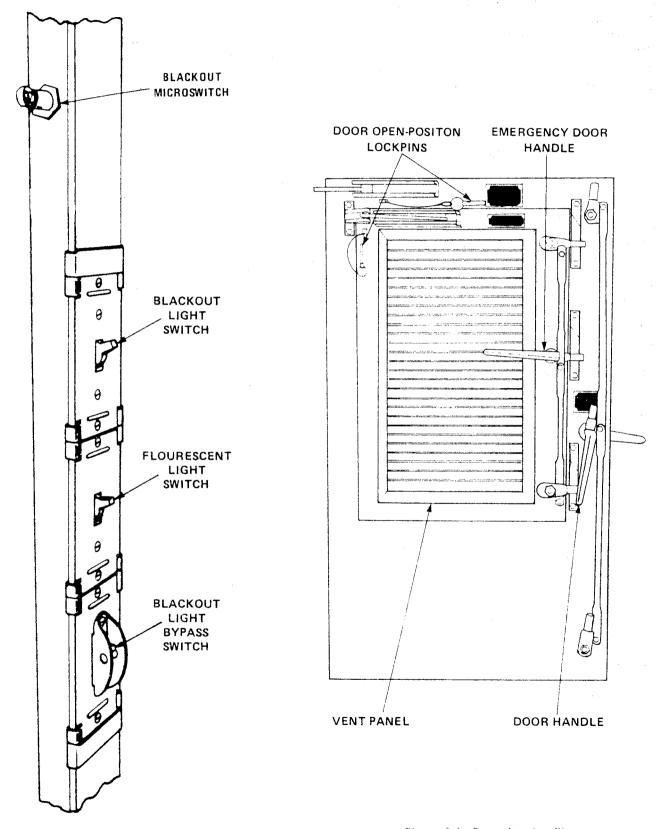


Figure 3-3. Light Switches

Figure 3-4. Door, Interior View

- f. Release the rotary chairs by unscrewing the mobility tie down of each chair. Snap the tiedowns into their clips on the curbside lower vertical panel.
- g. Operate equipment as instructed by the appropriate manuals.
- 3 4 **SHUTDOWN PROCEDURE.** For shutdown procedures of the individual components, refer to the applicable

manuals (Appendix A). Shut down the S-457A/G shelter as follows:

- a. Shut down equipment per instructions in the individual equipment manuals.
  - b. Switch shelter light switch off.
  - c. Switch all circuit breakers off.

#### Section III. OPERATIONUNDER UNUSUAL CONDITIONS

- 3 5 **GENERAL.** The AN/TYK-10A is fully insulated and weatherproofed for operation in hot, cold, wet, or dry climates, and is capable of providing operating personnel and equipment complete protection from the elements in temperatures ranging from minus 30° F to plus 120°F. Internal temperature is maintained by use of an air conditioner/heater installed as part of the shelter.
- 3 6 OPERATION IN EXTREME COLD. Special precautions are required to protect equipment and materials when operations are conducted in frigid climates or during periods of intense cold. Use care in handling cables and wire insulation. These items become hard and brittle in extreme cold and are easily damaged. Avoid sharp bends and unnecessary loops in wires. Keep all other equipment as warm and dry as possible. Keep equipment running, if necessary, to maintain warmth. For protection against drafts, and as an aid to reducing overall interior heat loss, a barrier, such as a blanket, can be placed between the shelter doorway and the equipment.
- 3 7 OPERATION EXTREME HEAT AND DUST. In hot, dry climates, connectors, receptacles, and binding posts can be damaged from dust and dirt. Open doors only when necessary, and be sure that door and panel gaskets seal properly. Hang wet sacking over doors to decrease entry of dirt and dust when doors are opened. Do not remove panel and chassis assemblies unless necessary, and clean thoroughly before replacing. Make frequent preventive maintenance checks. Excessive dirt, sand, or dust that comes in contact with oil and grease forms an abrasive grit that can damage moving parts. Clean and dust the shelter daily.
- 3-8 OPERATION IN HOT, HUMID CLIMATES. The AN/TYK-1 0A is weatherproofed and provides complete protection from the elements; however, it is susceptible to damage from moisture and fungi. Any moisture and/or fungi accumulation should be wiped away as soon as it appears.

#### Section IV. PREPARATION FOR MOVEMENT

- 3 9 **PROCEDURE.** Refer to the appropriate manuals for preparation for movement of the components of the AN/TYK-10A. Preparations shall include:
  - a. Turn all electrical equipment off.
  - b. Stow all loose equipment in the cabinets.
- c. Align the mobility tiedown plate on each chair over the appropriate threaded opening in the shelter floor and feed the threaded bolt through the hole in the plate and tighten it into the shelter floor until the chair is secure.
  - d. Turn off the lights.
  - e. Switch all circuit breakers off.
- f. Disconnect the power cable from the power source, then disconnect the other end from the shelter by twisting the connector counterclockwise. Replace the protective cap over the receptacle on the power inlet panel.

- g. Disconnect the signal wire from the signal terminals and rewind onto the wire reel. Stow the reel in one of the storage cabinets.
- h. Disconnect the ground cable from the power inlet panel and the ground rod.
- i. Pull the ground rod out of the soil, wipe it clean using a damp rag, and stow it in the storage clips on the curbside lower vertical panel.
- j. Disconnect and store VRC remove control cable, RF cable, and AS-1729 antenna.
- k. Wind the ground and power cables onto the power cable reel, then fasten the reel to the floor with the last mobility tie down.
  - l. Close and secure the air conditioner cover flaps. m. Close and secure the power entrance panel.
  - n. Close and secure the shelter door.

#### **OPERATOR/CREW MAINTENANCE INSTRUCTIONS**

#### Section I. TOOLS AND EQUIPMENT

4 - 1 **GENERAL.** Repair parts, tools, test equipment, and accessories issued with or authorized for use by the opera-

tor for the AN/TYK-10A are listed in Appendixes B, D, and E of this manual.

#### Section II. LUBRICATION INSTRUCTIONS

4-2 **GENERAL.** Apply a light film of oil (Appendix F) to the following surfaces weekly: shelter door and vent hinges; rotary chair swivel and sliding parts; and cabinet hinges. For

lubrication of central components, refer to the applicable manuals (Appendix A).

#### Section III. PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS)

4 - 3 **GENERAL.** To ensure that the AN/TYK-10A is always ready for operation, it must be inspected systematically so that defects may be discovered and corrected before they result in serious damage or failure. The necessary preventive maintenance checks and services to be performed are listed and described in table 4-1. The item numbers indicate the sequence of minimum inspection requirements. Defects discovered during operation of the central will be noted for future correction as soon as opera-

tion has ceased. Record all deficiencies, together with corrective action taken, on the appropriate maintenance form listed in TM 38-750.

#### CAUTION

Stop operation immediately if a deficiency is noted during operation which would damage the equipment.

Table 4-1. Operator/Crew Preventive Maintenance Checks and Services

NOTE: Within designated interval, these checks are to be performed in the order listed

# Petore W Wookly

	Interval		Item to be		Equipment will be reported Not	
Item No.	В	W	inspected	Procedures	Ready (Red) if:	
1	•		INTERCONNECTING CABLES	Check for connection; check cables for cuts, kinks, and abraded insulation.	Damaged cables prevent performance of mission.	
2	•		RACKS AND RACK- MOUNTED EQUIP- MENT	Check fee secure attachment at shelves, cabinets, and components.		
3	•		KNOBS AND CON- TROLS	Check for presence and tightness of all knobs and controls.	Controls will not operate equipment.	
4	•	,	ROTARYCHAIR	Check for firm seat and back attachment, casters on all four legs.		
5		•	SHELTER EXTERIOR	Check for corrosion, damaged skin, bent panels.		
6			EXTERIOR CABLING	Check power, ground, and signal cables for tight connections, kinks, bends, or breaks. Water area around ground rod if dry.	Cabling is damaged.	
7			VENT PANEL, INNER AND OUTER DOORS	Check for proper action, loose or bent hinges, and locking mechanisms.		
8			LIGHTS	Check for function of all fluorescent lights. Replace as needed.		
9			BLACKOUT LIGHTS	Check that blackout lights come on and normal lights go out when door is open.		
1 0			ALL EQUIPMENT COVERED BY SEP- ARATE MANUALS	Refer to other manuals to perform operator/crew PMCS as listed.	One or more items of equipment is reported red.	
11			FIRE EXTINGUISHER	Check state-of-charge gauge, and mounting bracket.		
1 2			EQUIPMENT COM- PLETENESS	Check all equipment against COEIL and BIIL.	Any component necessary to perform mission is missing.	

Interval Equipment will be reported Not Item Item to be Ready (Red) if: В W Procedures No. inspected **RUNNING SPARES** 13 Check all spare parts (bulbs, lamps, starters); reorder as needed. HEADSET Check for proper function. 14 **CLEANING** Dust all components and equipment 15 using a dampened cloth for soiled areas. **CLOCK** Wind the clock with the key provided. 16

Table 4-1. Operator/Crew Preventive Maintenance Checks and Services — Continued

#### Section IV. TROUBLESHOOTING

4 - 4 **GEN ERAL.** This section provides instructions that will enable the operator/crew to isolate sources of certain malfunctions. When a malfunction is noted, look for the malfunction in the troubleshooting chart (table 4-2). Check each of the probable causes listed to determine the actual cause, and perform the appropriate corrective action.

4 - 5 MAJOR EQUIPMENT. For detailed troubleshooting of the major components of the AN/TYK-10A, refer to the appropriate technical manual covering each item as listed in Appendix A. Any trouble beyond the scope of operator/crew maintenance shall be referred to organizational maintenance.

Table 4-2. Operator/Crew Troubleshooting

#### WARNING

Be extremely careful when performing troubleshooting procedures on electrical equipment; dangerous voltages are present which could cause serious injury or death.

#### MALFUNCTION

#### TEST OR INSPECTION

#### CORRECTIVE ACTION

#### 1. NO POWER TO CENTRAL.

Step 1. Check main power circuit breaker.

Reset to on.

#### Table 4-2. Operator/Crew Troubleshooting - Continued

#### MALFUNCTION

#### **TEST OR INSPECTION**

#### CORRECTIVE ACTION

Step 2. Trace power cable from central to power source.

Reconnect or replace cable as needed. Refer damaged cable to organizational maintenance

Step 3. Check output of power source.

If output is incorrect, switch to auxiliary power source.

#### 2. NO SHELTER LIGHTS.

Check light circuit breaker.

Reset circuit breaker to on.

#### 3. REGULAR LIGHTS STAY ON OR BLACKOUT LIGHTS FAIL TO COME ON WHEN DOOR IS OPENED.

Blackout defeat switch on.

Turn off blackout defeat switch.

#### 4. ELECTRONIC EQUIPMENT INOPERATIVE.

AC Equipment or dc PS-1 circuit breaker off.

Cycle circuit breaker off, then on.

#### 5. SINGLE COMPONENT INOPERATIVE.

Step 1. Power cord loose.

Seat plug firmly in power outlet.

Step 2. Equipment fuse(s) blown.

Replace fuse(s). If fuse(s) blow immediately, disconnect power supply and refer to organizational maintenance.

#### 6. TYPEWRITER LETTERS NOT PRINTING.

Step 1. Ribbon not feeding through guides.

Thread ribbon through guides.

#### Table 4-2. Operator/Crew Troubleshooting - Continued

#### MALFUNCTION

#### **TEST OR INSPECTION**

#### CORRECTIVE ACTION

Step 2. Color lever set on stencil.

Set color lever to color position.

7. TYPEWRITER TYPES PALE.

Ribbon worn.

Replace ribbon.

8. TYPE CHARACTERS FILLED IN.

Type dirty.

Clean type.

#### ORGANIZATIONAL MAINTENANCE INSTRUCTIONS

#### Section 1. TOOLS AND EQUIPMENT

5-1 GENERAL. Tools to be used by organizational maintenance are listed in Appendix D. Maintenance Allocation Chart.

#### Section II. REPAINTING AND REFINISHING INSTRUCTIONS

5 - 2 **GENERAL.** Repainting and refinishing shall be done in accordance with TB 43-0118. Field Instructions for Painting and Preserving Electronics Command Equipment including Camouflage Pattern Painting of Electrical Equipment Shelters. Paints and finishes shall be of the types listed in SB 11-573. Painting and Preservation Supplies Available for Field Use for Electronics Command Equipment. Refer to TM 43-0139. Painting Instructions for Field

Use, for instructions on the care of painting equipment. Refer to the individual component manuals for surfaces not to be painted.

5 - 3 REPAINTING AND REFINISHING. Refer to the applicable technical manuals for repainting instructions of the separa te components. For those items not covered by separate manuals, refer to the publications in the preceding paragraph

#### Section III. LUBRICATIONINSTRUCTIONS

5 - 4 **GENE RAL.** Refer to the manuals for each piece of equipment for lubrication instructions at the organizational

level. No other components of the central require organizational level lubrication.

#### Section IV. PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS)

5 - 5 **GENERAL.** Preventive maintenance checks and services (PMCS) to be performed on the major components are in the respective manuals for each item, along with

pertinent warnings, cautions, and notes. PMCS not listed in other manuals are listed in table 5-1.

Table 5-1. Organizational Preventive Maintenance Checks and Services

#### Legend

W - Weekly M - Monthly

Q - Quarterly
S - Semiannually

Item No.		Inte	rval		Item to be		Equipment will be reported Not Ready (Red) if:
	w	М	Q	S	inspected	Procedures	
1			•		PUBLICATIONS	Check that all publications are complete, service- able, and current (including all current publication changes). Refer to the latest issue of DA Pam 310-4.	
2	•	•	•	•	COMPONENT PMCS	Refer to all applicable component manuals and perform organizational PMCS as required.	
3			•		MODIFICATION WORK ORDERS (MWO's)	Check DA Pam 310-7 for applicable MWO's. Check equipment to see that all MWO's have been applied.	One or more URGENT MWO's have not been applied.
4			•		REPAIR PARTS	Check all repair parts authorized for the performance of maintenance at organizational level.	
5				CABLES AND WIRE	Tighten loose connections; repair cracked or cut insulation; remove kinks or strains.		
6	5		EQUIPMENT INVEN- TORY	Inventory each operating equipment; replace missing or broken parts.			
7			•		EQUIPMENT OPERA- TION	Check all equipment for proper operation.	Equipment cannot perform mission.
8			•		EQUIPMENT MOUNT- INGS	Tighten all loose hardware that secures racks and equipment in place. Inspect shock mounts for damage or deterioration.	
9			•		PAINTED SURFACES	Check for nicks, chips, sears, and scratches. Sand damaged area with fine-grade sandpaper and refinish surface in accordance with paragraph 5-2.	

#### Section V. TROUBLESHOOTING

5 - 6 **GENERAL.** All troubleshooting steps to be performed at the organizational level are in the individual manuals for the separate components. Refer to the applic-

able manual (Appendix A) for all components except the typewriters, which are covered by a commercial manual.

#### Section VI. MAINTENANCE OF DATA ANALYSIS CENTRAL AN/TYK-10A

- 5-7 **GENERAL.** Maintenance of the Data Analysis Central AN/TYK-10A is limited to replacing defective installed equipment. Refer to the applicable manual (Appendix A) for maintenance instructions for the separate components.
- 5 8 REMOVAL AND REPLACEMENT OF RACK-MOUNTED EQUIPMENT.

#### WARNING

Turn off power to equipment and disconnect power cable plugs before removing powered equipment. Dangerous voltages could be present and could cause injury or death on contact.

- a. Remove equipment from the rack as follows:
- (1) Disconnect the power cable plug from rack receptacle (if applicable).
- (2) Remove mounting screws and washers from front panel.
- (3) Pull equipment forward to allow cable connectors to be reached (if applicable).
- (4) Disconnect cables from equipment, tagging all unmarked cables (if applicable).
- (5) Remove equipment by pulling forward and out of the rack.

- b. Install equipment into racks as follows:
- (1) Insert equipment into rack, leaving it out far enough to allow access to the cables and connectors (if applicable).
- (2) Connect the cables to the appropriate connectors (if applicable).
- (3) Push the equipment into the rack, making sure that cables do not bind or get pinched (if applicable).
- (4) Secure the equipment to the racks with the mounting screws and washers.
- (5) Connect the power cable plugs to the correct receptacles.
  - c. Remove the typewriter from the shelf as follows:
- (1) Remove the four hold-down screws and washers from the bottom of the shelf.
  - (2) Lift the typewriter from the shelf.
  - d. Install the typewriter onto the shelf as follows:
- (1) Align the feet of the typewriter with the correct holes in the shelf.
- (2) Secure the typewriter to the shelf with the four hold-down screws and washers removed previously.

#### DIRECT SUPPORT AND GENERAL SUPPORT MAINTENANCE INSTRUCTIONS

#### Section I. GENERAL

6-1 **SCOPE.** There are no maintenance functions allocated for the direct or general support levels on the Data Analysis Central AN/TYK-10A. All DS and GS maintenance opera-

tions are specified in the manuals on the individual components of the central (Appendix A).

#### APPENDIX A

#### REFERENCES

Reference	Title
TM 5-4120-274-15	Operator's, Organizational, Direct Support, General Support, and Depot Maintenance Manual: Air Conditioning Unit, Electric Motor Driven: 9,000 BTU/HR, Vertical Compact, 115V, Single Phase, 50/60 Hz (Thermo-Air Model CV 9-1-15-60) (NSN 4120-00-935-1609); 230V, Single Phase, 50/60 Hz (Thermo-Air Model CV 9-1-30-60) (NSN 4120-00-935-1610), and 208V, 3 Phase, 50/60 Hz (Thermo-Air Model CV 9-3-08-60) (NSN 4120-00-935-1611)
TM 5-4120-274-20P	Organizational, Direct Support, and General Support Maintenance Repair Parts and Special Tools List: Air Conditioning Unit, Electric Motor Driven: 9,000 BTU/HR, Vertical Compact, 115V, Single Phase, 50/60 Hz (Thermo-Air Model CV 9-1-15-60) (NSN 4120-00-935-1609); 230V, Single Phase, 5-/60 Hz (Thermo-Air Model CV 9-1-30-60) (NSN 4120-00-935-1610), and 208V, 3 Phase, 50/60 Hz (Thermo-Air Model CV 9-3-08-60) (NSN 4120-00-935-1661)
TM 5-4120-274-35P	Direct Support, General Support, and Depot Maintenance Repair Parts and Special Tools List for Air Conditioning Units, Electrical Motor Driven; 9,000 BTU/HR, Vertical Compact, 115V, Single Phase, 50/60 Hz (Thermo-Air Model CV-9-1-15-60) (FSN 4120-935-1609); 230V, Single Phase, 50/60 Hz (Thermo-Air Model CV-9-1-30-60) (4120-935-1612); 280V, 3 phase, 400 Hz (Thermo-Air Model CV-9-3-08-400) (4120-935-1610) and 208V, 3 Phase, 50/60 Hz (Thermo-Air Model CV-9-3-08-60) (4120-935-1611).
TM 11-5805-201-12	Operator and Organizational Maintenance Manual: Telephone Set TA-312/PT (NSN 5805-00-543-0012) [TO 31W1-2PT-291]
TM 11-5805-201-35	Direct Support, General Support, and Depot Maintenance Manual (Including Repair Parts, and Special Tools List): Telephone Set TA-3 12/PT (NSN 5805-00-543-0012) [TO 31 W1 - 2PT-292]
TM 11-5810-224-10	Operator's Manual for Communications Security Equipment TSEC/KY-8
TM 11-5810-224-12P	Operator's and Organizational Maintenance Repair Parts and Special Tools List and Maintenance Allocation Chart; Communication Security Equipment TSEC/KY-8
TM 11-5820-348-15	Organizational, Direct Support, General Support, and Depot Maintenance Manual, Antenna Equipment RC-292
TM 11-5820-401-2	Operator's and Organizational Maintenance Manual, (Including Repair Parts and Special Tools List, Radio Sets AN/VRC-12, -43, -44, -45, -47, -48, -49
TM 11-5820-409-35	Field and Depot Maintenance Manual: Receiver, Radio R-442/VRC
TM 11-5965-255-14P	Operator's, Organizational, Direct Support, General Support, Maintenance Repair Parts and Special Tools (Including Depot Maintenance Repair Parts and Special Tools): Loudspeaker, Permanent Magnet LS-454/U
TM 11-5985-262-15	Operator, Organizational, Direct Support, General Support, and Depot Maintenance Manual Including Repair Parts and Special Tools List, Antenna AS-1729/VRC
TM 11-6625-203-12	Operator and Organizational Maintenance Manual: Multimeter AN/URM-105, Including Multimeter ME-77/U, ME-77C/U, and AN/URM-105C
TM 32-5410-001-24&P	Organizational, Direct Support, and General Support Maintenance Manual, (Including Depot Maintenance Repair Parts and Special Tools Lists): Electronic Equipment Shelter S-457A/G
TM 32-5835-005-14&P	Operator's, Organizational, Direct Support, and General Support Maintenance Manual (Including Repair Parts List): Recorder-Reproducer Set, Sound AN/UNH-17A.
TM 32-6130-001-14&P	Operator's, Organizational, Direct Support, and General Support Maintenance Manual. (Including Repair Parts and Special Tools List): Power Supply (Model PXS-EE-28V-F) (NSN 6130-01-010-3603)

TB 43-0118

Reference Title

TM 38-750 The Army Maintenance Management System (TAMMS)

TM 43-0139 Painting Instructions for Field Use
TM 740-90-1 Administrative Storage of Equipment

TM 750-244-2 Procedures for Destruction of Electronics Materiel to Prevent Enemy Use (Electronics Com-

mand)

CTA 50-970 Expendable Items (Except Medical, Class V, Repair Parts, and Heraldic Items)

DA Pam 310-4 Index of Technical Publications

Standard Form 364 Report of Discrepancy (ROD)

SB 11-573 Painting and Preservation Supplies Available for Field Use for Electronics Command Equip-

men

SB 700-20 Army Adopted/Other Items Selected for Authorization/List of Reportable Items

Field Instructions for Painting and Preserving Electronics Command Equipment, Including

Camouflage Pattern Painting of Electrical Equipment Shelters

#### APPENDIX B

#### COMPONENTS OF END ITEM LIST

#### section I. INTRODUCTION

- B 1 SCOPE. This appendix lists integral components of and Basic Issue Items (BII) for the Data Analysis Central AN/TYK-10A to help you inventory items required for safe and efficient operation.
- B 2 GENE RAL. This Components of End Item List is divided into the following sections:
- a. section II. In tegral Components of the End Item. These items, when assembled, comprise the central and must accompany it whenever it is transferred or turned in. The illustrations will help you identify these items.
- b. section III. Basic Issue Items (BII). These are the minimum essential items required to place the central in operation, to operate it, and to perform emergency repairs. Although shipped separately packed they must accompany the central during operation and whenever it is transferred between accountable officers. The illustrations will assist you with hard-to-identify items. This manual is your authority to requisition replacement BII, based on TOE/MTOE authorization of the end item.

#### B-3 EXPLANATION OF COLUMNS.

- a. Illustration. This column is divided as follows:
- (1) Figure Number. Indicates the figure number of the illustration on which the item is shown.

- (2) *Item Number*. The number used to identify item called out in the illustration.
- b. National Stock Number. Indicates the National stock number assigned to the item and which will be used for requisitioning.
- c. Part Number. Indicates the primary number used by the manufacturer, which controls the design and characteristics of the item by means of its engineering drawings, specifications, standards, and inspection requirements to identify an item or range of items.
- d. Description. Indicates the Federal item name and, if required, a minimum description to identify the item.
- e. Location. The physical location of each item listed is given in this column. The lists are designed to inventory all items in one area of the major item before moving on to an adjacent area.
- f. Usable on Code. "USABLE ON" codes are included to help you identify which component items are used on the different models. Identification of the codes used in these lists are: none.
- g. Quantity Required (Qty Req 'd). This column lists the quantity of each item required for a complete major item.
- h. Quantity. This column is left blank for use during an inventory. Under the Rcv'd column, list the quantity you actually receive on your major item. The Date columns are for your use when you inventory the major item at a later date; such as for shipment to another site.

#### SECTION II. INTEGRAL COMPONENTS OF END ITEM

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8) QUANTI	TV		
ILLUSTRATION							QUANTI	11		
(A) (B) FIGURE ITEM NO. NO.	NATIONAL STOCK NUMBER	PART NO.	DESCRIPTION	LOCATION	USABLE ON CODE	QTY REQD	RCV'D	DATE	DATE	DATE
1-1	5410-01-028-0696	S-457A/G	SHELTER, ELECTRONIC EQUIPMENT			1				
E-1 3	5835-01-023-4332	AN/UNH-17A	RECORDER-REPRODUCER SET, SOUND			2				
E-1 1	725-00-139-5023	CY-7181/G	CABINET, STORAGE			4				
E-1 7	5830-00-537-5031	MT-1582	SHELF			1				
E-1 5	5811-00-223-8015	MT-4412/G	MOUNT			2				
E-1 4	7430-00-663-1241		TYPEWRITER, PLATEN			2				
E-1 8	5975-00-937-4583	н6675	PANEL, BLANK, 10-1/2 IN.X 19 IN.			1				
E-1 2	5975-00-448-5006	PWHA13	PANEL, BLANK, 5-1/4 IN. X 19 IN.			2				
E-10		0099-1-3111	RACK, EQUIPMENT, R-442/VRC			1				
E-11		0099-2-4010	RACK, EQUIPMENT, RT-524/VRC			1				
			SECTION III BASIC ISSUE ITEMS							
			SECTION III BASIC ISSUE IIEMS							
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	TV		
(1)	(2)	(3)		(5)	(6)	(7)	(8) QUANTI	TY		
	(2)  NATIONAL STOCK NUMBER	(3) PART NO.		(5)	(6) USABLE ON CODE	(7) QTY REQD		TY DATE	DATE	DATE
ILLUSTRATION (A) (B) FIGURE ITEM	NATIONAL STOCK		(4)		USABLE ON	QTY	QUANTI		DATE	DATE
ILLUSTRATION (A) (B) FIGURE ITEM	NATIONAL STOCK NUMBER	PART NO.	(4) DESCRIPTION		USABLE ON	QTY REQD	QUANTI		DATE	DATE
ILLUSTRATION (A) (B) FIGURE ITEM	NATIONAL STOCK NUMBER 5985-00-636-5898	PART NO.	(4) DESCRIPTION CORD, PATCH		USABLE ON	QTY REQD	QUANTI		DATE	DATE
ILLUSTRATION (A) (B) FIGURE ITEM	NATIONAL STOCK NUMBER 5985-00-636-5898 5965-00-892-23353	PART NO. CD-307A H-216/V	(4)  DESCRIPTION  CORD, PATCH HEADSET		USABLE ON	QTY REQD 6	QUANTI		DATE	DATE
ILLUSTRATION (A) (B) FIGURE ITEM	NATIONAL STOCK NUMBER 5985-00-636-5898 5965-00-892-23353 5965-01-078-1312	PART NO.  CD-307A  H-216/V  M-104	(4)  DESCRIPTION  CORD, PATCH  HEADSET  MICROPHONE		USABLE ON	QTY REQD 6 6	QUANTI		DATE	DATE
ILLUSTRATION (A) (B) FIGURE ITEM	NATIONAL STOCK NUMBER 5985-00-636-5898 5965-00-892-23353 5965-01-078-1312 3895-00-498-8343	PART NO.  CD-307A  H-216/V  M-104  RL-39B	DESCRIPTION  CORD, PATCH HEADSET MICROPHONE REEL MACHINE		USABLE ON	QTY REQD 6 6 2	QUANTI		DATE	DATE
ILLUSTRATION (A) (B) FIGURE ITEM NO. NO.	NATIONAL STOCK NUMBER 5985-00-636-5898 5965-00-892-23353 5965-01-078-1312 3895-00-498-8343 5835-00-163-1118	PART NO.  CD-307A  H-216/V  M-104  RL-39B  SA-1921	DESCRIPTION  CORD, PATCH HEADSET MICROPHONE REEL MACHINE FOOTSWITCH		USABLE ON	QTY REQD 6 6 2 1	QUANTI		DATE	DATE
ILLUSTRATION (A) (B) FIGURE ITEM NO. NO.	NATIONAL STOCK NUMBER 5985-00-636-5898 5965-00-892-23353 5965-01-078-1312 3895-00-498-8343 5835-00-163-1118 5805-543-0012	PART NO.  CD-307A  H-216/V  M-104  RL-39B  SA-1921  TA-312/PT	DESCRIPTION  CORD, PATCH HEADSET MICROPHONE REEL MACHINE FOOTSWITCH TELEPHONE SET		USABLE ON	QTY REQD 6 6 2 1 2	QUANTI		DATE	DATE
ILLUSTRATION (A) (B) FIGURE ITEM NO. NO.	NATIONAL STOCK NUMBER 5985-00-636-5898 5965-00-892-23353 5965-01-078-1312 3895-00-498-8343 5835-00-163-1118 5805-543-0012	PART NO.  CD-307A  H-216/V  M-104  RL-39B  SA-1921  TA-312/PT  WD-1	DESCRIPTION  CORD, PATCH HEADSET MICROPHONE REEL MACHINE FOOTSWITCH TELEPHONE SET  CABLE, SIGNAL		USABLE ON	QTY REQD 6 6 2 1 2	QUANTI		DATE	DATE
ILLUSTRATION (A) (B) FIGURE ITEM NO. NO.	NATIONAL STOCK NUMBER 5985-00-636-5898 5965-00-892-23353 5965-01-078-1312 3895-00-498-8343 5835-00-163-1118 5805-543-0012 6145-00-226-8812 6645-00-9368120	PART NO.  CD-307A H-216/V M-104 RL-39B SA-1921 TA-312/PT WD-1 M-2	DESCRIPTION  CORD, PATCH HEADSET MICROPHONE REEL MACHINE FOOTSWITCH TELEPHONE SET  CABLE, SIGNAL CLOCK, MECHANICAL		USABLE ON	QTY REQD  6 6 2 1 2 1	QUANTI		DATE	DATE
ILLUSTRATION (A) (B) FIGURE ITEM NO. NO.	NATIONAL STOCK NUMBER 5985-00-636-5898 5965-00-892-23353 5965-01-078-1312 3895-00-498-8343 5835-00-163-1118 5805-543-0012 6145-00-226-8812 6645-00-9368120 5995-00-889-1253	PART NO.  CD-307A  H-216/V  M-104  RL-39B  SA-1921  TA-312/PT  WD-1  M-2  CX-4720/U	DESCRIPTION  CORD, PATCH HEADSET MICROPHONE REEL MACHINE FOOTSWITCH TELEPHONE SET  CABLE, SIGNAL CLOCK, MECHANICAL CABLE, POWER (12 FT)		USABLE ON	QTY REQD 6 6 2 1 2 1 1	QUANTI		DATE	DATE
ILLUSTRATION (A) (B) FIGURE ITEM NO. NO.	NATIONAL STOCK NUMBER 5985-00-636-5898 5965-00-892-23353 5965-01-078-1312 3895-00-498-8343 5835-00-163-1118 5805-543-0012 6145-00-226-8812 6645-00-9368120 5995-00-889-1253 5995-00-823-2913	PART NO.  CD-307A  H-216/V  M-104  RL-39B  SA-1921  TA-312/PT  WD-1  M-2  CX-4720/U  CX-4721/U	DESCRIPTION  CORD, PATCH HEADSET MICROPHONE REEL MACHINE FOOTSWITCH TELEPHONE SET  CABLE, SIGNAL CLOCK, MECHANICAL CABLE, POWER (12 FT) CABLE, POWER (4 FT)		USABLE ON	OTY REQD  6 6 2 1 2 1 1 1 1	QUANTI		DATE	DATE
ILLUSTRATION (A) (B) FIGURE ITEM NO. NO.	NATIONAL STOCK NUMBER 5985-00-636-5898 5965-00-892-23353 5965-01-078-1312 3895-00-498-8343 5835-00-163-1118 5805-543-0012 6145-00-226-8812 6645-00-9368120 5995-00-889-1253 5995-00-823-2913	PART NO.  CD-307A H-216/V M-104 RL-39B SA-1921 TA-312/PT WD-1 M-2 CX-4720/U CX-4721/U CX-4722/U	DESCRIPTION  CORD, PATCH HEADSET MICROPHONE REEL MACHINE FOOTSWITCH TELEPHONE SET  CABLE, SIGNAL CLOCK, MECHANICAL CABLE, POWER (12 FT) CABLE, POWER (4 FT) CABLE, SPEC PUR ELEC. (7 FT)		USABLE ON	OTY REQD  6 6 2 1 2 1 1 1 1 1	QUANTI		DATE	DATE

B-2 CHANGE 1

#### APPENDIX C

#### ADDITIONAL AUTHORIZATION LIST

#### Section I. INTRODUCTION

- c 1 SCOPE. This Appendix lists additional items you are authorized for the support of the AN/TYK-10A.
- c 2 GENE RAL. List identifies items which do not accompany the AN/TYK-1 OA and should not be turned in with
- the AN/TYK-10A. These items are authorized by appropriate MTOE, TDA, CTA, or JTA.
- c 3 **EXPLANATION OF LISTING.** National stock number, descriptions, and quantities are provided for requisitioning of the required items to expand the operational capabilities of the AN/TYK-10A.

SECTION II. ADDITION	NAL AUTHORIZATION LIST	TM32-5895-219-14&P		
(1)	(2)		(3)	(4)
NATIONAL STOCK NUMBER	DESCRIPTION		U/M	QTY AUTH
	PART NUMBER & FSCM	USABLE ON CODE		
5820-00-892-0864	RADIO SET AN/VRC-47			
	CONSISTING OF			
5895-00-985-9024	ANTENNA (AS-1729/VRC)(80063)		EA	1
5985-00-199-8831	ANTENNA ELEMENT (MS-116A)(80063)		EA	1
5985-00-115-7149	ANTENNA ELEMENT (MS-117A)(80063)		EA	1
5985-00-238-7474	ANTENNA EQUIPMENT (MS-118A)(80063)		EA	1
5820-00-497-8554	ANTENNA EQUIPMENT (RC-292)(82204)		EA	1
5985-00-221-5544	BASE, MAST AB-15/GR (SC-DL-100581)(80063)		EA	1
5835-00-868-8157	COM SEC EQUIPMENT TSEC/KY-8		EA	1
5965-00-069-8886	HANDSET (H189GR)(80058)		EA	1
5820-00-450-6796	INSTALLATION KIT (MK 1226/VRC-47)(80058)		EA	1
5965-00-876-2375	LOUDSPEAKER LS-454/U (SC-DL-436325)(80058)		EA	1
5820-00-892-0624	RECEIVER, RADIO (R-442/VRC)(80058)		EA	1
5820-00-892-0622	RECEIVER, TRANSMITTER, RADIO, (RT524/VRC)(80058)		EA	1
6114-00-738-6340	GENERATOR SET (PU-620M)(80058)		EA	1

#### APPENDIX D

#### MAINTENANCE ALLOCATION CHART

#### Section 1. INTRODUCTION

#### D-1 GENERAL.

- a. This section provides a general explanation of all maintenance and repair functions authorized at various maintenance levels.
- b. The Maintenance Allocation Chart (MAC) in Section II designates overall responsibility for the performance of maintenance functions on the identified end item or component. The implementation of the maintenance functions upon the end item or component will be consistent with the assigned maintenance functions.
- c. Section III lists the special tools and test equipment required for each maintenance function as referenced from Section II.
- d. section IV contains supplemental instructions and explanatory notes for a particular maintenance function.

#### D-2 MAINTENANCE FUNCTIONS.

- a. Inspect. To determine the serviceability of an item by comparing its physical, mechanical and/or electrical characteristics with established standards through examination.
- b. Test. To verify serviceability and detect incipient failure by measuring the mechanical or electrical characteristics of an item and comparing those characteristics with prescribed standards.
- c. Service. Operations required periodically to keep an item in proper operating condition; i.e., to clean (decontaminate), to preserve, to drain, to paint, or to replenish fuel, lubricants, hydraulic fluids, or compressed air supplies.
- d. Install. The act of emplacing, seating, or fixing into position an item, part, or module (component or assembly) in a manner to allow the proper functioning of an equipment or system.
- e. Replace. The act of substituting a serviceable like type part, subassembly, or module for an unserviceable counterpart.
- f. Repair. The application of maintenance services or other maintenance actions to restore serviceability to an item by correcting specific damage, fault, malfu nct ion, or failure in a part, subassembly, module (component or assembly), and item, or system.
- g. Overhaul. That maintenance effort (services/actions) necessary to restore an item to a completely serviceable/

operational condition as prescribed by maintenance standards; i.e., Depot Maintenance Work Requirement in appropriate technical publications. Overhaul is normally the highest degree of maintenance performed by the Army. Overhaul does not normally return an item to like new condition.

h. Rebuild. Consists of those services/actions necessary for the restoration of unserviceable equipment to a like new condition in accordance with original manufacturing standards. Rebuild is the highest degree of materiel maintenance applied to Army equipment. The rebuild operation includes the act of returning to zero those age measurements (hours/miles, etc.) considered in classifying Army equipments/components.

# D - 3 EXPLANATION OF COLUMNS IN THE MAC, SECTION II.

- a. Column 1, Group Number. Column 1 lists group numbers, the purpose of which is to identify components, assemblies, subassemblies, and modules with the next higher assembly.
- b. Column 2, Component/Assembly. Column 2 contains the names of components, assemblies, subassemblies, and modules for which maintenance is authorized.
- c. Column 3, Maintenance Function. Column 3 lists the functions to be performed on the item listed in column 2. (For detailed explanation of these functions, see para. D-2.)
- d. Column 4, Maintenance Level. Column 4 specifies, by the listing of a "work time" figure in the appropriate subcolumn(s), the lowest level of maintenance authorized to perform the function listed in column 3. This figure represents the active time required to perform the maintenance function at the indicated level of maintenance. If the number or complexit y of the tasks within the listed maintenance function vary at different maintenance levels, appropriate "work time" figures will be shown for each level. The number of man-hours specified by the "work time" figure represents the average time required to restore an item (assembly, subassembly, component, module, end item, or system) to a serviceable condition under typical field operating conditions. This time includes preparation time, troubleshooting time, and quality assurance/quality

control time in addition to the time required to perform the specific tasks identified for the maintenance functions authorized in the MAC. The symbol designations for the various maintenance levels are as follows:

C	Operator or crew
O	Organizational maintenance
D	Depot maintenance

- e. Column 5, Tools and Equipment. Column 5 specifies, by code, those common tool sets (not individual tools) and special tools, Test, Measurement, and Diagnostic Equipment (TMDE), and support equipment required to perform the designated function.
- f. Column 6, Remarks. This column shall, when applicable, contain a letter code, in alphabetical order, which shall be keyed to the remarks contained in Section IV.
- D 4 EXPLANATION OF COLUMNS IN TOOL AND TEST EQUIPMENT REQUIREMENTS, SECTION III.

- a. Column 1, Reference Code. The tool and TMDE reference code correlates with a code used in the MAC, Section II, column 5.
- b. Column 2, Maintenance Level. The lowest level of maintenance authorized to use the tool or test equipment.
- c. Column 3, Nomenclature. Name or identification of the tool or test equipment.
- d. Column 4, National/NA TO Stock Number. The National Stock Number (NSN) of the tool or TMDE.
- e. Column 5, Tool Part Number. The manufacturer's part number.

# D - 5 EXPLANATION OF COLUMNS IN REMARKS, SECTION IV.

- a. Reference Code. The code recorded in Section II, column 6.
- b. Remarks. This column lists information pertinent to the maintenance function being performed as indicated in the MAC, section II.

(1) Group	(2) Component/Assembly	(3) Maintenance	(4) Maintenance level				(5) Tools and	(6)	
Number	outsponding statement	function	C	0	F	Н	D	equipment	Remarks
0 0	DATA ANALYSIS CENTRAL AN/TYK-10A	Inspect Test Service Repair Overhaul Rebuild	0.3 0.3 0.3	0.6 1.0 1.0	7. 160.			1, 6 1, 6 1, 2, 6 1, 2, 6	
0 1	CABINET, STORAGE CY-7181/G	Inspect Test Replace	0.1 0.1	0.2				1	В
0 2	PANEL, BLANK, 5-1/4 IN. × 19 IN. PWHA-131- 8GSDS	Inspect Replace	0.1	0.1				1	В
0 3	RECORDER-REPRO- DUCER SET, SOUND AN/UNH-17A	Inspect Test Replace	0.1 0.1	0.1 0.3 0.2				1	A
0 4	FYPEWRITER	Inspect Test Replace	0.1 0.1	0.1 0.4				1	С
0 5	SHELF, MOUNTING MT-4412/G	Inspect Test Replace	0.1 0.1	0.1 0.1 0.7				1	C
0 6	TRAY ASSEMBLY, PAPEF 009-1-4060	Inspect Replace	0.1	0.4				1	В
0 7	SHELF MT-1582	Inspect Test Replace	0.1 0.1	0.1 0.4				1	В
0 8	PANEL, BLANK, 10-1/2 IN X 19 IN. H6675	Inspect Replace	0.1	0.1				1	В
0 9	EQUIPMENT RACK R-442/VRC	Inspect Test Service Align Replace	0.4	0.4	1.			1, 6 1, 4, 5-16	D
1 0	EQUIPMENT RACK RT-524/VRC	Inspect Test Service Align Replace	0.4 0.2 0.4	0.4	1.			1, 6 1, 4, 5-16	E

#### SECTION III. TOOL AND TEST EQUIPMENT REQUIREMENTS

(1) REFERENCE CODE	(2) MAINTENANCE LEVEL	(3) NOMENCLATURE	(4) NATIONAL/NATO STOCK NUMBER	(5) TOOL NUMBER
1	0	TOOL KIT-TK-105/G	5180-00-610-8177	TK-105/G
2	0	TOOL KIT TK-100/G	5180-00-605-0079	TK-100/G
3	C	HAMMER, SLEDGE, 8-LB.	5120-00-251-4489	
4	0	TOOL KIT TK-165/G	5180-00-762-9298	TK-165/G
5	F	METER, OUTPUT TS-585 B/U	6625-00-244-0501	TS-585 B/U
6	0	MULTIMETER AN/USM-223	6625-00-999-7465	AN/USM- 223
7	F	COUNTER, ELECTRONIC AN/USM-207A	6625-00-044-3228	AN/USM- 207A
8	F	ATTENUATOR, RF (HP-335D)	6625-00-957-1860	HP-355D
9	F	GENERATOR, AUDIO AN/USM-227	6625-00-783-5965	AN/USM- 127
10	F	GENERATOR, SIGNAL, RF AN/USM-44A	6625-00-539-9685	AN/USM- 44A
11	F	GENERATOR, SIGNAL AN/GRM-50	6625-00-868-8353	AN/GRM- 50
12	F	GENERATOR, SWEEP SG-677/U	6625-00-957-0439	SG-677/U
13	F	GENERATOR, SIGNAL AN/URM-103	6625-00-868-8352	AN/URM- 103
14	F	SET, RADIO INTERFERENCE MEASUREMENT AN/URM-85	6625-00-776-0595	AN/URM- 85
15	F	ANALYZER, DISTORTION AN/URM-180	6625-00-089-4229	AN/URM- 180
16	F	OSCILLOSCOPE AN/USM-281A	6625-00-228-2201	AN/USM- 281A

#### Section IV. REMARKS

Reference code	Remarks
Α	For detailed maintenance of this item, refer to the appropriate technical manual as listed in Appendix A.
В	Repair of this item is limited to replacement of the entire unit.
C	Service information on this item is furnished in the commercial manual provided by the manufacturer. For anything other than routine maintenance, return item to depot.
D	Refer to TM 11-5820-401-12 for maintenance functions.
E	Refer to TM 11-5820-339-35 for maintenance functions.
ı	

#### APPENDIX E

#### REPAIR PARTS AND SPECIAL TOOLS LIST

#### Section 1. INTRODUCTION

- E 1 SCOPE. This appendix lists spares and repair parts; special tools; special Test, Measurement, and Diagnostic Equipment (TMDE), and other special support equipment required for performance of organizational, direct support, and general support maintenance of the Data Analysis Central AN/TYK-10A. It authorizes the requisitioning and issue of spare and repair parts as indicated by the source and maintenance codes.
- E-2 GENERAL. This Repair Parts and Special Tools List is divided into the following sections:
- a. section III. Repair Parts List. A list of spares and repair parts authorized for use in the performance of maintenance. The list also includes parts which must be removed for replacement of the authorized parts. Parts lists are composed of functional groups in numeric sequence, with the parts in each group listed in figure and item number

Section III. Special Tools List. Not applicable.

Section IV. National Stock Number and Part Number Index. A list, in National Item Identification Number (NIIN) sequence, of all National Stock Numbers (NSN) appearing in the listings, followed by a list in alphanumeric sequence of all part numbers appearing in the listings. National stock numbers and part numbers are cross-referenced to each illustration figure and item number appearance.

#### E-3 EXPLANATION OF COLUMNS.

- a. Illustration. This column is divided as follows:
- (1) Figure Number. Indicates the figure number of the illustration on which the item is shown.
- (2) *Item Number.* The number used to identify item called out in the illustration.
- b. Source, Maintenance, and Recoverability (SMR) Codes.
- (1) Source Code. Source codes indicate the manner of acquiring support items for maintenance, repair, or overhaul of end items. Source codes are entered in the first and second positions of the uniform SMR code format as follows:

#### Code Definition

- PA Item procured and stocked for anticipated or known usage.
- XB Item is not procured or stocked. If not available through salvage, requisition.

NOTE: Cannibalization or salvage may be used as a source of supply for any items coded above except those coded XA and aircraft support items as restricted by AR 700-42.

- (2) Maintenance Code. Maintenance codes are assigned to indicate the levels of maintenance authorized to USE and REPAIR support items. The maintenance codes are entered in the third and fourth positions of the uniform SMR code format as follows:
- (a) The maintenance code entered in the third position will indicate the lowest maintenance level authorized to remove, replace, and use the support item. The maintenance code entered in the third position will indicate one of the following levels of maintenance:

#### Code Application/Explanation

- O Support item is removed, replaced, used at the organizational level.
- Support items that are removed, replaced, used at depot, mobile depot, or specialized repair activity only.
- (b) The maintenance code entered in the fourth position indicates whether the item is to be repaired and identifies the lowest maintenance level with the capability to perform complete repair; i.e., all authorized maintenance functions. This position will contain one of the following maintenance codes:

#### Code Application/Explanation

- D The lowest maintenance level capable of complete repair of the support item is the depot level.
- Z Nonreparable. No repair is authorized.

(3) Recoverability Code Recoverability code are assigned to support item to indicate the disposition action or unserviceable items. The recoverability code it entered in the fifth position of the uniform SMI code forms a follows.

#### Recoverability

### Code Definition

- Nonreparable item When unserviceable condem and dispose a the level independent in position.
- repai capability return to depor Cordemnation and dispose no authorize below deport leve
- Assigne t the iter on which with use for requisitioning
- the manufacture (individual company) firm, corporation of Covernment activity which control the design and characteristics of the item has manufacture that the design and specification standard on linspection requirement by identify a vitage of range of item.

MOTI Who stoor numbers literally requisitiones the stool requirement of the matching replaces

Earland Sunni Cove for Manufacture r/FSCM. The ECCLE of Sidilar number of occal listed in \$2.708.42 which indentify the manufacture distributo or Cover most agency of

Passerintia Indicate at a Endard litera norma an require.

The first of the literal indicate at a standard of the quantity of the literal indicate at a standard of the literal indicate at a performing the literal indicate at a supersonal literal indicate at a lit

- etc.) When the U/N differ from the unit of issue the lowes unit of issue that will satisf the require 1  $U/\Gamma$ , we be requisitioned
- tity of the iter use of the breakou snow of the mutration figure which is prepare in the indicate of the subfunctions group of a assembly of vappearing this column is lie of quantity indicates that has specificated applicable (e.g., shirt, spacer, etc.

#### E-4 SPECIA . INFORMATION NCt application

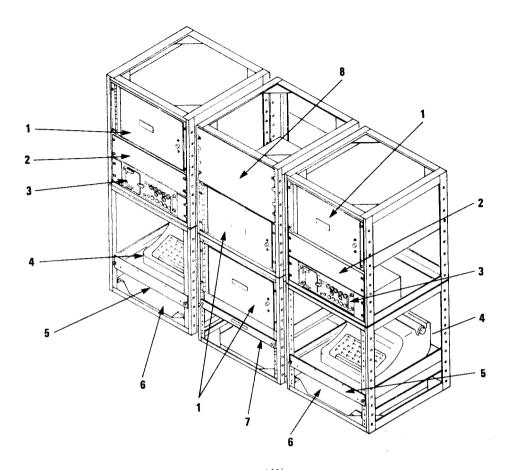
#### E-5 HOW TO LOCAT: REPAIR PARTS

- Whe Nation Stoc Number of Part Number unknown
- (1 Firs Using the table of content, determine to function: ground subground with: which to the belong. This is necessary since illustrations are prepared to function a group sor subgroup, and listings are divided in the same group.
- (2 + Secon Fine telt : illustration covering the tunition 1 group or subgroup to which the item belong
- (? Thir Identity the item on the illustration are note the illustration figure and item number of the item
- (4) Fourt Using the Repair Par's Listing, find the figure and item number noted on the illustration

When Nation! Stoc: Numb : cr Pa t Numb r

- Numbers and Part Numbers find the pertinent NS Nor panishes. This index is n NH sequence, followed by a life part numbers in alphanumeric sequence, cross-reference the illustration figure numbers at different numbers.
- (1) Second Aft finding figure at literanumber in the representation

#### E-6: ADDDEVIATION Not applicable



 $_{Figure\ E-I.}$  Data Analysis Central  $^{AN/TYK-10A}$  Rack-Mounted Components

#### Section II. REPAIR PARTS LIST

(1)		(2)	(3)	(4)	(5)	(6)	(7)	(8) <b>1TY</b>
(a) FIG	(b)	SMR CODE	NATIONAL Stock Number	PART Number	FSCM	DESCRIPTION	U/M	INC IN JNIT
NO.	NO.		_			Usable On Code		''''
						GROUP: 00 DATAANALYSIS CENTRAL		
E-1	1	PAODD	7125-00-139-5023	CY-7181/G	80058	CABINET, STORAGE	EA	4
E-1	2	PAOZZ	5975-00-448-5006	PWH A-131- 8GSDS	00675	PANEL, BLANK, 5-1/4 IN. X 19 IN.	EA	2
E-1	3	PAODD	5835-01-023-4332	AN/UNH-17A	15942	RECORDER-REPRODUCERSET, SOUND	EA	2
E-1	4	PAODD	7430-00-663-1241			TYPEWRITER	EA	2
E-1	5	PAODD	5811-00-223-8015	MT-4412/G	80058	SHELF, MOUNTING	EA	2
E-1	6	XBOZZ		0099-1-4060	15942	TRAY ASSEMBLY, PAPER	EA	2
E-1	7	PAODD	5830-00-537-5031	MT-1582	80058	SHELF	EA	1
E-1	8	PAOZZ	5975-00-937-4583	H6675	74156	PANEL, BLANK, 10-1/2 IN. ×19 IN	EA	1

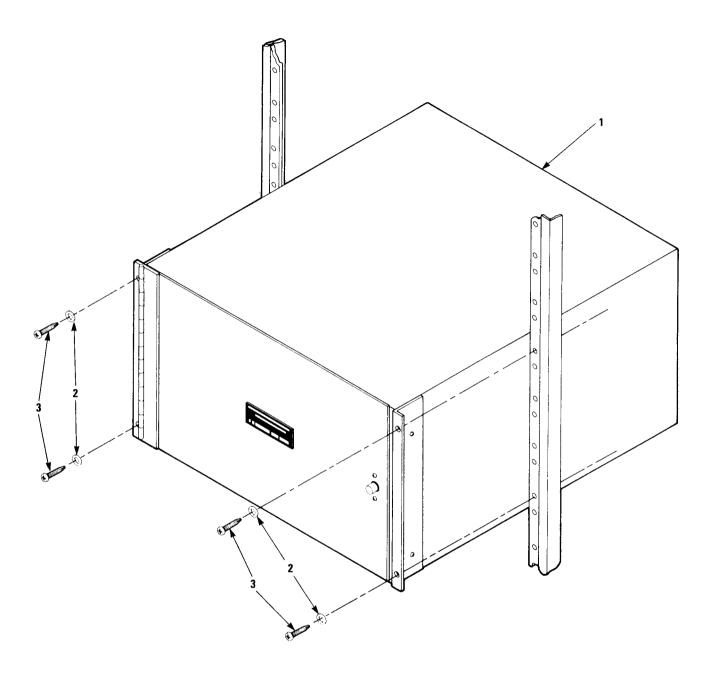


Figure E-2. Storage Cabinet CY-7181/G Mounting

SECTION II. REPAIR (1) (2) ILLUSTRATION			TS LIST (3)	TM32-5895-219-14&P (4) (5) (6)				(7)	(8)
(A) FIG NO	(B) ITEM NO	SMR CODE	NATIONAL STOCK NUMBER	PART NUMBER	FSCM	DESCRIPTION	USABLE ON CODE	U/M	QTY INC IN UNIT
						GROUP: 01 STORAGE CABINET			
E-2	1	PAODD	7125-00-139-5023	CY-7181/G	80058	CABINET, STORAGE		EA	1
E-2	2	PAOZZ	5310-00-014-5850	MS27183-42	96906	WASHER, FLAT		EA	4
E-2	3	PAOZZ	5305-00-993-1848	MS35207-165	96906	SCREW, MACHINE		EA	4

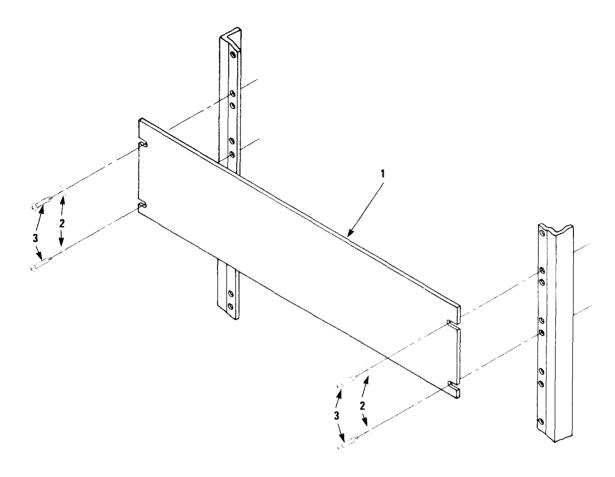


Figure E-3. Blank Panel 5-1/4 in. × 19 in. Mounting

#### section II. REPAIRPARTSLIST

1	(1) ILLUSTRATION		(3) National	(4)		(6)	(7)	(8) QTY
(a) FIG	(b) ITEM	SMR CODE	STOCK NUMBER	STOCK PART		DESCRIPTION	U/M	INC IN Unit
NO.	NO.					Usable On Code		0.17,
						GROUP: 02 BLANK PANEL 5-1/4 IN. X 19 IN.		
E-3	1	PAOZZ	5975-00-448-5006	PWH-A-13	00675	PANEL, BLANK, 5-1/4 IN. × 19 IN.	EA	1
E-3	2	PAOZZ	5310-00-014-5850	MS27183-42	96906	WASHER, FLAT	EA	4
E-3	3	PAOZZ	5305-00-993-1848	MS35207-265	96906	SCREW, MACHINE	ΕA	4

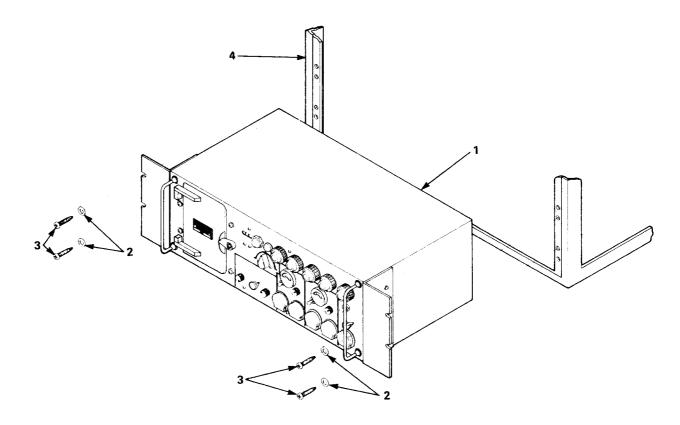


Figure E-4. Recorder-Reproducer Set, Sound AN/UNH-17A

## Section II. REPAIRPARTS LIST

(1	')		(3)	(4)	(5)	(6)	(7)	(8)
ILLUS1 (a) FIG	(b) ITEM	SMR CODE	NATIONAL Stock Number	PART Number	FSCM	DESCRIPTION	U/M	QTY INC IN Unit
NO.	NO.					Usable On Code		
						GROUP: 03 RECORDER-REPRODUCER SET, SOUND		
	1	PAODD 5	8835-01-023-4332	AN/UNH-17A	15942	RECORDER-REPRODUCER SET, SOUND	EA	
				MS27183-42	96906	WASHER, FLAT	EA	4
				MS35207-265	96906	SCREW, MACHINE	EA	4

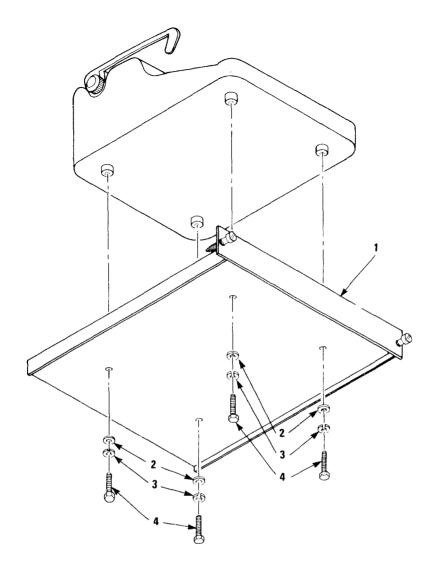


Figure E-5. Typewriter Mounting

Section II. REPAIRPARTS LIST

(a) FIG	RATION (b)	(2) SMR CODE	(3) NATIONAL STOCK NUMBER	(4) Part Number	(5) FSCM	(6) DESCRIPTION	(7) U/M	(8) DTY INC IN
NO.	NO.					Usable On Code		TINL
						GROUP: 04 TYPEWRITERMOUNT ING SHELF		
E-5	i	PAODD	5811-00-223-8015	MT-4412/G	80058	SHELF, MOUNTING	EA	1
E-5	ר	PAOZZ	5310-00-014-5850	MS27183-42	96906	WASHER, FLAT	EA	4
E-5	3	PAOZZ	5310-00-582-5965	MS35338-44	96906	WASHER, SPLIT	EA	4
E-5	4	PAOZZ	5305-00-267-8974	MS90726-8	96906	SCREW, CAP, HEXAGON	EA	4

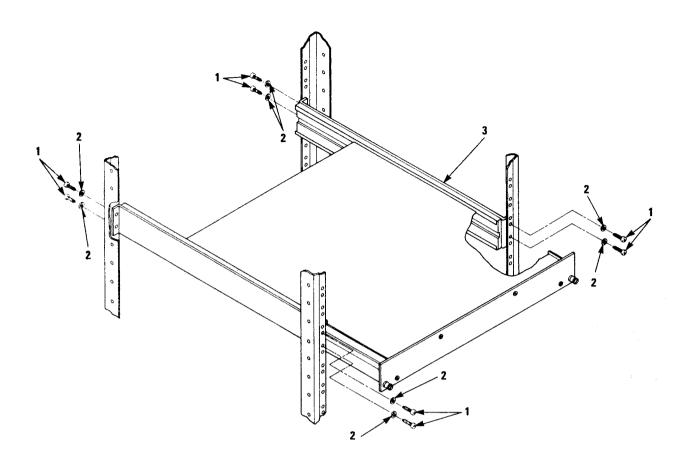


Figure E-6. Typewriter Shelf Mounting

#### Section II. REPAIR PARTS LIST

ILLUST		(2)	(3) National	(4)	(5)	(6)	(7)	(8) QTY
(a) FIG	(b) ITEM	SMR CODE	STOCK Number	PART Number	FSCM	DESCRIPTION	U/M	INC IN Unit
NO.	NO.					Usable On Code		
						GROUP: 05 TYPEWRITER SHELF		
E-6	1	PAOZZ	5305-00-993-1848	MS35207-265	96906	SCREW, MACHINE	EA	8
E-6	2	PAOZZ	5310-00-014-5850	MS27183-42	96906	WASHER, FLAT	EA	8
E-6	3	PAODD	5811-00-223-8015	MT-44 1 2/G	80058	SHELF, TYPEWRITER	EA	] 1

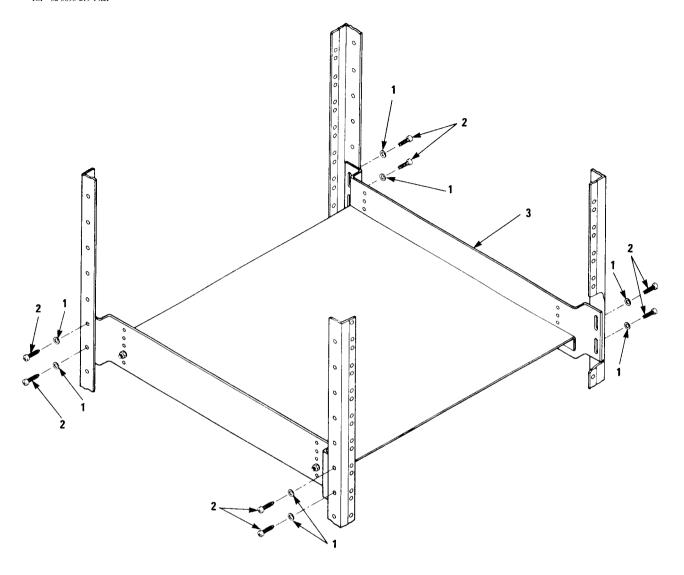


Figure E-7. PaperTray Assembly Mounting

#### Section II. REPAIRPARTSLIST

() ILLUST	1) Ration	(2)	(3) National	(4)	(5)	(6)	(7)	(8) QTY
(a) FIG	(b) ITEM	SMR Code	STOCK NUMBER	PART Number	FSCM	DESCRIPTION	U/M	INC IN Unit
NO.	NO.					Usable On Code		UNIT
						GROUP: 06 PAPER TRAY ASSEMBLY		
E-7	1	PAOZZ	5310-00-014-5850	MS27183-42	96906	WASHER, FLAT	EA	8
E-7	2	PAOZZ	5305-00-993-1848	MS35207-265	96906	SCREW, MACHINE	EA	8
E-7	3	PAOZZ		0099-1-4060	15942 TRAY ASSEMBLY, PAPER		EA	1

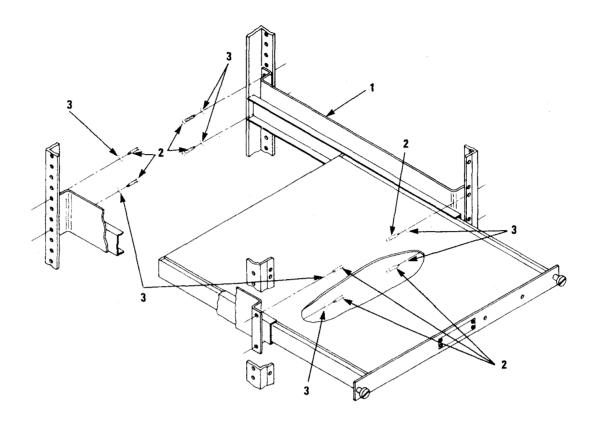


Figure E-8. Shelf Mounting

Section II. REPAIR PARTS LIST

ILLUST (a) FIG	(b) ITEM	(2) SMR CODE	(3) National Stock Number	(4) Part Number	(5) FSCM	(6) DESCRIPTION	(7) U/M	(8) QTY INC IN UNIT
NO.	NO.					Usable On Code		
						GROUP: 07 SHELF		
E-8	1	PAODD	5830-00-537-5031	MT-1582	80058	SHELF	EA	1
E-8	2	PAOZZ	5305-00-993-1848	MS35207-265	96906	SCREW, MACHINE	EA	8
E-8	3	PAOZZ	5310-00-014-5850	MS27183-42	96906	WASHER, FLAT	EA	8

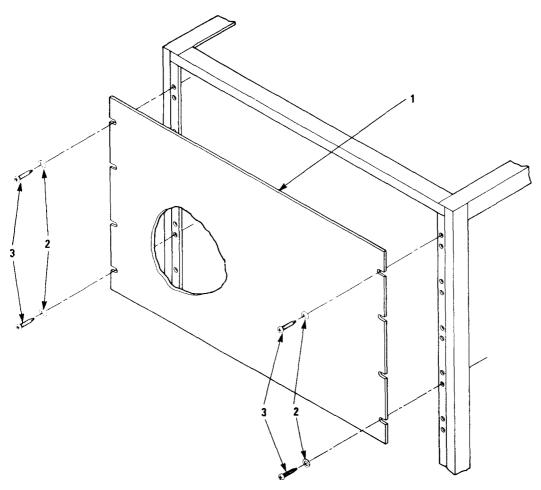


Figure E-9. Blank Panel 10-1/2 in.×19 in. Mounting

#### Section II. REPAIR PARTS LIST

( ? ILLUSTI	•	(2)	(3) National		(5)	(6)	(7)	(8) QTY INC
(a) FIG	(b) ITEM	SMR CODE	STOCK Number	PART Number	FSCM	DESCRIPTION	U/M	IN UNIT
NO.	NO.				_	Usable On Code		
						GROUP: 08 BLANK PANEL 10-1/2 IN. × 19 IN.		
E-9	1	PAOZZ	5975-00-937-4583	H-6675	74156	PANEL, BLANK, 10-1/2 IN. X 19 IN	EA	ì
E-9	2	PAOZZ	5310-00-014-5850	MS27183-42	96906	WASHER, FLAT	EA	4
E-9	3	PAOZZ	5305-00-993-1848	MS35207-265	96906	SCREW, MACHINE	EA	4

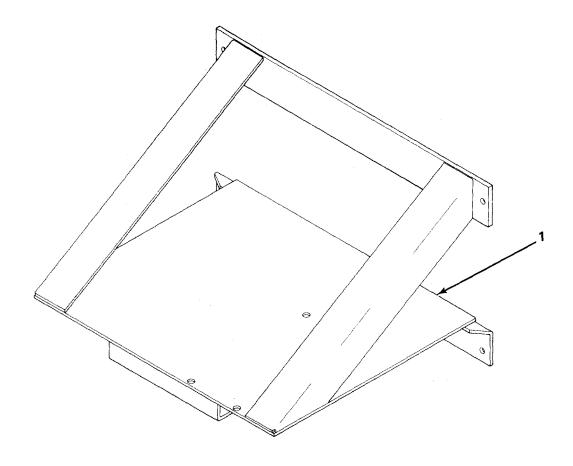


Figure E-10 Equipment Rack R-442/VRC

ILLU	(1) Tration	(2)	(3) National			(6)	(7)	(8) QTY
(a) FIG	(b)	SMR CODE	STOCK NUMBER	STOCK PART FS		DESCRIPTION	U/M	INC' IN
NS.	NO.					Usable On Code		
						GROUP: 09 EQUIPMENT RACK, R-442/VRC		
E-10	1	PAODD		0099-1-3111		EQUIPMENT RACK, R-442/VRC	EA	1

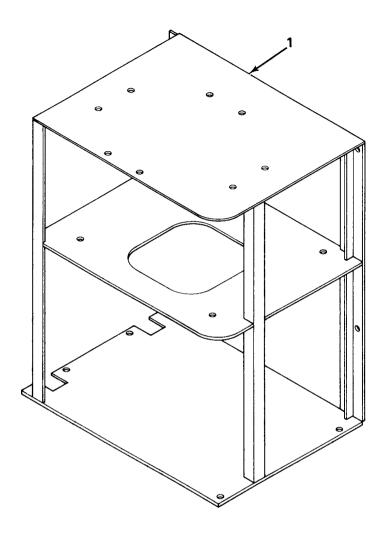


Figure E-11. Equipment Rack RT-524/VRC

ILLUST		(2)	(2) (3) (4) (		(5)	(6)	(7)	(8) QTY
(a) FIG	(b)	SMR CODE	STOCK NUMBER		FSCM	DESCRIPTION	U/M	INC
NO.	NO.					Usable On Code		
						GROUP: 10 EQUIPMENT RACK, RT-524/VRC		
E-11	1	PAODD		0099-2-4010	15942	EQUIPMENT RACK, RT-524/VRC/KY	 -8EAE <i>A</i> 	1

SECTIO	ON II. R	EPAIR PA	RTS LIST			TM32-5895-219-14&P			
(1)		(2)	(3)	(4)	(5)	(6)		(7)	(8)
ILLUS	TRATION								
			NATIONAL	PART		DESCRIPTION		U/M	QTY
(A)	(B)	SMR	STOCK	NUMBER	FSCM				INC
FIG	ITEM	CODE	NUMBER						IN
NO	NO						USABLE ON CODE		UNIT

(NOT APPLICABLE)

NATIONAL	FIGURE	ITEM	NATIONAL	FIGURE	ITEM
STOCK NUMBER	NUMBER	NUMBER	STOCK NUMBER	NUMBER	NUMBER
5310-00-014-5850	E-2	2	5830-00-537-5031	E-1	7
5310-00-014-5850	E-3	2	5830-00-537-5031	E-8	1
5310-00-014-5850	E-4	2	5310-00-582-5965	E-5	3
5310-00-014-5850	E-5	2	7430-00-663-1241	E-1	4
5310-00-014-5850	E-6	2	5975-00-937-4583	E-1	8
5310-00-014-5850	E-7	1	5975-00-937-4583	E-9	1
5310-00-014-5850	E-8	3	5305-00-993-1848	E-2	3
5310-00-014-5850	E-9	2	5305-00-993-1848	E-3	3
7125-00-139-5023	E-1	1	5305-00-993-1848	E-4	3
7125-00-139-5023	E-2	1	5305-00-993-1848	E-6	1
5811-00-223-8015	E-1	5	5305-00-993-1848	E-7	2
5811-00-223-8015	E-5	1	5305-00-993-1848	E-8	2
5811-00-223-8015	E-6	3	5305-00-993-1848	E-9	3
5305-00-267-8974	E-5	4	5835-01-023-4332	E-1	3
5975-00-448-5006	E-1	2	5835-01-023-4332	E-4	1
5975-00-448-5006	E-3	1			

PART NUMBER	FSCM	FIG NO	ITEM NO	PART NUMBER	FSCM	FIG NO	ITEM NO
AN/UNH-17A AN/UNH-17A CY-7181/G CY-7181/G H-6675 H-6675 H-6675 H-627183-42 MS27183-42 MS27183-42 MS27183-42 MS27183-42 MS27183-42 MS27183-42 MS27183-42 MS27183-42 MS27183-42 MS27183-45 MS35207-265	15942 15942 80058 74156 74156 96906 96906 96906 96906 96906 96906 96906 96906 96906	E-1 E-4 E-1 E-2 E-1 E-2 E-3 E-4 E-5 E-6 E-7 E-8 E-9 E-2 E-3	3 1 1 8 1 2 2 2 2 2 2 2 2 3 3 3 3	MS35207-265 MS35207-265 MS35207-265 MS25307-265 MS35338-44 MS90726-8 MT-1582 MT-1582 MT-4412/G MT-4412/G MT-4412/G PWH A-131-8GSDS PWH A-131-8GSDS 0099-1-311 0099-1-4010	96906 96906 96906 96906 96906 80058 80058 80058 80058 00675 15942 15942	E-6 E-7 E-8 E-9 E-5 E-1 E-8 E-1 E-5 E-6 E-1 E-3 E-10 E-11 E-11	1 2 2 3 3 4 7 1 5 1 3 2 1 1 1 6 3
MS35207-265	96906	E-4	3	0099-1-4060	15942	E-7	J

#### APPENDIX F

#### **EXPENDABLE SUPPLIES AND MATERIALS LIST**

#### Section | INTRODUCTION

F-1 SCOPE. This appendix lists expendable supplies and materials you will need to operate and maintain the AN/TYK-1 0A. These items are authorized to you by CTA 50-970, Expendable Items (except Medical, Class V, Repair Parts, and Heraldic Items).

#### F-2 EXPLANATION OF COLUMNS.

- a. Column 1, Item Number. This number is assigned to the entry in the listing and is referenced in the narrative instructions to identify the material (e.g., "Use cleaning compound, item 5, App. F").
- b. Column 2, Level. This column identifies the lowest level of maintenance that requires the listed item.

0																					Ω				٠.	~ -	. /4	n.		
v	•	*	٠	٠	٠		٠	•	٠	٠	٠	*		٠		*		*		٠	O	Ψ	¢	Ia	u	u	/1	اب	ľ	٠,

- c. Column 3, National Stock Number (NSN). This is the NSN assigned to the item; use it to request or requisition the item.
- d. Column 4, Description. Indicates the Federal Item name and, if required, a description to identify the item. The last line for each item indicates the part number followed by the Federal Supply Code for Manufacturer (FSCM) in parentheses, if applicable.
- e. Column 5, Unit of Measure (U/M). Indicates the measure used in performing the actual maintenance function. This measure is expressed by a two-character alphabetical abbreviation (e.g., ea, in, pr). If the U/M differs from the unit of issue, requisition the lowest unit that will satisfy your requirements.

TM32-5895-219-14&P

(1)	(2)	SECTION II. EXPENDA	ABLE SUPPLIES AND MATERIALS LIST (4)	(5)
ITEM NUMBER	LEVEL	NATIONAL STOCK NUMBER	DESCRIPTION	U/M
	С	9150-00-231-6639	OIL, LUBRICATING, GENERAL PURPOSE	CN

By Order of the Secretary of the Army:

E. C. MEYER

General, United States Army

Chief of Staff

Official:

J. C. PENNINGTON

Major General, United States Army
The Adjutant General

U.S. GOVERNMENT PRINTING OFFICE: 1983 O - 381-647 (2701)

#### RECOMMENDED CHANGES TO EQUIPMENT TECHNICAL PUBLICATIONS



## SOMETHING WRONG WITH THIS PUBLICATION?

THEN. JOT DOWN THE DOPE ABOUT IT ON THIS FORM, CAREFULLY TEAR IT OUT, FOLD IT AND DROP IT IN THE MAIL!

FROM: (PRINT YOUR UNIT'S COMPLETE ADDRESS)

OPERATIONS SECTION 375th ASA Co

Fort Hood, TX 76544

DATE SENT

**PUBLICATION NUMBER** 

TEAR ALONG PERFORATED LINE

TM 32-5895-215-ESC

PUBLICATION DATE

**PUBLICATION TITLE** 

Jul 76

AN/MLO-24

IM 5		-213-ES	,,,	Jui	76	AN/ MLQ=24
BE EXAC	CTPIN-P	OINT WHE	RE IT IS	IN THIS SPACE TI	ELL WHAT I	WRONG
PAGE NO	PARA- GRAPH	FIGURE	TABLE NO.	AND WHAT SHOU		
	<b>9</b> , 1, 1, 1, 1		,			
6	2н			The rating operational IP-81A.	for this conditi	step does not account for the on of the counter on the
				counter is	inoperat	rate the system red when the ive since the equipment cannot ary mission.
6	21		:	Change inst remaining t		to read "Repeat Step H for system".
				SA	m P	LE
PRINTED	NAME, GRAD	DE OR TITLE	. AND TELES	HONE NUMBER	SIGN HI	RE:

DA 1 JUL 79 2028-2

Bill N. Ernest

PREVIOUS EDITIONS ARE OBSOLETE.

000-000

SP/4

P.S.--IF YOUR OUTFIT WANTS TO KNOW ABOUT YOUR RECOMMENDATION MAKE A CARBON COPY OF THIS AND GIVE IT TO YOUR HEADQUARTERS.

FILL IN YOUR UNIT'S ADDRESS

FOLD BACK

DEPARTMENT OF THE ARMY

POSTAGE AND FEES PAID DEPARTMENT OF THE ARMY DOD 314



TEAR ALONG PERFORATED LINE

OFFICIAL BUSINESS PENALTY FOR PRIVATE USE \$300

Commander

US Army Electronics Materiel Readiness Activity

ATTN: SELEM-ME-E

Vint Hill Farms Station Warrenton, Virginia 20186

#### RECOMMENDED CHANGES TO EQUIPMENT TECHNICAL PUBLICATIONS



## SOMETHING WRONG WITH THIS PUBLICATION?

FROM: (PRINT YOUR UNIT'S CO

FROM: (PRINT YOUR UNIT'S COMPLETE ADDRESS)

THEN. JOT DOWN THE DOPE ABOUT IT ON THIS FORM, CAREFULLY TEAR IT OUT, FOLD IT AND DROP IT IN THE MAIL!

DATE SENT

PUBLICATION NUMBER

TEAR ALONG PERFORATED LINE

TM 32-5895-219-14&P

PUBLICATION DATE

PUBLICATION TITLE

17 Dec 79

Data Analysis Central

AN/ TYK - 104

BE EXACT PIN-POINT WHERE IT IS					L	l	AN/ IIN-			
PAGE	PARA-	FIGURE	TABLE	IN THIS	SPACE TELL HAT SHOULD	WHAT IS BE DONE	WRONG ABOUT IT:			
NO.	GRAPH	NO.	NO.							
					•					
			ļ						•	
										*
		·								1 1 1
										* **
			<u> </u>					 		
PRINTED	MAME GRAD		AND TELEP	HONE MILL	aco	SIGN HE	DE .			

DA 1 JUL 79 2028-2

PREVIOUS EDITIONS ARE OBSOLETE. P.S.--IF YOUR OUTFIT WANTS TO KNOW ABOUT YOUR RECOMMENDATION MAKE A CARBON COPY OF THIS AND GIVE IT TO YOUR HEADQUARTERS.

FILL IN YOUR UNIT'S ADDRESS

FOLD BACK

DEPARTMENT OF THE ARMY

POSTAGE AND FEES PAID DEPARTMENT OF THE ARMY DOD 314



TEAR ALONG PERFORATED LINE

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE \$300

Commander

US Army Electronics Materiel Readiness Activity ATTN: SELEM-ME-E Vint Hill Farms Station Warrenton, Virginia 20186

#### RECOMMENDED CHANGES TO EQUIPMENT TECHNICAL PUBLICATIONS

		ENDED ONAIN	0.0.0	Eddi MENT FEOTMORE FOR FOR TONE		
51119		SOMETI		WRONG WITH THIS PUBLICATION?		
	THEN LOT DO	WAL THE	FROM:	(PRINT YOUR UNIT'S COMPLETE ADDRESS)		
3 34 6	HEN. JOT DON OOPE ABOUT IT	ON THE	}			
	ORM, CAREFULI OUT, FOLD IT AN					
10000000000000000000000000000000000000	N THE MAIL!		DATES	ENT		
PUBLICATION NUMBER		PUBLICATION DA	ATE I	PUBLICATION TITLE		
TM 32-5895-219-14&F	,	17 Dec 7	1	Data Analysis Central AN/TYK-10A		
BE EXACTPIN-POINT WHER	EITIE	SPACE TELL V	WUAT IS			
PAGE PARA- FIGURE NO. GRAPH NO.		NO WHAT SHOULD BE DONE ABOUT IT:				
	l l					
CEN						
27.7						
TEAR ALONG PERFORATED LINE						
ONC						
<del>1</del>						
5						
	]					
!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!						
PRINTED NAME, GRADE OR TITLE, A	AND TELEPHONE NUMI	BER :	SIGN HEF	RE:		

DA 1 FORM 2028-2

PREVIOUS EDITIONS ARE OBSOLETE.

P.S.--IF YOUR OUTFIT WANTS TO KNOW ABOUT YOUR RECOMMENDATION MAKE A CARBON COPY OF THIS AND GIVE IT TO YOUR HEADQUARTERS.

TEAR ALONG PERFORATED LINE

FILL IN YOUR UNIT'S ADDRESS

FOLD BACK

DEPARTMENT OF THE ARMY

POSTAGE AND FEES PAID DEPARTMENT OF THE ARMY DOD 314



OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE \$300

Commander
US Army Electronics Materiel Readiness Activity
ATTN: SELEM-ME-E
Vint Hill Farms Station
Warrenton, Virginia 22186

#### RECOMMENDED CHANGES TO EQUIPMENT TECHNICAL PUBLICATIONS



# SOMETHING WRONG WITH THIS PUBLICATION?

FROM: (PRINT YOUR UNIT'S COMPLETE ADDRESS)

THEN. . JOT DOWN THE DOPE ABOUT IT ON THIS FORM, CAREFULLY TEAR IT OUT, FOLD IT AND DROP IT IN THE MAIL!

DATE SENT

PUBLICATION NUMBER

TEAR ALONG PERFORATED LINE

TM 32-5895-219-14&P

**PUBLICATION DATE** 

17 Dec 79

PUBLICATION TITLE

Data Analysis Central

AN/ TYK-10A

BE EXACT. PIN-POINT WHERE IT IS			ME 11 15	IN THIS SPACE TELL WHAT IS WRONG					
PAGE	PARA-	FIGURE NO.	TABLE	AND WHAT SHOULD BE DONE ABOUT IT:					
NO.	GRAPH	NO.	NO.						
	}								
		l							
	!	ŀ							
			•						
	ł								
		Ī							
	ŧ	l							
	ļ	1							
		l							
	<b>!</b> .	1	1						
	•	l							
		İ							
			1						
	<b>.</b>		<b>i</b> i						
			1						
	l .	İ							
			<u>l</u>						
		:	i						
1			1						
			1 1						
i i									
			1						
			1						
	ļ								
			L.,						
PRINTED NAME, GRADE OR TITLE, AND TELEP				HONE NUMBER SIGN HERE:					
1				•					

DA 1 JUL 79 2028-2

PREVIOUS EDITIONS ARE OBSOLETE.

P.S.--IF YOUR OUTFIT WANTS TO KNOW ABOUT YOUR RECOMMENDATION MAKE A CARBON COPY OF THIS AND GIVE IT TO YOUR HEADQUARTERS.

FILL IN YOUR UNIT'S ADDRESS

FOLD BACK

DEPARTMENT OF THE ARMY

POSTAGE AND FEES PAID DEPARTMENT OF THE ARMY DOD 314



TEAR ALONG PERFORATED LINE

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE \$300

Commander
US Army Electronics Materiel Readiness Activity
ATTN: SELEM-ME-E
Vint Hill Farms Station
Warrenton, Virginia 27186

# COMMANDER US ARMY ELECTRONICS MATERIEL READINESS ACTIVITY WARRENTON, VIRGINIA 22186

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, \$300

POSTAGE AND FEES PAID DEPARTMENT OF THE ARMY DoD-314

