TM 11-5995-207-12

DEPARTMENT OF THE ARMY TECHNICAL MANUAL

OPERATOR'S AND *ORG*ANIZATI*ON*AL

M*AINTENANCE* MANUAL

TEST SET GROUP, RADAR

0Q-59/APS-94D

This copy is a reprint which includes current pages from Changes 1 and 2.

H E A D Q U A R T E R S, D E P A R T M E N T O F THE A R M Y

AUGUST 1970

WARNING

DANGEROUS VOLTAGES EXIST IN THIS EQUIPMENT

Be careful when working on the 115-volt circuits.

DON'T TAKE CHANCES!

WARNING

THE FUMES OF TRICHLOROETHANE ARE TOXIC

Provide thorough ventilation whenever used. DO NOT use near an open flammable Trichloroethane is not flammable, but exposure of the fumes to an open, fame converts the fumes to highly toxic, dangerous gases.

Change

No.2

HEDQUARTERS
DEPARTMENT OF THE ARMY
Washington, DC, 19 April 1982

Operator's and Organizational Maintenance Manual
TEST SET GROUPS, RADAR
OQ9APS94D AND OQ-9A/APS-94D
(NSN 6625-00-194-2842)

TM 11 5595-207-12, 21 August 1970, is changed a follows:

1. New or changed material is indicated by a vertical bar in the margin of the page.
2. Remove and insert pages as indicated below:

Remove	*Insert*
i through iii	i through ii
1-1 and 1-2	1-1 and 1-2
A-1	A-1
None	C-1 through C-4
None	E-1 through E-3/(E-4 blank)

3. File this change sheet i front of the manual for reference purposes. By Order of the Secretary of the Army :

E**. C.** MEYER
General, United States Army Official:
Chief of Staff

ROBERT M. JOYCE
Brigadier General, United States Army
The Adjutant General

Distribution:
To be distributed in accordance with DA Form 12-36, Organizational Maintenance requirements for AN/APS-9.

TM 11-5995-207-12
C1

Change
No. 1

HEADQUARTERS
DEPARTMENT OF THE Army
WASHIGTON, DC, *2 September 1981*

Operator's and Organizational Maintenance Manual
TEST SET GROUPS, RADAR
OQ-59/APS-94D AND OQ-59A/APS-94D
(NSN 6625-00-194-2842)

TM 11-5995-207-12, 21 August 1970, is changed as follows below. This change reflects the alterations made to the OQ-59/APS-94D to add the capability to test Radar Surveillance Set ANIAPS-94F. The alteration does not change the capability of the test t group to test the AN/APS-94D and the ANPS-94E Radar Surveillance Sets. The modified test set group bears the new designation ofOQ-59APS-94D.

1. The following information is applicable throughout this manual.
   a. Test Set Group, Radar OQ-59/APS-94D also means Test Set Group, Radar OQ-59APS-94D.
   b. Monitor, Electrical Power MX-8570APS-94D also means Monitor, Electrical Power MX-8570AIAPS-94D.
   c. Accessory Kit, Radar Test Set Group MK-1209/APS-94D also means Accessory Kit, Radar Test Set Group MK-1209I APS-94D, which includes Dummy Load-Coupler Assembly DA-691/APS-94F.
   d Dummy Load, Electrical DA-561U also mans Dummy Load-Coupler Assembly DA-691/APS-94F.
2. Title of the manual is changed as indicated above.
3. Remove and insert pages as indicated below:

Remove	*Insert*
WARING page(inside front cover)	A..B blank)
i and ii	i through iii(iv blank)
1-1 through 1-9	1-1 through 1-11(1-12 blank)
2-1 and 2-2	2-1 and 2-2
2-5 and 2-6	2-5 and 2-6
3-1 through 3-4	3-1 through 3-4
4-l and 4-2	4-1 and 4-2
A-l	A-l(A-2blank)
B-1 through B-8	B-1 throughB-8
None	FO 2-5.1 and FO 2-5.2

4. New or change material is indicated by a vertical r in the margin of the page.
5. File this change sheet in front of the manual for reference purposes. By Order of the Secretary of the Army:

E. C. MEYER
General, United States Army Official:
Chief of Staff

Official:
ROBERT M. JOYCE
Brigadier General United States Army
*The Adjutant G*en*eral*

DISTRIBUTION:
To be distributed in accordance with DA Form 12-36 Organizational maintenance requirements for AN/APS-94.

WARNING

All operations must conform TB 385-4, Safety Precautions for r Maintenance of Electrical/Electronic Equipment(8 August 1979).

WARNING

DANGEROUS VOLTAGES EXIST IN THIS EQUIPMENT. Be careful when working on e 115 volt circuits.

DON'T TAKE CHANCES

WARNING

Adequate ventilation should be provided when using TRICHLOROTRIFLUOROETHANE. Prolonged breathing of vapor should be avoided. The solvent should not be used near heat or open flame; The products of decomposition are toxic and irritating. Since TRICHLOROTRIFLUOROETHANE dissolves natural oils, prolong contact with skin should be avoided. When necessary, use gloves which the solvent cannot penetrate. If the solvent is taken internally, call a physician immediately.

WARNING

Avoid shock by grounding the test set. Ensure that the ac line power plug is connected to a circuit that has a protective earth (safety) ground. Improperly grounded equipment an result in hazardous voltages between equipments. Ensure that all devices connected to the test set are connected to earth ground.

Technical Manual

HEADQUARTERS
DEPARTMENT OF THE ARMY
No. 11-5995-207-12 Washington, DC, 21 August, 1980

OPERATOR'S AND ORGANIZATIONAL MAINTENANCE MANUAL
TEST SET GROUPS, RADAR
OQ-591APS-94D AND OQ-59AIAPS-94D
(NSN 6625-00-194-2842)

LIST OF ILLUSTRATIONS

LIST OF TABLES

CHAPTER 1
INTRODUCTION

Section I. GENERAL

1-1. Scope
This manual describes Test Set Group, Radar *00-59*/APS-94D and provides instructions for installation, operation, maintenance, and demolition. Also included are instructions for cleaning and inspection of the equipment and replacement of parts available to the operator and organizational technicians.

NOTE

Test Set Group, Radar OQ-59/APS-94D has the capability to bench test Radar Surveillance' Set AN/APS-94E. Test Set Group, Radar OQ-59/APS-94D has the capability to bench test Radar Surveillance Set AN/APS-94E and Radar Surveillance Set AN/APS-94F. In this manual Radar Surveillance Set AN/APS-94D also means Radar Surveillance Set AN/APS-94E when using Test Set Group, Radar OQ-59A/APS-94D. When reference is made to Radar Surveillance Set AN/APS-94D manuals, refer to APPENDIX A for applicable AN/APS-94E and AN/APS-94F manuals.

1.2. Index of Technical Publications Refer to the latest issue of DA/Pam 310-4 to determine whether there are new editions, change, or addition publications pertaining to the equipment.

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.

b. Report o 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 (DREP) (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 4610.19C/DLAR 4500.15.

1-3.1. 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 procedure, please let us know. Mail your letter or DA Form 2028 (Recommended Changes to Publication and Blank Form) direct to Commander, US Army Communications-Electronics Command, ATTN: DRSEL-ME-MQ, Fort Monmouth, NJ 07703. In either case, a reply will be furnished direct to you.

1-3.2. Reporting Equipment Improvement Recommendations (EIR)

If your OA-59/APS-94D needs improvements, 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 Commander, US Army Communications-Electronics Command, ATTN: DRSEL-ME-MQ, Fort Monmouth, NJ 07703. We' send you a reply.

1-3.3. Hand Receipt.

This manual has a companion document with a TM number followed by "-HR" (which stands for Hand receipt. The TM 11-5995-207-10-HR consists of preprinted hand receipts (DA Form 206) that list end item related equipment (i.e., COEI, BII, and AAL) you must account for. As an aid to property accountability, additional -HR manuals may be requisitioned from the US Army Adjutant General Publications Center, Baltimore, MD, in accordance with the procedures in Chapter 3, AR 310-2, and DA Pam 310-10-2

Section II. DESCRIPTION AND DATA

1-4. Purpose and Use

Test Set Group. Radar OQ-59/APS-94D permits bench testing of e radar set when removed from the aircraft. The test set group consists of two major components and an accessory it**,** as described in the following paragraphs.

a. Accessory Kit, Radar Test Set Group MK-1209APS-94-D. Accessory t, Radar Test Set Group MK-1209/APS-94D contains directional couplers, dummy loads, equipment supports; and most of the cables required for interconnection of the radar set. This component is used for bench operation of the radar set.

b. *Monitor, Electrical, Power MX-8570APS-94D.* Monitor, Electrical, Power MX-8570 APS-94D provides circuit breaker protection and monitors primary power supplied to the radar set. This component is used in conjunction with accessories kept the MK-1209 APS-94D, to operate the radar set. Some of the radar set Interconnecting cables are kept the MX-8570 APS-94D.

c. *Simulator-Monitor SM-567/APS-94D.* Simulator-Monitor SM-567/APS-4Dindicates the presence of radar-generated signalsin the airborne data annotation system (ADAS) and antenna circuits the radar set and generates inertial navigation signals normally supplied to the radar set from aircraft equipment. This component is used as a serving aid. Some of the cables required to interconnect the radar are kept in the SM-567APS-94D.

1-5. Technical Characteristics

a. Accessory it, Radar Test Set Group MK-1209/APS-94D

Dummy Load-Directional coupler MX-8741/APS-94D:

Coupler, Directional CU-1921/U

Quantity 2

TypeGross-Guide

Impedance..... 50 ohms

Coupling loss ..... 30 db

Dummy Load, Electrical DA561 U

Quantity 2

TypeWaveguide

Impedance..... 50 ohms

Power dissipation ..... 100 Kilowatts peak. 15 watts average (maximum)

Cable Assemblies:

Quantity 24

b. AccessoryKit, Radar Test Set Group MK-1209A/APS-4D .....(additional units) Figure 1-2.1)

Dummy Load-Coupler Assembly DA-6911APS-94-F

Type..... Pressurized

Impedance 50 ohms

Coupling loss. 40 db

Power dissipation. 250 kilowatt peak, 100 watts average (maximum).

Test Plug SM-C-945931

Waveguide Quick Disconnect Adapter SM-C-945897

Hose, Pressurizing Assembly SM-C-945898

Waveguide cover SM-B-945899

Cable Assemblies

Additional Quantity 14

c. Monitor, Electrical Power MX-8570/APS-94D

Input power requirements

AC Input ..... 108 volts to 118 volts, 3-phase line-to-neutral, 400 Hz 2 0,4 amperes per phase.

DC input ..... ± 27 volts ± 1 volt, 13 amperes

Overload protection:

AC input ..... Circuit breaker,5 amperes per phase. Trip time, 4 to 35 seconds at 200% overload.

DC input ..... Circuit breaker, 25 amperes. Trip time, 15 to 55 seconds at 200% overload.

System panel illumination test circuit — Fuse, 3 ampere time lag.

Metering:

AC phase voltages — 0-150 volts 2 (full scale)

AC phase currents — 0-5 amperes ± 2%(full scale)

DC voltage — 5-50 volts ± 2% (full scale)

DC current — 0-50 Amperes ± 2% (full scale)

Output power demand:

AC output to radar set of radar set. — 432 to 472 volt-amperes (steady state) 3phase line-to-neutral, 400 Hz ± 20 Hz

. AC output to Simu-, lator-Monitor SM-567/APS- 94D — 115 volt-amperes single-phase, 400 Hz ± 20 Hz.

DC panel illumination output to radar set — 26 to *28* volt-amperes

DC output to Sim-uator-Mostor SM-567/APS-94D. — 44 to 48 volt-amperes

C. Simulator-Monitor SM-567/APS-94D.

Input power requirements:	
In AC input from Monitor Electrical Power MX-8570/-APS-4D.	108 volts to 118 volts, single- phase, 400 Hz ±20 Hz at less than I ampere
DC input from Monitor, Electrical Power MX-8570/ APS-94D.	+27 volts ± I volt at less than 2 amperes.
AC input from radar set	10 volts volt, single phase at less than I ampere
Output power demand:	
AC output to radar single-phase 400 Hz ±20 Hz at less than I ampere.	26 volts 0.6 volt
DC output to radar set	+27 volts ±I volt at less than I ampere.

1-6. Items Comprising Test Set Group, Radar OQ-59/APS-94D

The components and dimensions of Test Set Group Radar OQ-59/APS-94D are listed in table 1-1.

1-7. Description of Accessory Kit, Radar Test Set Group MK-1209/APS-94D

The description of the MK-1209/APS-94D is given below

A. Cable Assemblies (fig. 1-1). The cable assemblies provide power and signal interconnections for AN/APS-94D bench operation. The cable assemblies supplied are listed, along with interconnection data, in table 1-2.

B. Dummy Load-Directional Couplers MX8741/APS-94D. There are two of these equipments supplied. Each MX-8741/APS-94D consists of the following items:

(1) Coupler, Directional CU-1921/U (fig. 1-2). Coupler, Directional CU-1921/U makes it possible to monitor transmitter output signals during AN/APS-94D operation.

(2) Dummy Load Electrical DA-56il U (fig. 1-2). Dummy Load, Electrical DA-561/ U provides the correct load termination for the radar set transmitter during operations.

(3) Dummy Load-Coupler Assembly DA-691/APS-94F fig. 1-2.1) Supplied in Accessory Kit, Radar Test Set Group MK-1209A/APS-94D. Used to monitor the output of the transmitter during operation with a pressurized waveguide system.

(4) Test Plug SM-C-94931

(5) Waveguide Quick Disconnect Adapter SM-C-945897

(6) Hose, Pressuring Assembly SM-C- 945898

(7) Waveguide Cover SM-B-945899

c.Indicator Set, Support (fig. 1-2) The indicator set support is comprised of two aluminum channels. The channels support the AN/APS-94D cockpit equipment complex and prevent the complex from tipping when assembled on a bench.

d.Case, Accessories CY-6826/APS-94D. The CY-6826/APS-94D is a portable aluminum " case (fig. 1-3) that has two spring-loaded handles for lifting. A valve in the case wall permits equalization of inside-to-outside air pressure. The valve operates. automatically in either direction when the pressure differential exceeds 2 pounds. The pressure can be manually relieved at any time by pressing the red button at the center of the valve. This must always be done before opening the case cover. Four rubber feet on the bottom of the case body correspond to indentation locations in the case cover and facilitate stacking for transportation or storage. The case cover is secured to the case body by eight latches, and is made airtight and watertight by a rubber gasket. Underneath a hinged lid within the cover is a storage area. The lid is locked by three press-to-release fasteners.

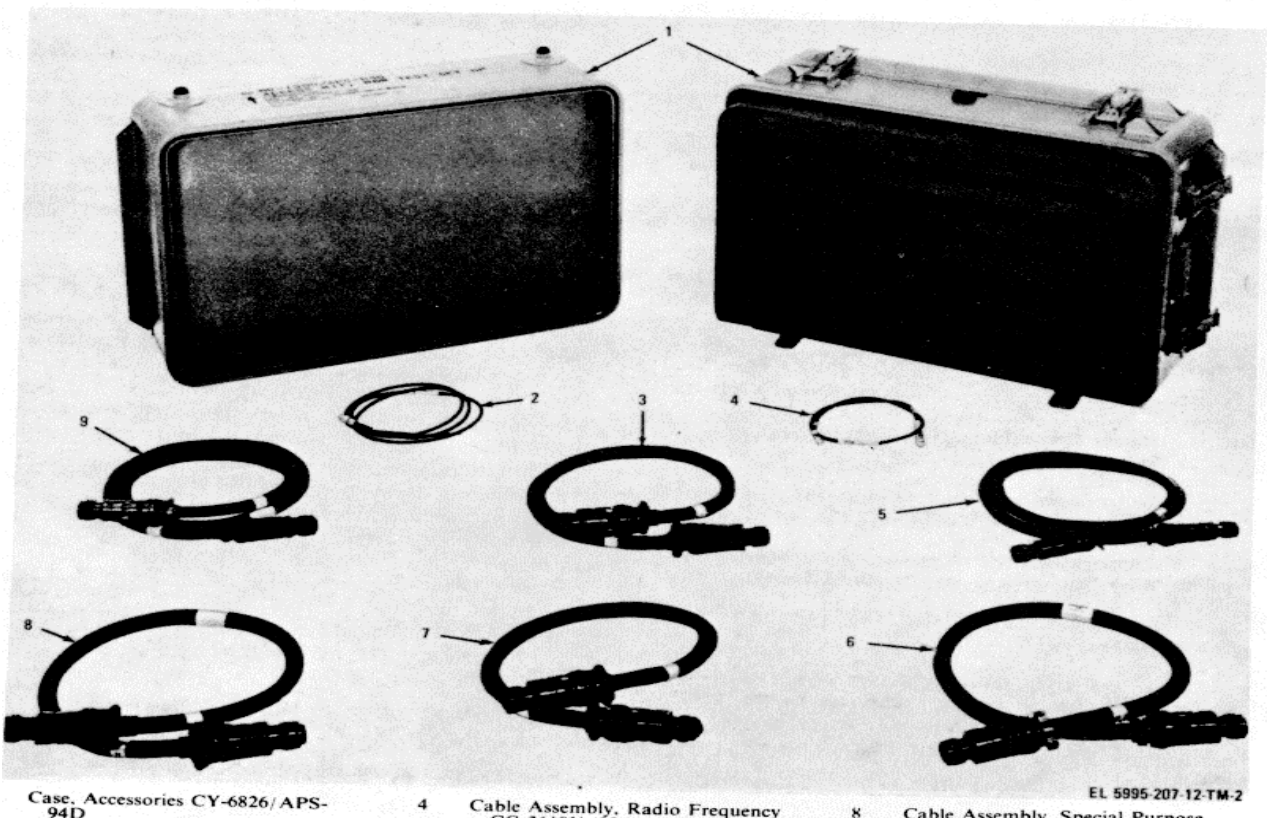
1-8. Description of Monitor, Electrical Power MX-8570/APS-94D

The MX-8570/APS-94D is contained in a carrying case identical in construction to that described in paragraph 1-7d, except that the case is smaller (Table 1-1).

a. All circuit pans of Monitor, Electrical Power MX-8570/APS-94D are mounted on the panel. The ac input primary power is connected to panel connector J 1; dc input primary power, to panel connector J2. Output primary power is supplied to external circuits through panel connectors through J3 and J4. Primary power voltage and current levels are indicated by meters mounted on the panel and phasing of the input ac primary power is indicated by panel-mounted lamps. Circuit breakers and a fuse provide overload protection

b. Four cable assemblies are supplied with the MX-8570/APS-94D to provide power interconnections for radar set operation**.** The cable nomenclature, description, and interconnection data is given in table1-3

*c.*Four additional cable assembles are supplied for the MX-8570A/APS-984D. The cable nomenclature, description and interconnection data is given in Table 1-3.1



Case, Accessories CY-6826/APS-94D 4 Cable Assembly, Radio Frequency 8 Cable Assembly, Special Purpose

1. CaseAccessoriesCY6826/APS-94D
]2.Cable Assembly, Radio Frequency CG-3618/U (6ft.), (cable W11 through W14,W16
2 Cable Assembly,
3 Cable assembly Special Purpose Electrical CS-12231/U (2ft)
4. Cable Assembly, Radio Frequency CG-3618U (3ft), (cable W8, W9, W10, W15)
5 Cable Assembly, Special Purpose Electrical CX12235/U (6ft)
6 Cable Assembly, Special Purpose Electrical CX-12232/u(2ft)
7Cable Assembly, Special Purpose Electrical CX-12236/U (3ft) Cable 8 Assembly, Special Purpose Electrical CX-12237/U (4ft)
9 Cable Assembly, Special Purpose Electrical CX-12234/U (4ft)

Figure 1-1. Accessory Kit, Radar Test Group MK-1209/APS-94D, Case Accessories CY-6826/APS-94D and cable assemblies

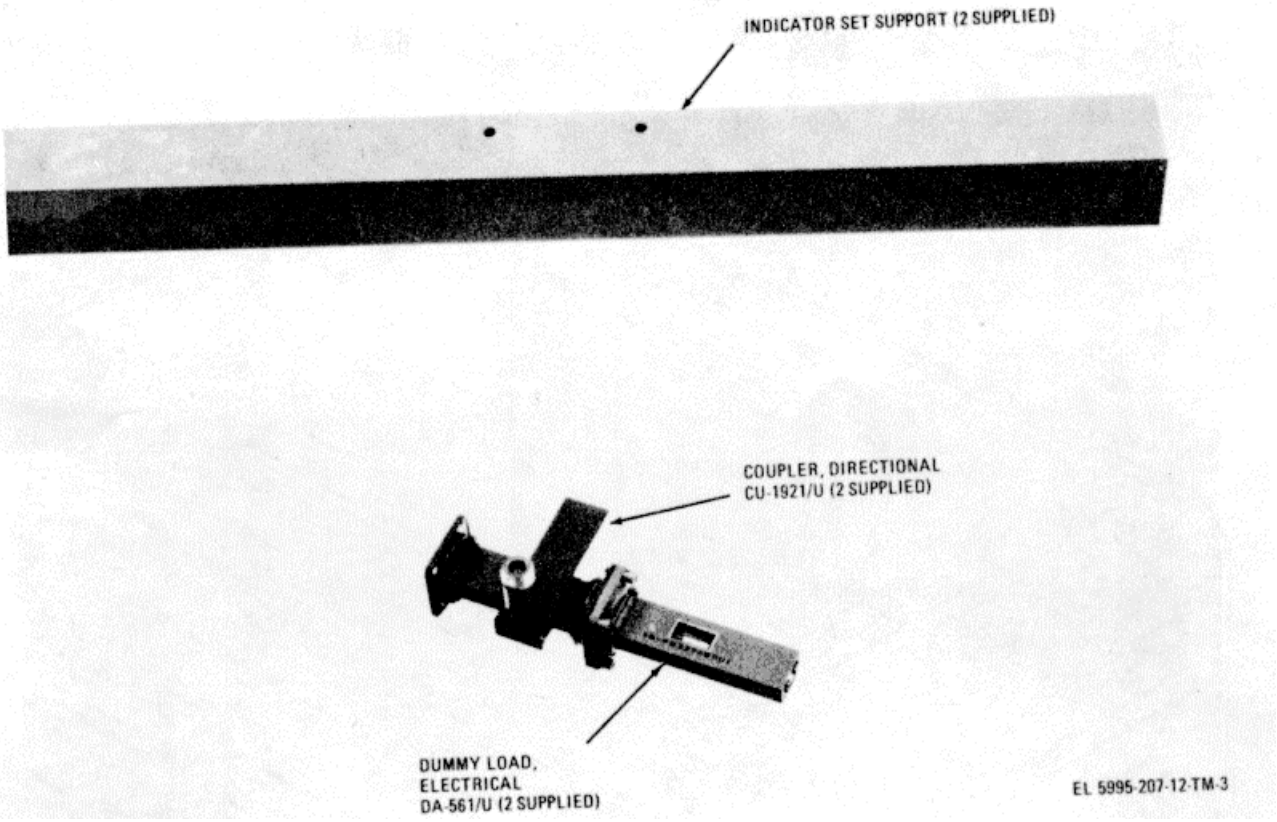
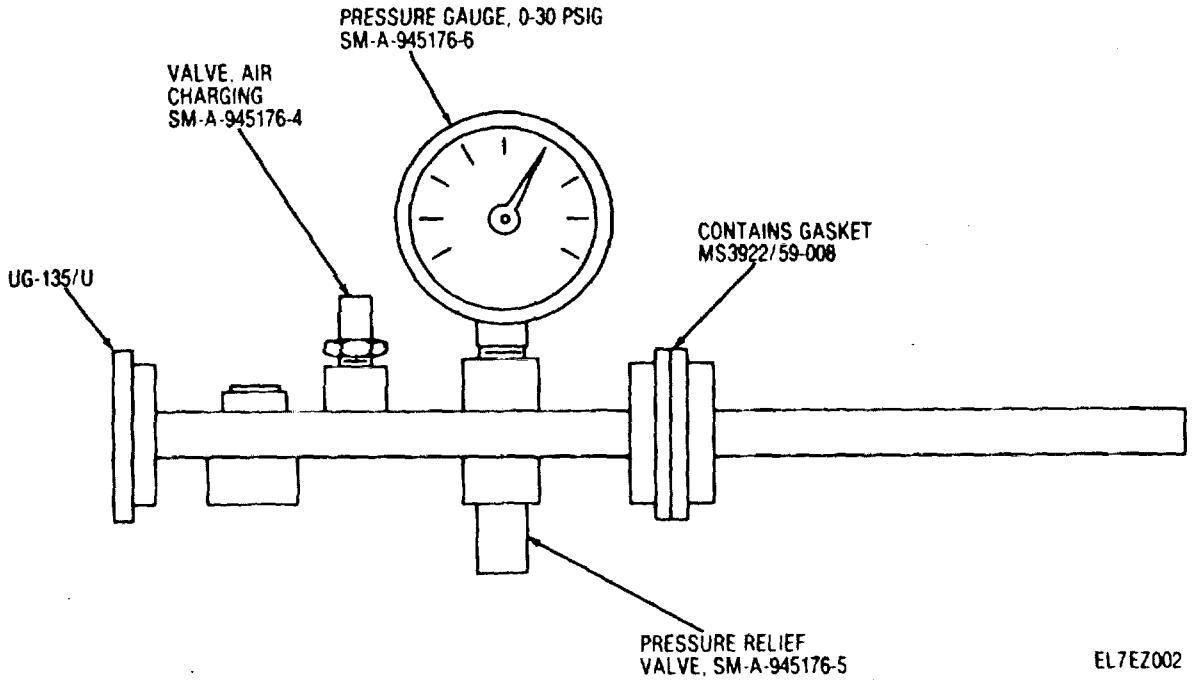


Figure *1-2. Dummy Load-Directional Couplers MX-8741/APS-94D and indicator support brackets.*



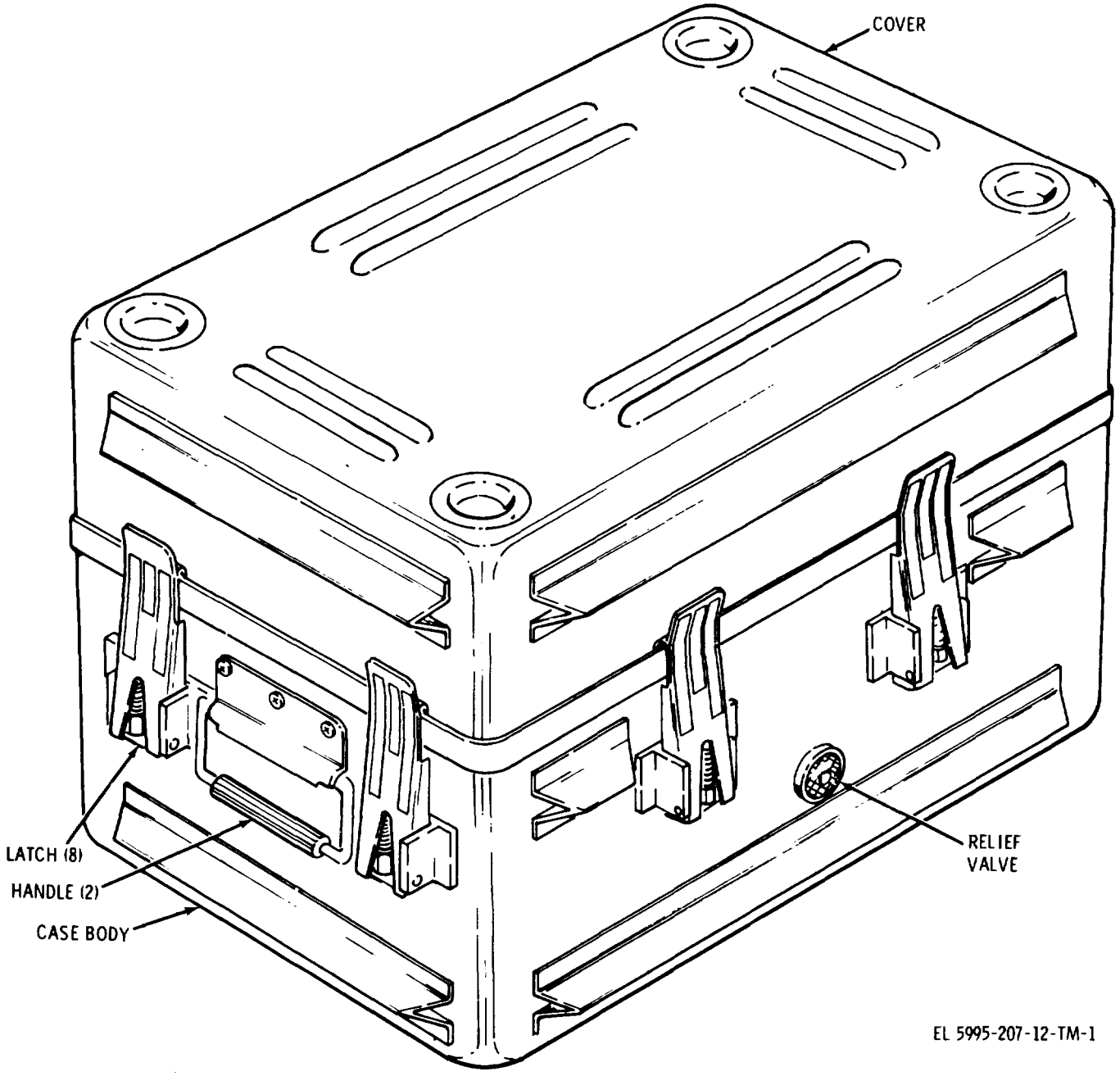


Figure 1-3. Typical case 1-6

Table 1-1. Components and Dimensions

FSN	Quantity	Item	Dimensions (in) Height Depth Width	Unit Weight(lb.)
6625-194-2842	1	Test Set Group. Radar OQ-59/APS-94D including:	19-1/422-3/'4 31	80
6625-938-0229	1	Accessory Kit, Radar Test Set Group MK-1209,APS-94D.		
	1	Waveguide Load Assembly SM-C-945930 I		
	1	Dummy Load- Coupler Assembly DA-691/APS-94F I		
	1	Waveguide Cover SM-B-945899		
6625-938-02352	2	Dummy Load Directional Coupler MX-8741/APS-94D:		
5985-07840682	2	Coupler, Directional CU-1921,U3	3 3-1/2 3	
	2	Dummy Load, Electrical DA-56I/U4	4 1-1/2 1-1/2	
		Cable assemblies (table 1-2). I		
	1	Test Plug SM-C-945931 I		
	1	Pressurization hose assembly SM-C-945898 1		
	1	Waveguide quick disconnect adapter SM-C-945897 2		
	2	Indicator set support Case Accessories 1		
	1	CY-6826/APS-94D		
6625-938-02311	1	Monitor, Electrical Power MX-8570/APS-94D	19-3/42124-1/4	58
		Cable assemblies (table 1-3)		
6625-762-48871	1	Simulator-Monitor SM-567:APS-94D	19-1/42124-1/4	53
		Cable assemblies (table 1-4).		

Table 1-2. Cable Assemblies in Accessories Kit, Radar Test Set Group MK-1209A/APS-94D

Ref. des.	Nomenclature and Description	P1 destination	P2 destination
W2	Cable Assembly, Special Purpose Electrical CX-12231/U (2 ft) (32-conductor cable).	Connector 2JI of RT-899/APS-94D	Connector J3 of J-2794/ APS94D.
W3	Cable Assembly Special Purpose Electrical CX-12234/U (4 ft) (26-conductor cable).	Connector JI of MT-4015/APS-94D	Connector J4 of J-2794/APS-94D.
W4	Cable Assembly, Special Purpose Electrical CX-12235/U (6 ft) (19-conductor cable).	Connector 3JI of CM-374/APS-94D	Connector J5 of J-2794/APS-94D.
W5	Cable Assembly. Special Purpose Electrical CX-12247/U (4 ft), (41-conductor cable).	Connector 3J2 of CM-374/APS-94D	Connector J3 of MT-4015/APS-94D.
W6	Cable Assembly, Special Purpose Electrical CX-12236/U (3 ft) (4-conductor cable).	Connector JI of recorder assembly of RO-352/APS-94D.	Connector J2 of MT-4015/APS-94D.
W7	Cable Assembly, Special Purpose , Electrical CX-12232/U (2 ft).	Connector J5 of recorder assembly of RO-352/APS-94D.	Connector J1 of film magazine of
W8	Cable Assembly, Radio Frequency CG-3618/U (3 ft).	ANT TRIG connector 2J2 of RT-899/APS-94D.	Connector 3J3 of CM-374/APS-94D.
W9	Cable Assembly, Radio Frequency CG-3618/U (3 ft).	RCVR VID connector 2J3 of RT-899/APS4D.	Connector 3J9 of CM-374/APS-94D.
W10	Cable Assembly, Radio Frequency CG-3618/U (3 ft)	MOD TRIG connector 2J4 of RT-899/APS94-D	Connector 3J4 of CM-374/APS-94D.
W11	Cable Assembly, Radio Frequency CG-3618/U (6ft).	SWEEP GATE connector 6J3 of IP-923/APS-94D.	Connector 3J5 of cM-374/APS-94D.

Table 1-2. Cable Assemblies n Accessories Kit, Radar test Set Group MK-1209A/APS-94D (cont)

Ref. des.	Nomenclature and Description	P1 destination	P2 destination
W12	Cable Assembly, Radio Frequency CG-3618/U (6 ft).	VIDEO FT connector 6J1 of IP-923/APS-94D.	Connector 3J6 of CM-374/APS-94D.
W13	Cable Assembly. Radio Frequency CG-3618/U (6 ft)	Connector 3J7 of CM-374/APS-94D 923APS-94D.	VIDEO MT connector 6J2 of IP-
W14	Cable Assembly. Radio Frequency CG-3618/U (6 ft).	Connector J4 of recorder assembly of RO-352APS-94D.	Connector 3J8 of CM-374 APS-94D.
W15	Cable Assembly, Radio Frequency CG-3618/U (6 ft).	VIDEO TEST connector 6J4 of IP-923/APS-94D	Connector J3 of recorder assembly of RO-3521 APS-94D.
WI6 **through** W'25	Cable Assembly, Radio Frequency CG-3618/U (6 ft) (general test use)	Various.	Various.
W29	Cable Assembly. Special Purpose Electrical SM-C-945932-1 (6 ft)	Connector J24 of RT-1283APS-94F	Connector J3 of CM481/APS-94F
W30	Cable Assembly, Special Purpose Electrical SM-C-945932-2 (6 f)	Connector J22 of RT-1238/APS-94F	Connector J9 of CM481/APS-94F
W31	Cable Assembly, Special Purpose, Electrical SM-C-945932-3 (6 ft)	Connector J17 of RT-1283/APS-94F	Connector J4 of CM481/APS-94F
W'32	Cable Assembly, Special Purpose, Electrical SM-C-945932-4 (6 ft)	Connector J2 of recorder controller RO-495/ U	Connector J5 of CM481/APS-94F
W33	Cable Assembly, Special Purpose, Electrical SM-C-945932-5 (6 ft) '	Connector J4 of RO-495/U	Connector J6 of CM481 / APS-94F
W34	Cable Assembly, Special Purpose, Electrical SM-C-945932-6 (6 ft)	Connector J3 of RO-495/U	Connector J7 of CM481/APS-94F
W35	Cable Assembly Special Purpose, Electrical SM-C-945932-7 (6 t)	Connector J5 of RO-495/U	Connector J8 of CM48I/APS-94F
W36	Cable Assembly. Special Purpose, Electrical SM-C-945932-8 (6 t)	Connector J26 of RT-1283/APS-94F	Connector J10 of CM481/APS-94F
W'37	Cable Assembly, Special Purpose, Electrical SM-C-945932-9 (6 ft)	Connector J16 of RT-1283 APS-94F	Connector JII of CM481/APS-94F
W38	Cable Assembly, Special Purpose, Electrical SM-C-945932-10 (6 ft)	Connector J21 of RT-1283/APS-94F	Connector J12 of CM48I/APS-94F
W39	Cable Assembly, Special Purpose, Electrical SM-C-945932-11 (6 ft)	Connector J23 of RT-1283/APS-94F	Connector J13 of CM481/APS-94F
W40	Cable Assembly. Special Purpose. Electrical SM-C-945932-12 (6 f)	Connector J25 of RT-1283/APS-94F	Connector JI4 of CM481APS-94F
W'41	Cable Assembly. Special Purpose. Electrical SM-C-945932-13 (12 t)	Connector JI2 of RO-495/U	Connector JII of RT-1283/APS-94F
W'42	Cable Assembly. Special Purpose, Electrical SM-C-945932-14 (12 ft)	Connector JII of RO-495/U	Connector J12 of RT-1283?APS-94F

1-9. Description of Simulator-Monitor SM-567/APS-94D (fig. 1-5) The SM-567/APS-94D is a rack-mounting unit with the ADAS inputs to panel connector J3. Navigation inputs and outputs are supplied to panel connector J4. The presence of radar signals in ADAS and antenna circuits are indicated by panel lamps, and test functions are provided by panel switches.

b. The SM-567/APS-94D carrying case is identical with t SM-567/APS-94D to provide power and signal interconnections for radar set operation. Cable reference designation, nomenclature, description, and interconnection data are given in table 1-4. *c.* Monitor, Electri references throughout this manual. The common name assignments and nomenclature are listed in table 1-5.

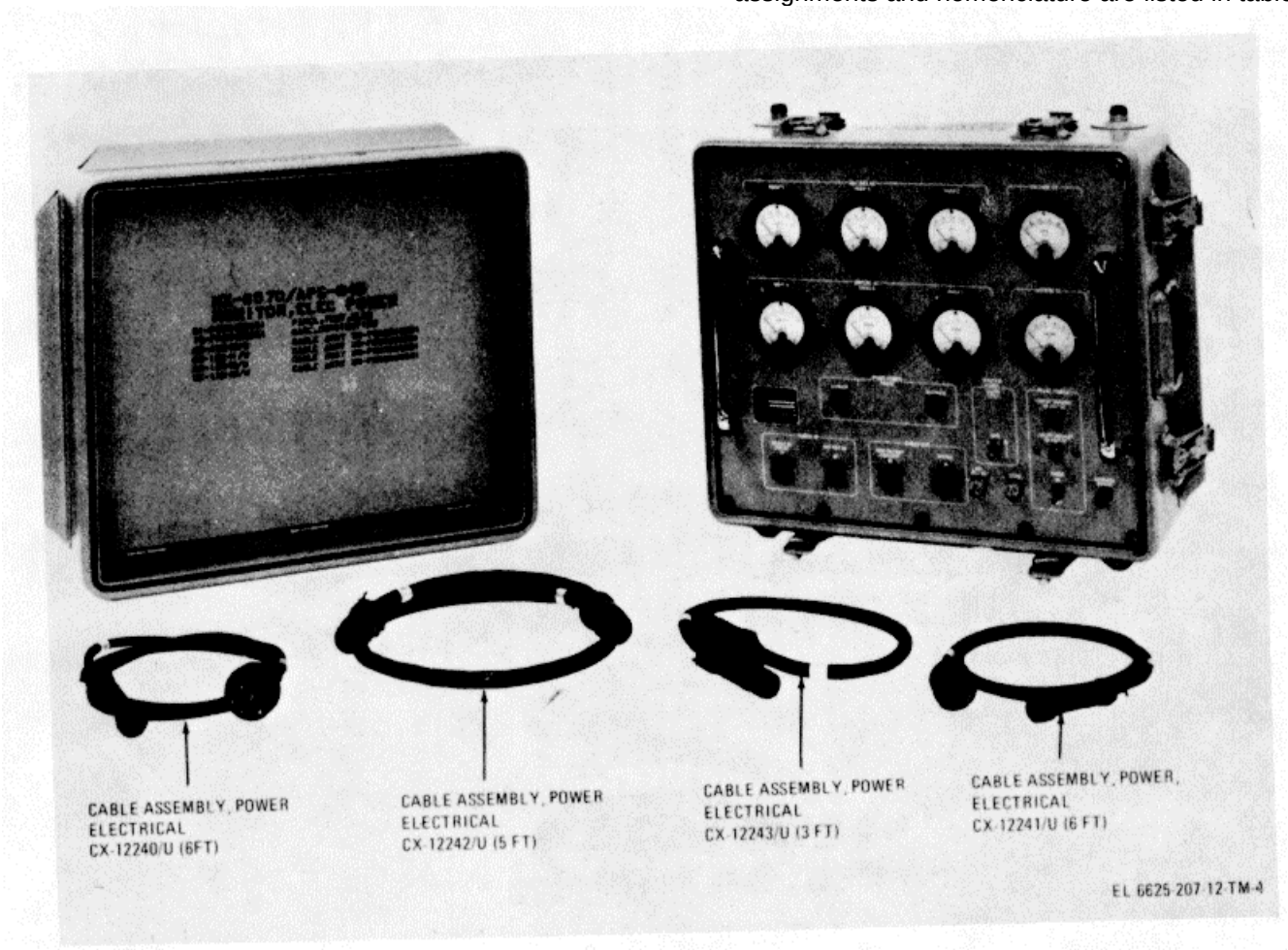


Figure 1-4. Monitor, Electrical Power MX-8570/ APS-94D

Table 1-3. Cable Assemblies in Monitor, Electrical Power MX-8570/APS-94D

Ref. des.	Nomenclature and Description	P1 destination	P2 destination
W1	Cable Assembly, Power, Electrical CX-I240: U (6 ft) (4-conductor cable).	Connector JI of MX-8570, APS-94D	115 VAC, 400 Hz prima power.
W2	Cable Assembly, Power, Electrical CX-12241/U (6 ft) (2-conductor cable).	+28 VDC primary power	Connector J2 of MX-8570/APS-94D.
W3	Cable Assembly. Power. Electrical CX-12243/U (3 ft) (4-conductor cable).	Connector J3 of MX-8570/APS-94D	Connector JI of SM-567/APS-94D
W4	Cable Assembly. Power, Electrical CX-I2242/U (5 ft) (11 conductor cable).	Connector JI of J-2794/APS-94D	Connector J4 of MX-8570/APS-94D.

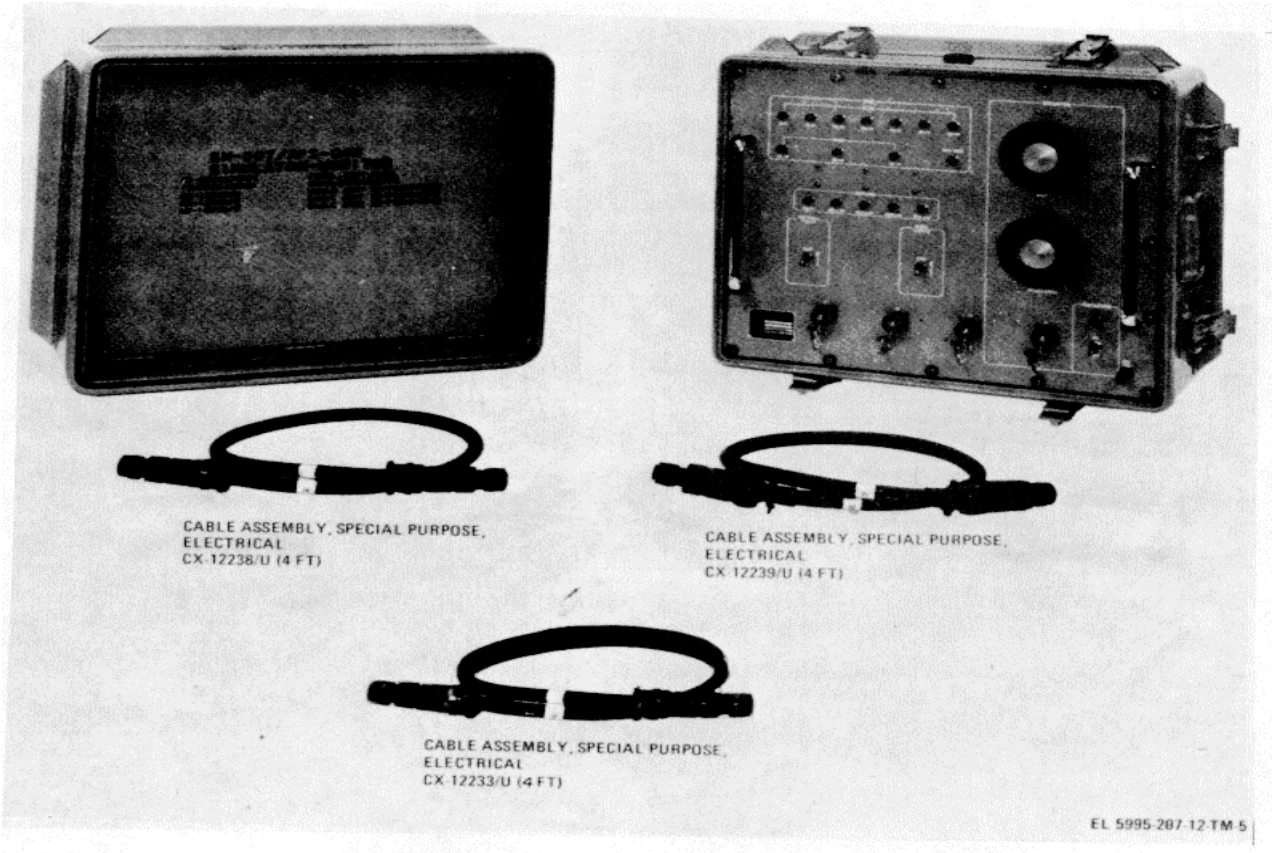


Figure 1-5. Simulator-Monitor SM-567/APS-94

Table 1-3.1. Additional Cable Assemblies in Monitor, Electrical Power MX-8570A/APS-94D

Ref. des.	Nomenclature and Description	P1 destination	P2 destination
W5	Cable Assembly Power Electrical SM-C-945892	Connector J3 of PP-7508/APS-94F	Connector J3 of J2794A APS-94D
W6	Cable Assembly Special Purpose Electrical SM-C-945901	Connector J2 of PP-7508A/APS-94F	Connector J2 of RT-1293 APS-94Fand connector JI of HD-IO67/APS-94F
W27	Cable Assembly. Special Purpose. SM-C-945926	Connector J4 of PP-7508/APS-94F	Connector J19 of RT-I293/APS-94F
W28	Cable Assembly, Special Purpose, SM-C-945927	Connector J5 of PP-7508/APS-94F	Connector J18 of RT-1293/APS-94F

Table 1-4. Cable Assemblies in Simulator-Monitor SM-567/APS-94D

Ref. des.	Nomenclature and Description	P1 destination	P2 destination
W1	Cable Assembly, Special Purpose Electrical CX-12233/U (4 ft) (19-conductor cable).	Connector J2 of SM-567/APS-94D	Connector J2 of J-2794/APS-94D.
W2	Cable Assembly, Special Purpose, Electrical CX-12238, U (4 f) (19-conductor cable).	Connector J5 of MT-4015/APS-94D	Connector J3 of SM-567/APS-94D.
W3	Cable Assembly. Special Purpose, Electrical CX-I2239/ U (4 ft) (19-conducor cable).	Connector J4 of MT-4015/APS-94D	Connector J4 of SM-567/APS-94D.

Table 1-5. Common Names

Nomenclature	Common name
Test Set Group Radar OQ-59/APS-94D	Test set group
Accessory Kit, Radar Test Set Group MK-1209/APS-94D	Test accessories kit
Monitor, Electrical Power MX-8570/APS-94D	Power monitor
Simulator-Monitor SM-567/APS-94D	Simulator
Coupler, Directional CU-1921/u	Directional coupler
Dummy Load, Electrical DA-561/U	Dummy load
Dummy Load-Coupler Assembly DA-691/APS-94F	Dummy load-coupler
Case Accessories CY-6826/APS-94D	Case

CHAPTER 2
INSTALLATION AND OPERATING INSTRUCTIONS

Section I. SERVICE UPON RECEIPT OF EQUIPMENT

2-1. Unpacking

a. *Packaging Data.* All components of Test Set Group, Radar OQ-59/APS-94D are packaged in cleated plywood boxes reinforced with metal straps. The complete shipment consists of three boxes. Packaging data is provided in table 2-1.

b. Unpacking Instructions (fig. 2-1).

(1) Cut the metal straps so that the top cover of the plywood box can be removed.

(2) Remove the nail from the top cover with a nailpuller and lift the cover off of the box.

(3) Remove the nails that secure the side covers of the box.

(4) the side covers of the box to provide space.

(5) the foam corner blocks and corrugated fiberboard liners from the top of the component case.

(6) the corrugated fiberboard liners from all sides of the case.

(7) assistance and lift the case out of the plywood box.

(8) Place the unit on a flat, dry clean surface in the repair facility.

Table 2-1. Component Packaging Data

Component	Overall dimensions (in.)	Volume (cu. .)	Shipping weight (Ib.)
Accessory Kit. Radar Test Set Group MK-1029/APS-94D	37.5 by 30 by 25.5	16.4	135
Accessory Kit, Radar Test Set Group MK-1209A/APS-94D	37.5 by 30 by 25.5	16.4	144
Monitor, Electrical Power MX-8570/APS-94D	31.5 by 28.5 by 26.5	13.1	107
Monitor, Electrical Power MX-8570A/APS-94D	31.5 by 28.5 by 26.5	13.1	116
Simulator-Monitor SM-567/APS-94D	31.5 by 28.5 by 26.5	13.1	102

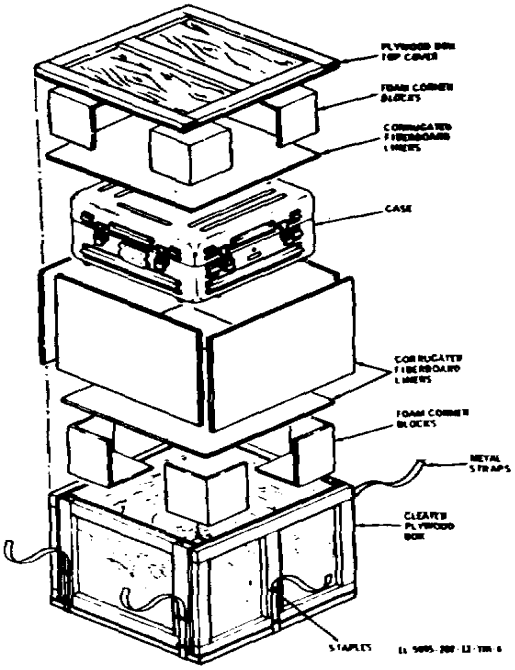


Figure 2-1. Component packaging.

NOTE

Before opening the case, press the red button at the center of the air pressure relief valve (Fig. 1-3) to equalize the pressures on the case wall.

(9) Save the plywood box and packing materials.

2-2. Checking Unpacked Equipment

a. Checking Equipment for Completeness. See that the equipment is complete as listed on the packing slip. Report all discrepancies (para 1-3c). If an equipment shortage exists that does not affect proper functioning of the equipment, use the equipment.

b. Checking Equipment Damage. Inspect the equipment for damage incurred during shipment. If the equipment was improperly packaged, or is damaged, use DD Form 6 or (DISREP) (SF 361), as pertinent, to report the difficulty.

c. Checking Equipment for Modifications. If the equipment has been used or reconditioned, see whether it has been changed by a modification work order (MWO). If the equipment has been modified, the MWO number(s) will appear on the equipment near the equipment identification plate. Check to see whether the modified equipments are covered in the manual.

NOTE

This manual does not list modification work orders (MWO) for the equipment.

2-3. Installation of Equipment

Installation of the equipment requires two men because of equipment weight. After positioning the equipment in the desired location, remove the case covers.

SECTION II. OPERATORS CONTROLS, INDICATORS AND CONNECTORS

2-4. Controls, Indicators, and Connectors for Monitor, Electrical Power MX-8570/APS-94D

The power monitor controls, indicators, and connectors are shown in figure 2-2. The controls, indicators, and connectors are listed, together with their functions, in table 2-2.

2-5. Controls, Indicator, and Connectors for Simulator-Monitor SM-567/APS-94D

The simulator controls, indicators, and connectors are shown in figure 2-3. The controls, indicators, and connectors are listed, together with their functions, in table 2-3.

Table 2-2. Monitor, Electrical Power MX-8570/APS-94D, Controls, Indicators, and Connectors

Control, Indicators, or connectors	Function
Voltage AC:	
Phase A, Phase B Phase C meters (0-150 volts)	Indicate ac primary power phase voltage levels.
Ampere AC:	
Phase A, Phase B Phase C meters(0-5 amperes).	Indicate ac primary power Phase current levels.
PRIME POWER PHASE: CORRECT, INCORRECT lamps.	When lit, indicate correct or incorrect phasing of Ac input primary power.
PRIME POWER:	
115 VOLT AC CIRCUIT BREAKER (two-position ckt breaker).	When closed, connects primary power in power Monitor
28 VOLT DC CIRCUIT BREAKER (two-position ckt breaker).	When closed, connects dc primary power in power monitor
POWER switch (two-position toggle).	When ON, connects ac and dc primary power to equipment under test.
VOLTAGE DC meter (0-50 volts).	Indicates dc primary power voltage level.
AMPERE DC meter (0-30 amperes).	Indicates dc primary power current level.
SYSTEM PANEL ILLUM TEST:	
TEST switch (momentary toggle).	When operated, all panel lamps light in equipment under test.
POWER IN:	
115 VOLT AC 400HZ connector J1.	Prime (ac) power input connector for power monitor
+28 VOLT DC connector J2.	Prime (dc) power input connector for power monitor
POWER OUT:	
ADAS-ANT/NAV SIMULATOR connector J3	Output connector for ac and dc primary power to simulator
System connector J4	Output connector for ac and dc primary power to AN/APS-94D equipment under test
EXTERNAL GROUND connector.	Provides external system Ground connection for power monitor.
28-Volt DC fuse holder	Provides circuit protection.

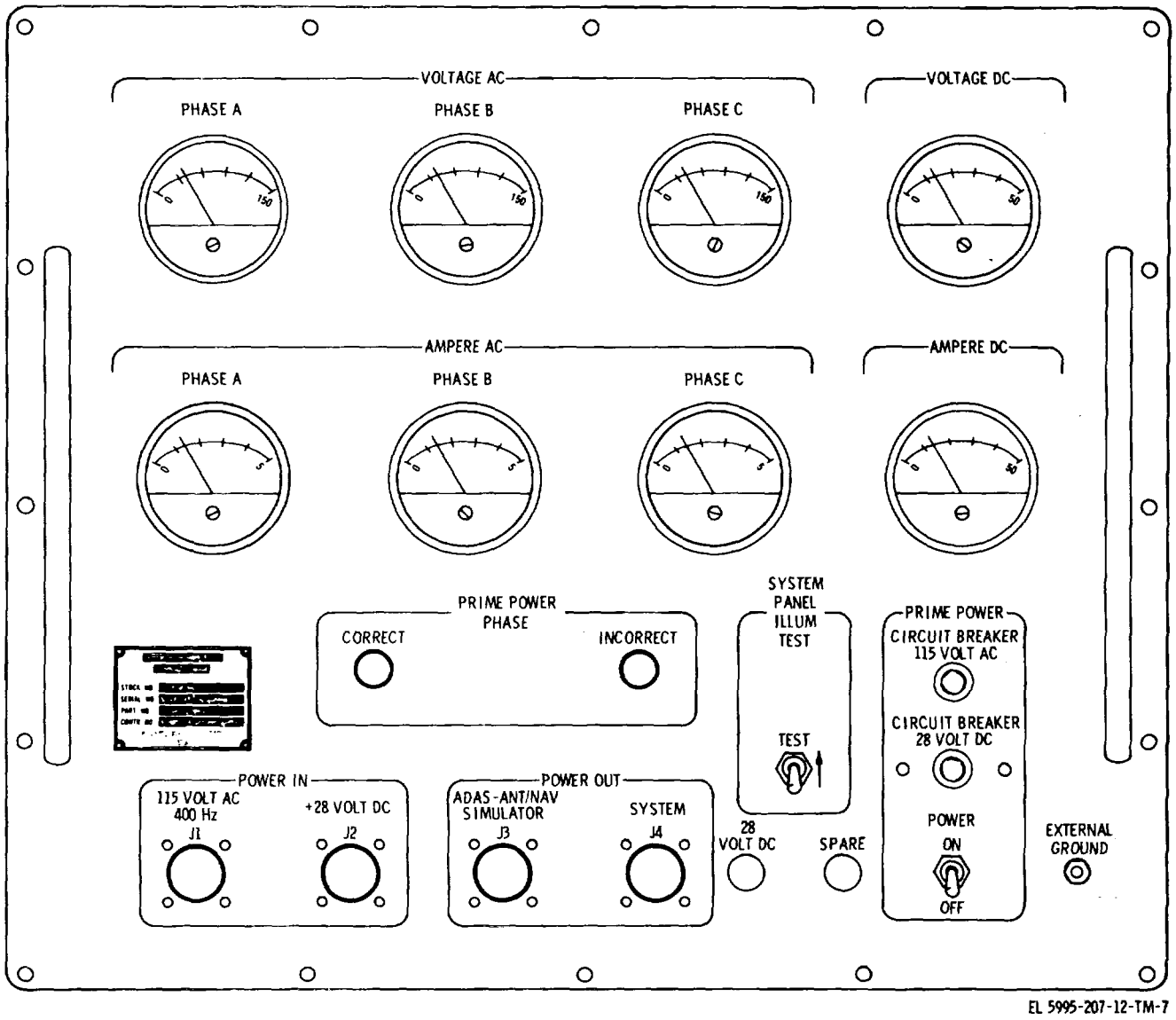


Figure 2-2. Monitor, Electrical Power MX-8570APS-94D, controls, indicators, and connectors.

Table 2-3. Simulator-Monitor SM-567/APS-94D Controls, Indicators and Connectors

Controls, Indicator, or connector,	Function
PANEL LIGHTS TEST simula- switch (momentary toggle).	When operated, all tor panel lamps lights.
ANTENNA FAULT TEST switch (momentary toggle).	When operated, simulates an antenna fault
Navigation switch simulates (2-position toggle).	When set at ON, navigation signal turn on
NAVIGATION DRIFT control dial (-15 degrees to + 15 degrees).	Indicates drift angle in degrees.

Table 2-3. Simulator-Monitor SM-567/APS94D Controls, Indicators, and Connectors-Continued

Control, Indicator, and Connector	Function
NAVIGATION GROUND SPEED control dial (150 knots to 300 knots).	Indicates groundspeed in knots
Navigation lamp (incandesent).	When lit, indicates navi- gation signal turn-on.
ADAS lamps (incandescent):	
0 KM to 60 KM DELAY	When lit, indicates delay.
25 KM to 100 KM RANGE	When lit, indicates range.
DATA MARK	When lit, indicates data mark is supplied.

Table 2-3. Simulator-Monitor SM-567/APS-94D Control ,Indicators and Connectors-Continued

Control, indicator, or connectors	*Function*
ANTENNA lamps (incandescent):	
POWER	When lit, indicates antenna power is on.
ANT CONT	When lit, indicates antenna control is enerized.
MAP CONT	When lit, indicates map control is energized.
XMTR ON	When lit, indicates transmiter is energized.
BITE ON	When lit, indicates built-in test equipment is ener- gized,

Table 2-3. Simulater-Monitor SM-567/APS-94D Control, Indicators, and Connectors—Continued

Control, indicator connector	*Function*
J1	Prime ac and dc power input connector to simulator.
J2	Connects antenna inputs from equipment under test to simulator.
J4	Connects navigation inputs from, and navigation out- puts to, equipment under test.
J3	Connects ADAS inputs from equipment under test to simulator.
EXT GND	Provides external system ground connection for simulator.

Error! Not a valid filename.

Figure 2-3. Simulator-Monitor SM-567/APS-94D, controls, indicators, and connectors.

Section III. OPERATION

2-6. General

Information in this section consists of instructions for preliminary operating procedures, starting, and operating the equipment. Preliminary operating procedures are described in paragraph 2-7. Starting and operating procedures are provided in paragraph 2-8.

NOTE

Simulator connectors not in use must be covered with equipment connector covers during equipment operation.

2-7. Preliminary Operating Procedures

Preliminary operating procedures consist of test set group power monitor interconnections, a performance check for the power monitor, and interconnection of the test set group for operation with the radar set.

Performance checks of the power monitor are made, prior to operation of the test set group with the radar set to determine the operating condition of this component. The checks verify that indicator lamp, voltmeter, and circuit breaker operations are normal. Switch and ammeter operation not subject to verification during the performance checks must be verified during operation with the radar set.

a. Power Monitor Interconnections.

(1) Deenergize the primary power.

(2) Set the power monitor **POWER** switch (fig. 2-2) at **OFF**.

(3) Trip the power monitor **115 VOLT AC CIRCUIT BREAKER** and **28 VOLT DC CIRCUIT BREAKER** (pull out on the actuators).

(4) Connect the power monitor to the primary power circuits as shown in figure 2-4.

b. Power Monitor Performance Check.

NOTE

The simulator can only be checked when connected to the radar set.

(1) Energize the primary power circuits.

(2) Close the power monitor **115 VOLT. AC CIRCUIT BREAKER.** All power monitor **VOLTAGE AC PHASE** meters should indicate within the limits of 108 to 118 volts.

(3) Observe the power monitor PRIME POWER PHASE indicator lamps. The CORRECT lamp should light.

(4) Close the power monitor 28 VOLT DC CIRCUIT BREAKER. The VOLTAGE DC meter should indicate 27 volts ±2 volts. (5) Trip the power monitor circuit breakers and turn off the primary power.

c. Interconnections or Operation with The Radar Set.

WARNING

Be sure the primary power circuits are deenergized before attempting equipment interconnection. Extremely dangerous voltages exist in the following listed components of the radar set. Contact with the voltages can cause death or serious injury.

Indicator, Radar Target IP-923/APS-94D:

High voltage power supply 6A6.	+22,000 volts.
High voltage regulator 6A5	+7,000 volts.

Receiver-Transmitter, Radar RT-889/APS-94D:

High voltage power supply 2A3.	+3, 550 volts.
Modulator 2A4	+7, 100 volts.
Rectifier-regulator	-700 volts.

WARNING

When assembling the cockpit equipment complex on a bench, be sure to attach the indicator set supports supplied with Accessory Kit, Radar Test Set Group MK-1209/APS-94D to Rack, Electrical Equipment MT- 4015/APS-94D. The indicator set supports prevents the cockpit equipment complex from tipping and causing injury to personnel.

(1) Place equipment on the test bench.

(2) Interconnect the test set group and the radar set as shown in figure 2-5, *2*-5.1 or 2-5.2, as applicable.

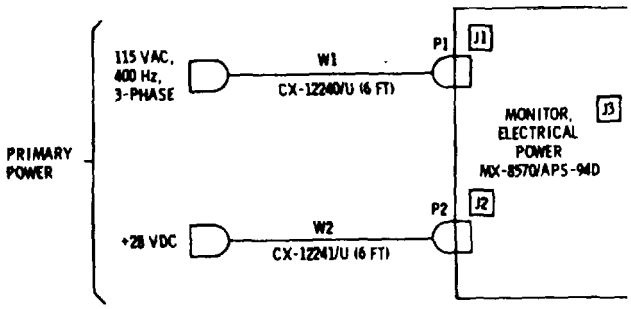


Figure 2-4. Interconnection of Monitor, Electrical Power MX-8570/APS-94D and Simulator-Monitor SM-567/APS-94D

2-8. **Instructions for Operation with Radar Surveillance Set AN/APS-94D, AN/APS-94E and AN/APS-94F**

a. Power Turn-On.

(1) Energize the primary power circuits.

(2) Close the power monitor **115 VOLT AC CIRCUIT BREAKER** and the **28 VOLT DC CIRCUIT BREAKER**.

(3) Set the power monitor **POWER** switch at **ON.**

b. Operation. For operation of the test set group in conjunction with the radar set, refer to TM 11-5895-967-34.

c. Standby Operation. Set the power monitor **POWER** switch at **OFF.**

d. Shutdown.

(1) Set the power monitor **POWER** switch at **OFF.**

(2) Trip the power monitor circuit breakers.

(3) Deenergize the primary power circuits.

NOTES:

1. W1 IS CABLE ASSEMBLY, SPECIAL PURPOSE, ELECTRICAL CX-12233/U (4 FT).
2. W1 IS CABLE ASSEMBLY, POWER, ELECTRICAL CX-12240/U (6 FT).
3. W2 IS CABLE ASSEMBLY, SPECIAL PURPOSE, ELECTRICAL CX-12231/U (2 FT).
4. W2 IS CABLE ASSEMBLY, POWER, ELECTRICAL CX-12241/U (6 FT).
5. W2 IS CABLE ASSEMBLY, SPECIAL PURPOSE, ELECTRICAL CX-12238/U (4 FT).
6. W3 IS CABLE ASSEMBLY, SPECIAL PURPOSE ELECTRICAL CX-12234/U (4 FT).
7. W3 IS CABLE ASSEMBLY, POWER, ELECTRICAL CX-12243/U (3 FT).
8. W3 IS CABLE ASSEMBLY, SPECIAL PURPOSE, ELECTRICAL CX-12239/U (4 FT).
9. W4 IS CABLE ASSEMBLY, SPECIAL PURPOSE, ELECTRICAL CX-12235/U (6 FT).
10. W4 IS CABLE ASSEMBLY, POWER, ELECTRICAL CX-12242/U (5 FT).
11. W5 IS CABLE ASSEMBLY, SPECIAL PURPOSE, ELECTRICAL CX-12237/U (4 FT).
12. W6 IS CABLE ASSEMBLY, SPECIAL PURPOSE, ELECTRICAL CX-12236/U (3 FT).
13. W7 IS CABLE ASSEMBLY, SPECIAL PURPOSE, ELECTRICAL CX-12232/U (2 FT).
14. W8 IS CABLE ASSEMBLY, RADIO FREQUENCY CG-3618/U (3 FT).
15. W9 IS CABLE ASSEMBLY, RADIO FREQUENCY CG-3618/U (3 FT).
16. W10 IS CABLE ASSEMBLY, RADIO FREQUENCY CG-3618/U (3 FT).
17. W11 IS CABLE ASSEMBLY, RADIO FREQUENCY CG-3618/U (6 FT).
18. W12 IS CABLE ASSEMBLY, RADIO FREQUENCY CG-3618/U (6 FT).
19. W13 IS CABLE ASSEMBLY, RADIO FREQUENCY CG-3618/U (6 FT).
20. W14 IS CABLE ASSEMBLY, RADIO FREQUENCY CG-3618/U (6 FT).
21. W15 IS CABLE ASSEMBLY, RADIO FREQUENCY CG-3618/U (3 FT).
22. SHADED ITEMS ARE PART OF TEST SET GROUP, RADAR OQ-59/APS-94D

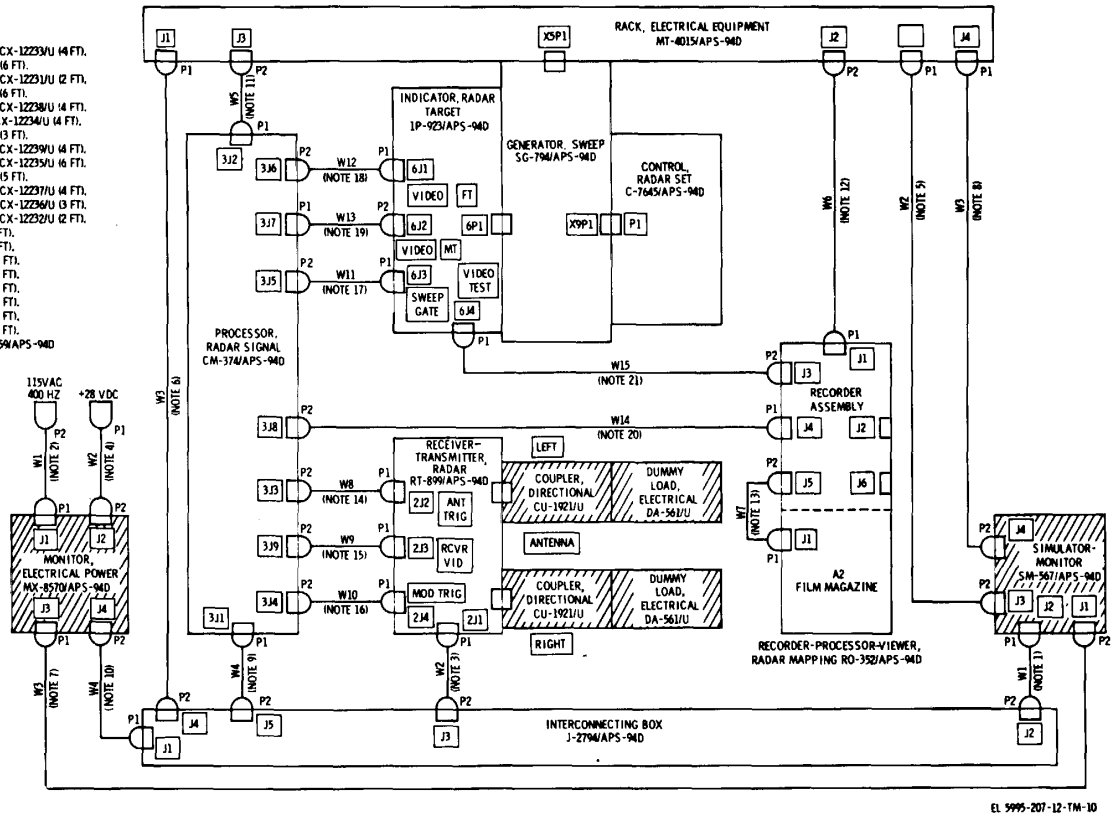


Figure 2-5. Interconnection of Test Set Group, Radar OQ59/APS -94D and Radar Surveillance Set AN/APS-94D

CHAPTER 3
OPERATORS MAINTENANCE INSTRUCTIONS

Section I. SCOPE, TOOLS, AND EQUIPMENT

3-1. Scope of Operator's Maintenance

Maintenance duties assigned to the operator of the test set group are listed below together with references to paragraphs covering specific maintenance functions.

a. Preventive maintenance checks and services (para 3-5).

b. Cleaning (para 3-6).

c. Removal and replacement (para 3-7).

d. Troubleshooting (para 3-8).

3-2. Tools, Test Equipment, and Materials Required for Operator's Maintenance

a. Tools and Test Equi*pment.*

(1) Multimeter AN/URM-105.
(2) Toolkit, Electronic Equipment TK-101/G.

b. Materials

(1) Trichlorotrifluoroethane.
(2) Cheesecloth.
(3) Cleaning tissues.

Section II. OPERATOR'S PREVENTIVE MAINTENANCE

3-3. General

Operator's preventive maintenance is limited to inspection, cleaning, and determining the operating capability of the equipment through normal operating procedures. Preventive maintenance checks and services (PMCS) periods are described in paragraph 3-4. Procedures for performing preventive maintenance are provided in paragraph 3-5.

3-4. Operator's Preventive Maintenance Checks and Services Periods

a. Preventive maintenance checks and services are required on a daily basis and under the special conditions listed below.

(1) When the equipment is initially installed.
(2) When the equipment is reinstalled after removal for any reason.
(3) At least once each week if the equipment is maintained in a standby condition.

b. Preventive maintenance checks and services are presented in charts consisting of four columns.

(1) Interval and sequence number column. These checks and services are performed during the interval specified in the column. The order of performance is from number 1 to the highest listed number.

(*2) Item* to *be inspected column.* The item to be checked or serviced is identified in this column.

(*3) Procedure column.* The procedure for performing the check or service is specified in this column. References in this column are to procedures that are too lengthy to be *included* in the chart.

(*4) Paragraph reference column.* References in this column are to corrective measures the operator can take when an abnormal condition is found.

3-5. Operator's PMCS Charts

The operator's daily and weekly PMCS duties are listed in the charts in a and b below.

a. Operator's PMCS Chart.

Interval and sequence no.			Item to be inspected	Procedure	Paragraph reference
Before operation	During operation	After operation			
1		9	Test set group	Check exterior surfaces for dirt and moisture	Para 3-6.
2		10	Electrical cables	Check cable assemblies for breaks and cuts. If broken or cut, make replacement, if available. If not available, higher category of maintenance is required.	None.
	3		All test set group panels	Check for proper mechanical operation of each control or switch during operation.	none.
4		11		Check for loose or cracked indicator lamp lenses. Replace as required.	Para 3-8.
5		12		Check that protective caps for connectors are In place and fit properly. Refer to higher category of maintenance.	None.
	6			Check that all simulator panel lamps light when PANEL LIGHTS TEST switch is operated. Replace lamps as required.	Para 3-8.
	7		Power monitor	Check performance (para 2-7)	Para 3-6.
	8		Test set group	Check operation in conjunction with AN/APS-94D (para 2-8).	

b. Operator's Weekly PMCS Chart

Interval and sequence no.			Item to be inspected	Procedure	Paragraph reference
Before operation	During operation	After operation			
1			Cables, jacks, and plugs	Inspect cable connectors for corrosion, bent Pins, or thread damage. Refer to higher category of maintenance.	None.
2			Handles, latches, hinges	Refer to higher category of maintenance	None.
3	4	5	Knobs, switches	Check for tightness. Refer to higher category of maintenance.	None.

Section III. OPERATOR'S TROUBLESHOOTING

3-6. General Troubleshooting Information

a. General Instructions. Operator's troubleshooting procedures are based upon incorrect indications observed while making the power monitor and simulator performance checks (para 2-7) and the during-operation checks with the radar set specified in paragraph 3-5a. The trouble- shooting procedures are contained in a four-column chart (*b* below). The chart provides a list of trouble symptoms that may be observed; the probable cause of the symptom; a list of corrective actions within the capability of the operator; and references to separate paragraphs containing corrective actions that are too lengthy to include in the chart. Trouble symptoms are listed in numerical sequence by item number.

NOTE

During operation with the radar set, it is assumed all components of the radar set are operating normally.

b. Operator's Troubleshooting Chart.

Item No.	Trouble symptom	Probable trouble	Corrective measure
1	All power monitor **VOLTAGE AC PHASE** meter do not indicate when **115 VOLT AC CIRCUIT BREAKER** Is closed	*a.* Loose connection on ac primary power cable. *b.* Cable defective *c.* Power monitor defective	*a.* Check ac primary power cable Connections. *b.* Higher category of maintenance required. *c.* Higher category of maintenance required.
2	Individual power monitor **VOLTAGE AC PHASE** meters do not indicate when **115 VOLT AC CIRCUIT BREAKER** is closed.	Same as item 1	Same as item 1 above.
3	Power monitor **CORRECT PRIME POWER PHASE** lamp does not illuminate (**INCORRECT PRIME POWER PHASE** lamp not illuminated). ***Caution:*** Incorrect phasing of input AC primary power will cause reversed blower motor operation in equipment being operated and possible burnout. Turn off the AC primary power immediately if the **INCORRECT PRIME POWER PHASE** lamp is illuminated.	*a.* Lamp defective *b.* Power monitor defective	*a.* Replace lamp (para 3-8). *b.* Higher category of maintenance required.
4	Power monitor **INCORRECT PRIME POWER PHASE** lamp illuminates.	AC primary power phasing incorrect	Higher category of maintenance Required.
5	Power monitor **VOLTAGE DC** meter meter does not indicate when 28 **VOLT DC CIRCUIT BREAKER** is closed.	*a.* Loose connection on dc primary power cable. *b.* Cable defective *c.* Power monitor defective	*a.* Check dc primary power cable Connections. *b.* Higher category of maintenance Required. *c.* Same as *b* above.
6	Power monitor **VOLTAGE DC** meter meter indicates in reverse.	Polarity of dc primary power reversed.	Higher category of maintenance required.
7	All simulator indicator lamps do not illuminate when **PANEL LIGHTS TEST** switch is operated.	*a.* Loose connection on simulator power cable. *b.* Cable defective *c.* Simulator defective	*a.* Check cable connections. *b.* Higher category of maintenance required. *c.* Same as *b* above.
8	Individual simulator lamps do not Illuminate when **PANEL LIGHTS TEST** switch is operated.	*a.* Lamp defective *b.* Simulator defective	*a.* Replace lamp (para 3-8). *b.* Higher category of maintenance required.
9	Simulator **NAVIGATION** lamp does not illuminate when **NAVIGATION** switch is set at **ON**.	Simulator edfective	*a.* Higher category of maintenance required.
10	Power monitor **AMPERE AC PHASE** Meter does not indicate during Operation with AN/APS-94D.	*a.* Loose connection on interconnecting cables. *b.* Defective cable *c.* Power monitor defective	*a.* Check cable connections. *b.* Higher category of maintenance required. *c.* Same as *b* above.
11	Power monitor **AMPERE DC** meter Does not indicate during operation with AN/APS-94D.	*a.* Loose connection on interconnecting cables. *b.* Defective cable *c.* Power monitor defective	*a.* Check cable connections. *b.* Higher category of maintenance *c.* Same as *b* above.

Item No.	Trouble symptom	Probable trouble	Corrective measure
12	Control panel lamp illumination not Obtained during operation with AN/APS-94D.	*a.* Defective fuse in power monitor *b.* Loose connection on interconnecting cable. *c.* Defective cable	*a.* Replace fuse (para 3-8). *b.* Check cable connections. *c.* Higher category of maintenance required.
		d. Power monitor defective	*d.* Same as *c.* above.
13	Antenna fault operation not Obtained during operation with AN/APS-94D.	*a.* Loose connection on interconnecting cables. *b.* Defective cable ..... *c.* Simulator Defective.....	*a.* Check cable connections. *b.* Higher category of maintenance required. *c.* Same as *b* above.
14	Drift control operation improper during operation with AN/APS-94D.	*a.* Loose connection on interconnecting cables. *b.* Defective cables ..... *c.* Simulator defective	*a.* Check cable connections. *b.* Higher category of maintenance required. *c.* Same as *b* above.
15	Groundspeed control operation improper during operation with AN/APS-94D	*a.* Loose connection on interconnecting cables. *b.* Defective cable ..... *c.* Simulator defective	*a.* Check cable connections. *b.* Higher category of maintenance. *c.* Same as *b* above.

3-7. CLEANING

WARNING

Adequate ventilation should be provided when using TRICHLOROTRIFLUOROE-THANE. Prolonged breathing of vapor should be avoided. The solvent should not be used near heat or open flame; the products of decomposition are toxic and Irritating. Since TRICHLOROTRIFLUOROETHANE dissolves natural oil, prolonged contact with skin should be avoided. When necessary, use gloves which the *solv*ent cannot penetrate. If the solvent is taken internally, call a physician immediately.

CAUTION

When cleaning equipment, be sure cleaning fluid does not come in contact with plastic parts on the equipment The cleaning fluid has an adverse effect on the plastic.

a. Remove accumulated dust and loose dirt with a clean, soft cloth.

b. Remove grease, fungus, and ground-in dirt from the equipment exterior with a cloth dampened (not wet) with cleaning fluid. Wipe the component dry with clan, lint free cheesecloth.

c. Clean meter lenses with a cleaning tissue.

3-8. Removal and Replacement of Lamps and Fuse

a. Removal and Replacement of Power *Monitor Lamps.*

(1) Unscrew and remove the lamp lens (turn coun-terclockwise).

(2) Press in on the lamp bulb, turn counterclockwise, and pull the lamp out of the lamp assembly.

(3) Assemble the replacement lamp in the lamp assembly

(4) Press in on the lamp bulb and turn clockwise to lock into position.

(5) Screw the lamp lens into the lamp assembly.

b. Removal and Replacement of Power Monitor Fuse

(1) Press in on the fuse cap, turn counterclockwise, and pull the fuse holder out of the fuse assembly.

(2) Pull the defective fuse out of the fuse holder.

(3) Push the replacement fuse into the fuse holder.

(4) Assemble the fuse holder in the fuse assembly.

Press in on the fuse cap and turn clockwise to lock into *p*osition.

c. Removal and Replacement of Simulator Lamps.

(1) Unscrew and remove the lamp lens (turn coun-terclockwise).

(2) Pull the defective lamp out of the lens.

(3) Assemble the replacement lamp in the lens. Push in to seat.

4) Screw the lamp lens into the lamp assembly (turn clockwise).

CHAPTER 4
ORGANIZATIONAL MAINTENANCE

Section I. GENERAL

4-1. Scope of Organizational Maintenance

Maintenance duties assigned to organizational maintenance personnel are listed below together with references to paragraphs covering specific maintenance functions.

a. Preventive maintenance checks and services (para 4-4).

b. Cable continuity checks (para 4-5).

c. Touchup painting (para 4-7).

d. Adjustment of case latch tension (para 4-8).

e. Troubleshooting (paras 4-9 and 4-10).

4-2. Tools, Test Equipment, and Materials Required for Organizational Maintenance

a. Tools and Test Equipment.
(1) Multimeter AN/URM-105.
(2) Toolkit, Electronic Equipment TK-101/G.

b. Materials.
(1) Trichlorotrifluoroethane.
(2) Cheesecloth.
(3) Cleaning tissues.
(4) Sandpaper No. 000.
(5) Primer, color T per MIL-P-8585.
(6) Enamel, light gray type III, class 2 per MIL-E-15090.

Section II. ORGANIZATIONAL PREVENTIVE MAINTENANCE

4-3. General

Organizational preventive maintenance consists of checks and services beyond the capabilities of the operator of the test set group. Preventive maintenance checks and services periods are de- scribed in paragraph 4-4. Procedures for per- forming preventive maintenance are provided in paragraph 44.

4-4. Organizational Preventive Maintenance Checks and Service Periods

The periodic PMCS functions are indicated in the monthly preventive maintenance checks and services chart (a below, or the quarterly preventive maintenance checks and services chart *(b* below). A month is defined as approximately 30- calendar days of 8-hour per day operation. If the equipment is operated 16 hours a day, the monthly preventive maintenance checks and services should be performed at 15-day intervals Adjustment of the maintenance interval must be made to compensate for any unusual operating conditions. The requirement for monthly and/or quarterly preventive maintenance checks and services is not limited to equipment in everyday use. These preventive maintenance checks and services must al- so be performed on equipment maintained in a standby (ready for immediate operation) condition. Equipment in limited storage, which re- quires services before operation, does not require monthly and/or quarterly maintenance. Weekly and monthly preventive maintenance checks and services constitute a part of the quarterly preventive maintenance checks and services and must be performed at the same time. All deficiencies will be recorded in accordance with the requirements of TM 38-750.

a. Monthly Organizational PMCS Chart.

Sequence No.	Item to be inspected	Procedure	Paragraph references
1	Cables and connectors.....	*a.* Perform continuity checks ..... *b.* Lightly sand corroded pins..... *c.* Replace cable having damaged connectors	*a.* Refer to para 4-5.
2	Component panels	Touchup (paint) damaged surfaces.	Refer to para 4-6 for touchup painting instructions
3	Combination case latches	Check for sufficient tension	Refer to para 4-8 for adjustment information.
4	Control and switch knobs	Check for tightness on shaft. Replace if damaged.	Tighten setscrew in knob.
5	Fuses.....	*a.* Check for continuity and rating. Replace if open, or rating is incorrect	*a.* Para 3-8.
		b. Check spare fuse holder for fuse. Install spare fuse if holder is empty	*b.* Para 3-8.

b. Quarterly Organizational PMCS Chart.

Sequence No.	Item to be inspected	Procedure	Paragraph references
1	Publications	Check that all publications are complete, serviceable, and current.	Refer to DA Pam 310-4 and DA Pam 310-7.
2	Modifications.....	Check DA Pam 310-7 to determine if new applicable MWO's have been published. All URGENT MWO's must be applied immediately. All NORMAL MWO's must be scheduled.	Refer to TM 38-750 and DA Pam 310-7

4-5. Cable Continuity Checks

Continuity checks relative to multiconductor and coaxial cables are given below. The checks are performed with Multimeter AN/URM-10.

a. Multiconductor Cables.

(1) Adjust the multimeter for operation on the lowest resistance range. Connect the multimeter common probe to a pin in the connector at one end of the cable. Touch the corresponding pin in the connector at the other end of the cable with the multimeter ohms probe. The multimeter should indicate less than 1 ohm. Continue the procedure until each conductor in the cable under test has been checked out.

(2) Connect the multimeter common probe to the shell of a connector at one end of the cable. Touch the shell of the connector at the other end of the cable with the multimeter ohms probe. The multimeter should indicate less than 1 ohm.

b. Coaxial Cables.

(1) Adjust the multimeter for operation on the highest resistance range. Connect the multimeter common probe to the shell of one of the cable connectors. Touch the multimeter ohms probe to the connector center conductor pin. The multimeter should indicate infinity.

(2) Adjust the multimeter for operation on the lowest resistance range. Connect the multimeter common probe to the center conductor pin in a connector at one end of the cable. Touch the center conductor pin of the connector at the other end of the cable with the multimeter ohms probe. The multimeter should indicate less than 1 ohm.

4-6. Touchup Painting Instructions

WARNING

The primer and enamel used for touchup painting are flammable. Perform the touchup in an approved area that is away from fire or flame.

a. Use the primer and enamel specified in paragraph 4-2.

b. Refer to the applicable cleaning and refinishing instructions contained in TB 746-10.

4-7. Lubrication

No lubrication of the test set group is required.

4-8. Adjustment of Case Latch Tension

Check latches for tension. Tension is adequate when the cover is firmly secured to the case and all latches are tight. Perform the following if any of the latches are loose.
any of the latches are loose.

a. Exert downward pressure on the latch to permit disengagement. Disengage the latch from the case cover.

b. Using a 3/8-inch open-end wrench, hold the latch nut in position while turning the latch in the direction that will secure the cover more firmly.

c. Engage the latch on the case cover, then exert upward pressure on the latch to secure.

d. Check the latch for sufficient tension.

e. Repeat the procedures given in a through c above as required, until the desired latch tension is obtained.

Section III. ORGANIZATIONAL TROUBLESHOOTING

4-9. Organizational Troubleshooting Information

Organizational troubleshooting is based on trouble symptoms that are observed while making the performance check (para 2-7) and trouble symptoms noted by the operator during test set group operation with Radar Surveillance Set AN/ APS-94D and listed in the operator's trouble- shooting chart (para 3-6). Troubleshooting performed by organizational maintenance personnel is developed from those corrective measures listed in the operator's troubleshooting chart that are beyond the scope of operator's maintenance

4-10. Organizational Troubleshooting Chart

The organizational troubleshooting chart in b be- low is a continuation of, and supplements, the operator's troubleshooting chart in paragraph 3-6. The organizational troubleshooting chart lists the troubleshooting symptoms specified in the operators troubleshooting chart and provides additional corrective measures within the capabilities of organizational maintenance.

a. Supplementary Information. Reference to the cabling diagram of figure 2-5 during troubleshooting will help establish component relationships and localize troubles.

b. Organizational Troubleshooting Chart.

Item No.	Trouble symptom	Probable trouble	Corrective measure
1	All power monitor **VOLTAGE AC PHASE** meters do not indicate when **115 VOLT AC CIRCUIT BREAKER** is closed	*a.* Cable Assembly CX-12240/U defective.	*a.* Perform continuity check (para 4-5). If cable is defective, higher category of maintenance is required.
		b. Connector **J1** or **115 VOLT AC CIRCUIT BREAKER** defective.	*b.* Higher category of Maintenance
2	Individual power monitor **VOLTAGE AC PHASE** meters do not indicate when **115 VOLT AC CIRCUIT BREAKER** is closed.	**VOLTAGE AC PHASE** meter or **115 VOLT AC CIRCUIT BREAKER** defective.	Higher category of maintenance required.
3	Power monitor **CORRECT PRIME POWER PHASE** lamp does not illuminate	**CORRECT** lamp circuit defective	Higher category of maintenance required.
4	Power monitor **INCORRECT PRIME POWER PHASE** lamp illuminates.	AC primary power circuit on connections to AC source incorrect.	Higher category of maintenance required.

Item No.	Trouble symptom	Probable trouble	Corrective measure
5	Power monitor **VOLTAGE DC** meter does not indicate when **28 VOLT DC CIRCUIT BREAKER** is closed.	*a.* Cable Assembly CX-12241/U defective.	*a.* Perform continuity check (para 4-5). If cable is defective, higher category of maintenance is required.
		b. Connector J**2, 28 VOLT DC**. **CIRCUIT BREAKER**, or **VOLTAGE DC** meter defective.	Higher category of maintenance required.
6	Power monitor **VOLTAGE DC** meter indicates in reverse.	DC primary power circuit connections to DC source incorrect.	Check dc primary power connections.
7	All simulator indicator lamps do not illuminate when **PANEL LIGHTS** switch is operated during operation with AN/APS-94D.	*a.* Cable Assembly CX-12238/U (4 ft) or CS-12239/U(4 ft) defective.	*a.* Perform continuity check (para 4-5). If cable is defective, higher category of maintenance is required.
		b. Connectors **J3**, **J4**, or **PANEL LIGHTS TEST** switch defective.	*b.* Higher category of maintenance required.
8	Individual simulator indicator lamps do not illuminate when **PANEL LIGHTS TEST** switch is operated during operation with AN/APS-94D.	Lamp circuit defective.....	Higher category of maintenance required.
9	Simulator **NAVIGATION** lamp does not illuminate when **NAVIGATION** switch is set at ON during operation with the AN/APS-94D.	**NAVIGATION** switch defective....	Higher category of maintenance required.
10	Power monitor **AMPERE AC PHASE** meter does not indicate during operation with AN/APS-94D.	*a.* Cable Assembly CX-12242/U defective.	*a.* Perform continuity check (para 4-5). If cable is defective, higher category of maintenance is required.
		b. Connector **J4**, **POWER** switch, or **AMPERE AC PHASE** meter defective.	*b.* Higher category of maintenance required.
11	Power monitor **AMPERE DC** meter does not indicate during operation with AN/APS-94D	*a.* Cable Assembly CX-12242/U defective.	*a.* Perform continuity check (para 4-5). If cable is defective, higher category of maintenance is required.
		b. Connector **J4**, **POWER** switch, **AMPERE DC** meter defective.	*b.* Higher category of maintenance required.
12	Control panel lamp illumination-not obtained during operation with AN/APS-94D.	*a.* Cable Assembly CX-12234/U (4 ft), Cable Assembly CX-12236/U (3 ft), or Cable Assembly CX-12232/U (2 ft) defective.	*a* Perform continuity checks (par 4-5). If cables are defective, higher of category of maintenance is required.
		b. Power monitor connector **J4**, **SYSTEM PANEL ILLUM TEST** switch, or switch circuit defective.	*b.* Higher category of maintenance required.
13	Antenna fault operation not obtained during operation with AN/APS-94D.	*a.* Cable Assembly CX-12233/U (4 ft) or Cable Assembly CX-12234/U (4 ft) defective.	*a.* Perform continuity checks (para 4-5). If cables are defective, higher catgory of maintnaneu is required.
		b. Simulator connector **J2**, **ANTENNA FAULT** switch, or switch circuit defective.	*b.* Higher category of maintenance required.

Item No.	Trouble symptom	Probable trouble	Corrective measure
14	Drift control operation improper during operation with AN/APS-94D.	*a.* Cable Assembly CX-12238/U (4 ft) or Cable Assembly CX-12239/U (4 ft) defective.	*a.* Perform continuity checks (para 4-5). If cables are defective, higher category of maintenance is required.
		b. Simulator connectors **J1** or **J4***b.* d*efec*tive.	Higher category of maintenance required.
		c. Simulator **NAVIGATION DRIFT** control dial loose or incorrectly positioned on shaft.	*c.* Same as *b* above.
15	Groundspeed control operation improper during operation with AN/APS-94D.	*a.* Cable Assembly CX-12238/U (4 ft) or Cable Assembly CX-12239/U (4 ft) defective.	*a.* Perform continuity checks (para 4-5). If cables are defective, higher category of maintenance is required.
		b. Simulator connectors **J1** or **J4***b.* defective.	Higher catgory of maintenance required.
		c. Simulator **NAVIGATION**. **GROUNDSPEED** control dial loose or incorrectly positioned on shaft.	*c.* Same as *b* above.

CHAPTER 5

SHIPMENT, LIMITED STORAGE, AND DEMOLITION TO PREVENT ENEMY USE

Section I. SHIPMENT AND LIMITED STORAGE

5-1. Disassembly of Equipment

Prepare units of the test set group for shipment and limited storage as follows:

a. Disconnect all test set cabling, coil the interconnecting cables.

b. Place all minor component items in storage areas of the cases.

c. Use dry, soft neutral material to fill all voids and cushion any vibration.

d. Secure the hinged inner lid in case cover by pressing the press-to-lock-unlock fasteners.

e. Place cover on test set unit. Close and secure the cover of each case by fastening the eight latches.

5-2. Repackaging the Equipment

Each test set can be repackaged as indicated in figure 2-1. Use the original packaging materials if available. Refer to table 5-1 if it becomes necessary to fabricate new packaging materials for the power monitor or the simulator. Refer to table 5-2 to fabricate new packaging materials for the test accessories list.

5-3. Repackaging

Package each unit of the test set group as out lined below. Refer to figure 2-1.

a. Place two corrugated fiberboard liners in bottom of cleated plywood box. Place test set (unit) in box.

b. Place at least two corrugated fiberboard liners between each side of case and cleated ply- wood box.

c. Place at least two liners on top of case.

d. Secure plywood top to cleated plywood box.

e. Install two steel straps (QQ-S-781) around box, using staples (FF-N-105).

5-4. Limited Storage

Perform the operations listed below to prepare the equipment for limited storage.

a. Inspection. Perform a visual inspection of the equipment.

Table 5-1. Materials far Fabrication of Shipping Box for Power Monitor or Simulator

Qty	Materials
2 min.	Fiberboard liners (PPP-F-320, CF, DOM, SW, 200), top and bottom, 24.5 by 21.5 inches.
2 min.	Fiberboard liners (PPP-F-320, CF, DOM SW 200), sides, 24.5 by 19.5 inches.
2. min	Fiberboard liners (PPP-F-320, CF, DOM SW 200), ends, 21.5 by 19.5 inches
8	Foam corner blocks (unicellular, polyethy-lene foam, MIL-C-46842), 7 by 7 inches with 2-inch thick walls.
As req.	Steel strapping flat (QQ-S-7B1, type 1, lass B, Grade 2), 0.75 inch wide by 0.023 inch thick.
As req.	Cleated plywood box (PPP-B-601, style A, domestic type) inside dimensions 24 by 29 by 26 inches.

Table 5-2. Materials for Fabrication of Test Accessories Kit Shipping Box

Qty	Materials
2 min.	Fiberboard liners (PPP-F-320, CF, DOM, SW, 200), top and bottom, 23 by 30.5 inches.
2 min.	Fiberboard liners (PPP-F-320, CF, DOM SW 200), sides, 30.5 by 19.5 inches.
2. min	Fiberboard liners (PPP-F-320, CF, DOM SW 200), ends, 23 by 19.5 inches
8	Foam corner blocks (unicellular, polyethy-lene foam, MIL-C-46842), 9 by 9 by 9 inches with 2-inch thick walls.
As req.	Steel strapping flat (QQ-5-781, Type 1, lass B, Grade 2), 0.75 inch wide by 0.023 inch thick.
As req.	Cleated plywood box (PPP-B-601, style A, domestic type) inside dimensions 24 by 35 by 27.5 inches.

b. Cleaning. Clean the equipment (para 3-7).

c. Painting. Touch up painted surfaces as required (para 4-6).

d. Packing. Pack the equipment (paras 5-1 and 5-2).

Section II. DEMOLITION TO PREVENT ENEMY USE

5-5. Authority for Demolition

Demolition of the equipment will be accomplished only upon order of the commander. Use the destruction procedure outlined in paragraph 5-6 to prevent further use of the equipment.

5-6. Methods of Destruction

*a. Smash. S*mash the controls, switches, capacitors, resistors, transformers, cable connectors, and meters. Use sledge axes, hammers, crowbars, or any available heavy object that can be used in this manner. Smash all control panels and cases.

b. Cut. Use axes, machetes, or any suitable sharp object to cut cabling, cording, and wiring. Cut in a number of pieces.

WARNING

Be extremely careful with explosives and incendiary devices. Use these items only when the need is urgent, and only when all personnel concerned are thoroughly familiar with demolition procedures (FM 5-25).

c Burn. Burn technical manuals. Use gasoline, kerosene, oil, flamethrowers, or incendiary grenade.

d. Dispose. Bury or scatter the destroyed parts foxholes or throw them into streams.

5-7. Priorities for Destruction

Priorities for destruction are-

a. Operating instructions.

b. Component parts and the spare parts.

c. Cables and wires.

d. Control panels.

e. Component cases.

APPENDIX A
REFERENCES

The following publication contain information applicable to the operation and organizational maintenance of Test Set Group, Radar OQ-59/APS-94D and 00-59A/APS-94D.

DA	Pam 310-4	Index of Technical Publications.
FM	5-25	Explosives and Demolition.
SB	11-573	Painting and Preservations of Supplies Available for Field Use for Electronics Command Equipment.
TB	430118	Field Instructions for Painting and Preserving Electronics Command Equipment Including Camouflage Pattern Painting of Electrical Equipment Shelters.
TB	385-4	Safety Precautions for Maintenance of Electrical Electronic Equipment.
TM	11-5895-967-34	Direct Support and General Support Maintenance Manual: Radar Surveillance Set *A*NAPS-*94E*SN 5841-*0*1-040-873).
TM	11-*5895-10730*	Direct Support Maintenance Manual for Radar Surveillance Set ANAPS-*94*F.
TM	11-25-203-12	Operator's and Organizational Maintenance Manual: Multimeter AN*URM*-105 and AN/URM-1 C (including Multimeter ME-77/U and ME-77C/*U).*
TM	38-7	The Army Maintenance Management System (TAMMS).

APPENDIX B

MAINTENANCE ALLOCATION

Section I. INTRODUCTION

B-1. General

This appendix provides a summary of the maintenance operations for the test set groups. It authorizes cate- gores of maintenance for specific maintenance functions on repairable items and components and the tools and equipment required to perform each function. This appendix may be used as an aid in planning maintenance operations.

B-2. Maintenance Function

Maintenance actions will be limited to and defined as follows:

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 to detect incipient failure by measuring the mechanical or electrical characteristics of an item and comparing those characteristic with prescribed standards.

c.. Service. Operations required periodically to keep an item in proper operating condition, i. e. , to clean (de contaminate), to preserve, to drain, to paint, or to replenish fuel, lubricants, hydraulic fluids, or compressed air supplies.

c. Adjust. To maintain, within prescribed limit, by bringing into proper or exact position, or by setting the operating characteristics to the specified parameters.

e. Align. To adjust specified value elements of an item to bring about optimum or desired performance.

f. Calibrate. To determine and cause corrections to be made or be adjusted on instrument or test measuring and diagnostic equipment used in precision measurement. Consists of comparisons of two instruments, one of which is a certified standard of known accuracy, to detect and adjust any discrepancy in the accuracy of the instrument being compared.

g. *stall.* The act of emplacing, seating, or fixing into position an item, part, module (component or assembly) in a manner to allow the proper functioning of the equipment or system.

h. Replace. The act of substituting a serviceable like type part, subassembly, or module (component or as- sembly) for an unserviceable counterpart.

i. Repair. The application of maintenance services (inspect, test, service, adjust, align, calibrate, replace) or other maintenance actions (welding, grinding, riveting, straightening, facing, remachining, or resurfacing) to restore serviceability to an item by correcting specific damage, fault, malfunction, or failure in a part, subassembly, module (component or assembly), end item, or system.

j. Overhaul. That maintenance effort (service/action necessary to restore an item to a completely serviceable/operational condition as prescribed by mainte- nance standards (i. e. , DMWR) 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.

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

B-3. Column Entries

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 noun names of components, assemblies, sub assemblies, and modules for which maintenance is authorized.

c. Column 3, *Ma*inten*ance Functions.* Column 3 lists the functions to be performed on the item listed in column 2. When items are listed without maintenance functions, it is solely for purpose of having the group numbers in the MAC and RPSTL coincide.

d. Column 4, *Maintenance Category.* Column 4 specifies, by the listing of a "work time" figure in appropriate subcolumn(s), the lowest level of mainte nance authorized to perform the function listed in column 3. This figure represents the active time required to perform that maintenance function at the indicated category of maintenance. If the number or complexity of the tasks within the listed maintenance

function vary at different maintenance categories, ap propriate "work time" figures will be shown for each category. The number of task-hours specified by the "work time figure represents the aver age time required 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 maintenance allocation chart.
Subcolumns of column 4 are as follows:

C-Ope*rator*/Crew
O--Organizational
F-Direct Support
H-General Support
D-Depot

e*. Column 5, Tools and Equipment.* Column 5 specifies by code, those common tool sets (not individual tools) and special tools, test, and support equipment required to perform the designated function.

f. Column 6, Remarks. Column 6 contains an alphabetic code which leads to the remark in section IV, Remarks, which is pertinent to the item opposite the particular code
.

B-4. Tool and Test Equipment Requirements (Sect. III)

a. Tools or Test Equipment Reference Code. The numbers in this column coincide with the numbers used in the tools and equipment column of the MAC. The numbers indicate the applicable tool or test equipment for the maintenance functions.

b. Maintenance Category. The codes in this column indicate the maintenance category allocated the tool or test equipment.

c. Nomenclature. This column lists the noun name and nomenclature of the tools and test equipment required to perform the maintenance functions.

d. National/ NATO Stock Number. This column lists the National/NATO stock number of the specific tool or test equipment.

e. Tool Number This column lists the manufacturer's part number of the tool followed by the Federal Supply Code for manufacturers (5-digit) in parentheses.

B-5. Remarks (Sect. IV)

a. Reference Code. This code refers to the appropriate item in section , column 6.

*b. Remarks. Th*is column provides the required explanatory information necessary to clarify items appearing in section II.

(Next printed page is B-3)

SECTION II. MAINTENANCE ALLOCATION CHART

(1) GROUP NUMBER	(2) COMPONENT/ASSEMBLY	(3) MAINTENANCE FUNCTION	(4) MAINTENANCE CATEGORY C	O	F	H	D	(5) TOOLS AND EQPT	(6) REMARKS
00	Test Set Group, Radar OQ-59/APS-94D AND OQ-59A/APS-94D	Inspect.	.2					Visual	
		Test		.5				1	
		Replace		.1					
		Repair		.2				1, 3	
		Repair			.5			2, 3, 4, 5, 6 2 thru 19	
01	Accessory Kit, Radar Test Set Group, MK-1209A/APS-94D	Inspect	.2					Visual	
		Test		.5				3	
		Service	.4						
		Replace		.1					
		Repair			.5			2, 3	
0101	. CY-68A/APS-94D	Inspect		.2					
		Replace			.1				
		Repair			.1			2	
0102	. Cable Assembly RF CG-3618/U W11-14, W16-W25 (6 Ft)	Inspect		.1					
		Replace		.1					
		Repair			1			2	
0103	. Cable Assembly, Special Purpose Electrical CX-12231/U (2 FA) W2	Inspect		.1					
		Replace		.1					
		Repair			1			2, 20, 22 26	
0104	. Cable Assembly, Special Purpose Electrical CX-12232/U (2 Ft) W7	Inspect		.1					
		Replace		.1					
		Repair			1			2, 20, 22 26	
0105	. Cable Assembly, Special Purpose Electrical CX-12234/U (4 Ft) W3	Inspect		.1					
		Replace		.1					
		Repair			1			2, 20, 22 28	
0106	. Cable Assembly, Special Purpose Electrical CX-12235/U W4 (6 Ft)	Inspect		.1					
		Replace		.1					
		Repair			1			2, 20, 22 25	
0107	. Cable Assembly, Special Purpose Electrical CX-12236/U (3 Ft) W8	Inspect		.1					
		Replace		.1					
		Repair			1			2, 20, 22 27	
0108	. Cable Assembly, Special Purpose Electrical CX-12237/U (4 Ft) W5	Inspect		.1					
		Replace		.1					
		Repair			1			2, 20, 22 27	
0109	. Cable Assembly, RF CG-3618/U (3 Ft) W8, W9, W10, W15	Inspect		.1					
		Replace		.1					
		Repair			1			2	

SECTION II. MAINTENANCE ALLOCATION CHART

(1) GROUP NUMBER	(2) COMPONENT/ASSEMBLY	(3) MAINTENANCE FUNCTION	(4) MAINTENANCE CATEGORY C	O	F	H	D	(5) TOOLS AND EQPT	(6) REMARKS
0110	. Cable Assembly, RF 14 ea	Inspect		.1					A
	W29-W42	Replace		.1					
		Repair			1			2	
0111	. Waveguide Load Assy	Inspect		.5					
		Replace		.1					
		Repair			.5			2	
0112	. Hose Assy, Pressurization	Inspect		.5					A
		Replace		.1					
		Repair		.5				2	
0113	Quick Disconnect Adapter Assy	Inspect		.5					A
		Replace		.1					
		Repair			.5			2	
0114.	Test Plug 12PI	Inspect		.5					
		Replace		.1					
		Repair			.5			2	
0115	. Dummy Load-Directional Coupler,	Inspect		.5					
	MX-8741/APS-94D	Replace		.1					
	Consisting of:	Repair			1			2	
	. Coupler, Directional CU-1921/U								
	. Dummy Load, Electrical DA-561/U								
	. Dummy Load-Coupler Assembly								
	. DA-691/APS-94F								A
02	Simulator-Monitor SM-567/APS-94D	Inspect	.2						
		Test		.5					
		Service	.5						
		Align			.5				
		Calibrate			1				
		Replace		.1					
		Repair		.2					
		Repair			.5			2	
		Repair					2		
0201	. Cable Assembly, Special Purpose	Inspect		.1					
	CX-12233/U (6 Ft) W1	Replace		.1					
		Repair			1			2, 20, 22, 25	
0202	. Cable Assembly, Special Purpose	Inspect		.1					
	CX-12238 /U (4 Ft) W2	Replace		.1					
		Repair			1			2, 20, 22, 25	
0203.	. Cable Assembly, Special Purpose	Inspect		.1					
	CK-12239/U (4 Ft) W3	Replace		.1					
		Repair			1			2, 20, 22, 25	
03	Monitor, Electrical Power	Inspect	.2						
	UX-8570A/APS-94D	Test		.5					
		Service	.5						
		Calibrate			1				
		Replace		.1					
		Repair		.2					
		Repair			.5			2	
		Repair					2		

SECTION II. MAINTENANCE ALLOCATION CHART

(1) GROUP NUMBER	(2) COMPONENT/ASSEMBLY	(3) MAINTENANCE FUNCTION	(4) MAINTENANCE CATEGORY C	O	F	H	D	(5) TOOLS AND EQPT	(6) REMARKS
0301	. Cable Assembly, Power Electrical CX-12240/U (6 Ft) W1	Inspect Replace Repair		.1 .1	 1			 2, 20, 21 25	
0302	. Cable Assembly, Power Electrical CX-12241/U (6 Ft) W2	Inspect Replace Repair		.1 .1	 1			 2, 20, 21 24	
0303	. Cable Assembly, Power Electrical CX-12242/U (5 Ft) W4	Inspect Replace Repair		.1 .1	 1			 2, 20, 21 26	
0304	. Cable Assembly, Power Electrical CX-12243/U (3 Ft) W3 Repair	Inspect Replace		.1 .1	 1			 2, 20, 21 25	
0305	Cable Assembly Special Purpose Electrical W5 Repair	Inspect Replace		.1 .1	 1			 2, 26, 29	
0306	Cable Assembly, Special Purpose Electrical W26	Inspect Replace Repair		.1 .1	 1			 2, 20, 22, 23, 26, 2	
0307	Cable Assembly, Special Purpose Electrical W27	Inspect Replace Repair		.1 .1	 1			 2, 20, 22 23	
0308	Cable Assembly, Special Purpose Electrical W28	Inspect Replace Repair		.1 .1	 1			 2, 20, 22 23	

SECTION III. TOOL AND TEST EQUIPMENT REQUIREMENTS

TOOL OR TEST EQUIPMENT REF CODE	MAINTENANCE CATEGORY	NOMENCLATURE	NATIONAL/ NATO STOCK NUMBER	TOOL NUMBER
1	0	TOOL KIT. ELECTRONICEUIPMENT TK-101/G	5180-00-064-5178	
2	0, F, D	MULTIMETER AN/URM-105	6625-00-581-2036	
3	F, D	TOOL. KIT, ELECTRONIC EQUIPMENT TK-105/G	5180-00-610-8177	
4	F, D	MULTIMETER TS-352B/U; r/b AN/USM-223 (6625-00-999-7465)	6625-00-553-0142	
5	F, D	VOLTMETER, ELECTRONIC ME-30(*)U	6625-00-669-0742	
6	F, D	VOLTMETER, DIGITAL AN/GSM-64B INCLUDING:	6625-00-022-7894	
		Ac Plug-in Module	6625-00-137-8360	
		Module Cover	8625-00-137-8348	
7	F, D	AMMETER: WESTON MODEL 370-2903005	6625-*00-801*-1311	
8	F, D	TRANSFORMER, VARIABLE; GENERAL RADIO MODEL M2 G3	6988	5950-00-557-
9	F, D	TEST CABLE NO. 1 FOR SM-567/APS-94D	Fabricated	
10	F, D	TEST CABLE NO. 2 FOR SM-567/APS-94D	Fabricated	
11	F. D	TEST FIXTURE FOR HX-8570/APS-94D	Fabricated	
12	F, D	TEST FIXTURE, SIMULATOR-MONITOR	Fabricated	
13	D	GENERATOR, SIGNAL SG-400/U	6625-00-814-3854	
14	D	ATTENUATOR, WAVEGUIDE FIXED; NARDA MODEL P/N 720-3		
15	D	CONNECTOR, ADAPTER, ELECTRICAL UG-270/U	5935-00-204-8383	
16	D	INDICATOR, STANDING WAVE RATIO AN/USM-37(*)	6625-00-814-8357	
17	D	TEST SET, RF POWER AN/USH-260	6625-00-917-3099	
18	D	MOUNT, THERMISTOR; HEWLETT-PACKARD MODEL 486A	4931-00-100-1794	
19	D	DEPOT FACILITIES		
20	F	CRIMPING TOOL 22520/7-01	5120-00-133-1747	
		INCLUDES:		
		Positioner M22520/7-02	5120-00-133 1769	
		Positioner M22520/7-03	5120-00-133-1770	
		Positioner M22520/7-05	5120-00-133-1778	

SECTION III TOOL AND TEST EQUIPMENT REQUIREMENTS

TOOL OR TEST EQUIPMENT REF CODE	MAINTENANCE CATEGORY	NOMENCLATURE	NATIONAL/ NATO STOCK NUMBER	TOOL NUMBER
		Positioner M22520/7-08	5120-00-133-1785	
21	F	INSERTION/REMOVAL TOOL MS27534-16	5120-00-915-4588	
22	F	INSERTION/REMOVAL TOOL MS27534-20	5120-00-018-0535	
23	F	INSERTION/REMOVAL TOOL MS27534-22D	5120-00-018-0575	
24	F	TOOL, CONNECTOR ASSEMBLY MS3481-12	5120-00-133-2052	
25	F	TOOL, CONNECTOR ASSEMBLY MS3481-14	5120-00-133-2072	
26 F		TOOL, CONNECTOR ASSEMBLY MS3481-18	None	
27 F		TOOL, CONNECTOR ASSEMBLY MS3481-20	5120-00-126-6666	
28	F	TOOL, CONNECTOR ASSEMBLY MS3481-16	None	
29	F	TOOL, CONNECTOR ASSEMBLY MS3480-18	5120-00-078-2275	
		NOTE Items 9, 10, 11, and 12 are included in: TEST FACILITIES KIT FOR OQ-59/APS-94D, AN/GPM-61, OQ-61/APS-94D, OQ-64V(1)/APS-94D		

SECTION IV. REMARKS FOR RADIO SET AN/GRC-240

REFERENCE CODE	REMARKS
A	This item is pecular to the OQ-59A/APS-94D

APPENDIX C
COMPONENTS OF END ITEM LIST

Section I. INTRODUCTION

C-1. Scope

This append ix lists integral components of and basic issue items for the OQ-59/AP*S*-94D and OQ-59A/APS-94D to help you inventory items required for safe and efficient operation.

C-2. General

This Components of End Item List is divided into the following sections:

a. Section II. Integral Components of the End Item. Not applicable. These items, when assembled, comprise the OQ-59/APS-94D and OQ-59A/APS-94D and must accompany it whenever t is transferred or turned in. The illustrations will help you identify these items.

b. Section III. Basic Issue Items. Not applicable. These are the minimum essential items required to place the OQ-59/APS-94D and OQ-59A/APS-9D in operation, to operate it, and to perform emergency repairs. Although shipped separately packed they must accompany the *OQ*-59APS-94D and OQ-59A/APS-94D 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.

C-3. Explanation of Columns

a. Illustration. This column is divided as follows:

(1) Figure number. Indicates the number of the illustration on which the item is shown.

(2) *Item number.* The number used to identify item called out n 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 drawing, specifications, standard, and inspection requirements to identify an item or range of terms. Following the part number, the Federal Supply Code for Manufacturers (FSCM) is shown in parentheses.

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. Not applicable.

g. Quantity Required (Qty Reqd). 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 Rcvd 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.

(Next printed page is C-3)

(1) ILLUSTRATION (A) FIG.	(1) ILLUSTRATION (B) ITEM	(2) NATIONAL STOCK NUMBER	(3) DESCRIPTION PART NUMBER	(3) CAGE	(4) LOCATION	(5) USUABLE ON CODE	(6) QTY REQD	(7) QUANTITY RCVD	(7) QUANTITY DATE
		6625-00-938 -0229	ACCESSORY KIT, RADAR TEST SET GROUP _ K-1209/ APS-94D.	(80058)			1		
		6625-00-938 -0231	MONITOR, ELECTRICAL, POWER MX-8570/APS-94D	(80058)					
		6625-00-762 -4887	SIMULATOR-MONITOR SH-567/APS-94D	(80058)			1		

(1) ILLUSTRATION (A) FIG.	(1) ILLUSTRATION (B) ITEM	(2) NATIONAL STOCK NUMBER	(3) DESCRIPTION PART NUMBER	(3) DESCRIPTION CAGE	(4) LOCATION	(5) USUABLE ON CODE	(6) QTY REQD	(7) QUANTITY RCVD	(7) QUANTITY DATE
			TM11-5995-207-12 OQ-59/APS-94D				1		

APPENDIX E
EXPENDABLE SUPPLIES AND MATERIALS LIST

Section I. INTRODUCTION

E-1. Scope

This appendix lists expendable supplies and materials you will need to operate and maintain in the OQ-59/APS-94D and OQ-59A/APS-94D. These items are authorized to you by CTA 50-970, Expendable Items (Except Medical, Class V, Repair Parts, and Heraldic Items) .

E-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. D").

b. Column 2--Level. This column identifies the lowest level of maintenance that requires the listed item.

C-Operator/Crew

O-Organizational Maintenance/Aviation Unit Maintenance

F-Direct Support Maintenance/Aviation Intermediate Maintenance

H--Genera Support Maintenance

c Column 3-National Stock Number. This is the National stock number 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 Federal Supply Code for Manufacturer (FSCM) in parentheses followed by a part number.

e. *Column* 5-*UntMeasu(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 unit of measure differs from the unit of issue, requisition the lowest unit of issue that will satisfy your requirements.

(Next printed page is E-3)

SECTION II. EXPENDABLE SUPPLIES AND MATERIALS LIST.

(1) ITEM NUMBER	(2) LEVEL	(3) NATIONAL STOCK NUMBER	(4) DESCRIPTION PART NUMBER AND FSCM	(5) UNIT OF MEAS
I	C	6505-00-105-0000	ALCOHOL, DENATURED, UA 00408	CN
2	C	8020-00-245-4509	BRUSH, CAMEL'S HAIR, HB391 SIZE 1	PK
3	H		CABLE TIE, TYB-23M (06865)	BX
4	C	8305-00-205-3496	CLOTH, COTTON, LINT-FREE CCC-440	PK
5	H		COMPOUND, HEAT SINK, DC-340 (71984)	
6	0		ENAMEL, LIGHT GRAY TYPE III, CLASS 2 PER MIL-E-15090	CN
7	0		PRIMER, COLOR T PER WIL-P-8585	CN
8	0		SANDPAPER NO. 000	PK
9	H	3439-00-824-9856	SOLDER, SNS60WRAP 30.0-32 (C81349)	RL
10	H	3439-00-194-9727	SOLDER, (C81349)	RL
11	H		SOLDER BRAID, CAT #40-3-5 SIZE 3 (34605)	PK
12	H		TAPE, INSULATION, ELECTRICAL MIL-I-15126 (81340)	RL
13	C		TAPE, MASKING 1", 292-3300 (28213)	RL
14	0		TISSUES, CLEANING	PK
15	C	6850-00-105-3084	TRICHLOROTRIFLUOROETHANE, FREON TF	CN

(E-4 blank)

By Order of the Secretary of the Army:

W. C. WESTMORELAND,
General, United States Army,
Chief of Staff.

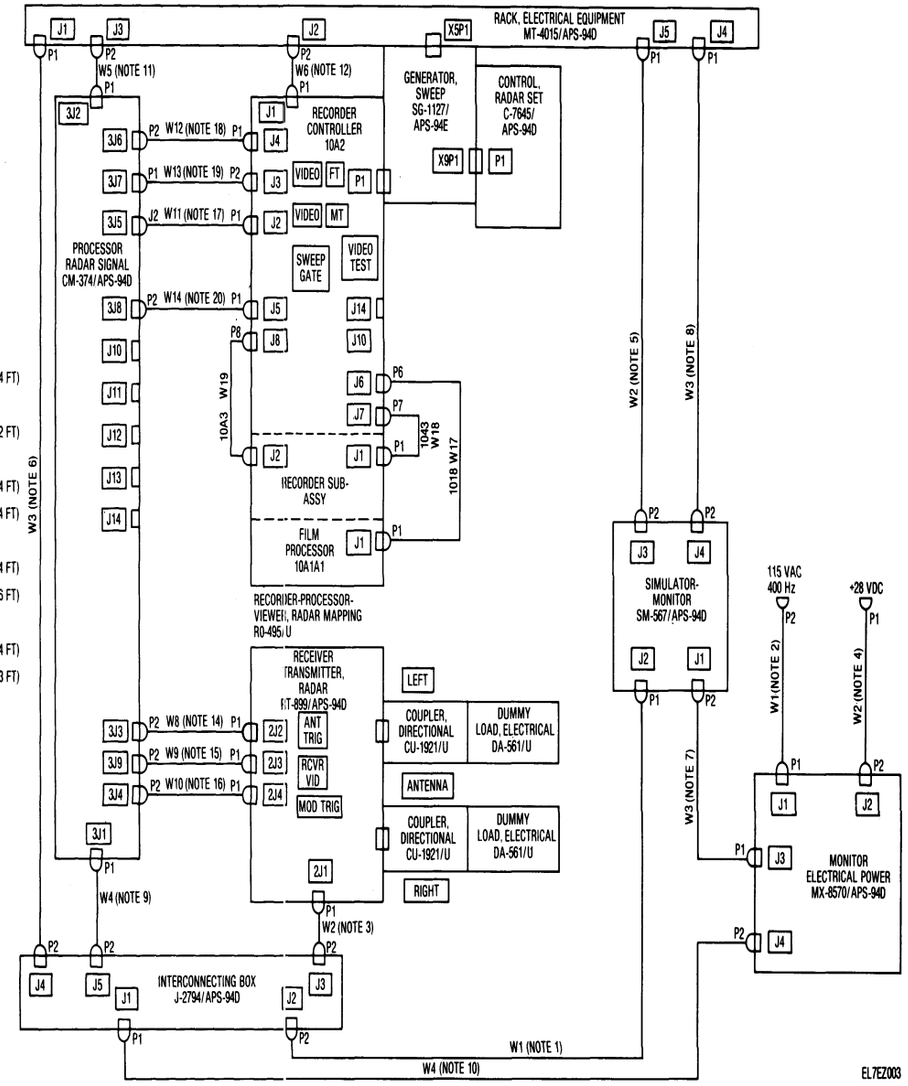
Official:
KENNETH G. WICKHAM,
Major General, United States Army,
The Adjutant General.

Distribution:
To be distributed in accordance with DA Form 1236, Direct and General Support requirements for OV-1A, OV-1B, and OV-1C aircrafts.

*U. S. GOVERNMENT PRINTING OFFICE : 1984 0 - 461-421 (10732)

NOTES

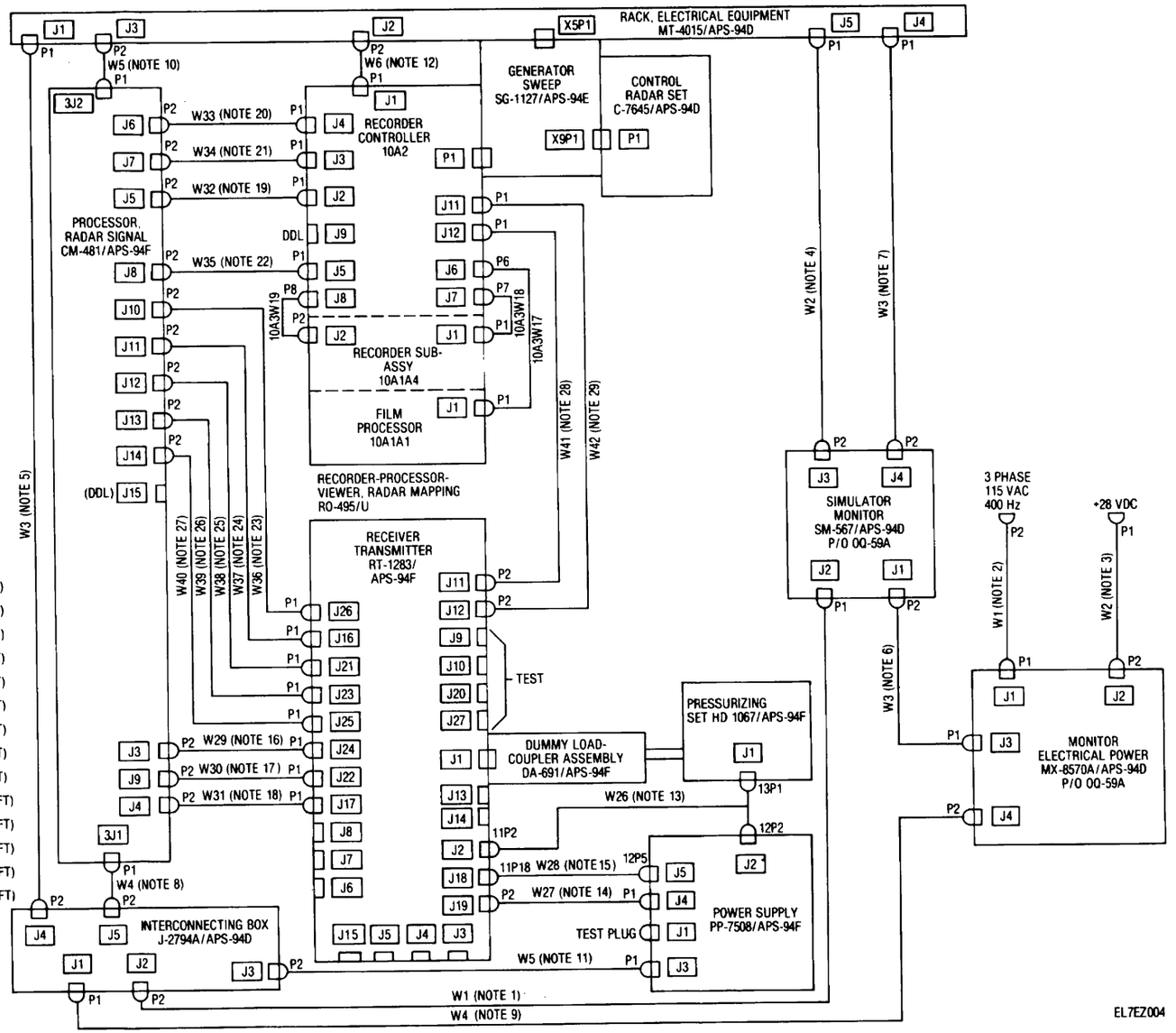
1. W1 IS CABLE ASSEMBLY, SPECIAL PURPOSE, ELECTRICAL CX-12233/U (4 FT)
2. W1 IS CABLE ASSEMBLY, POWER, ELECTRICAL CX-12240/U (6 FT)
3. W2 IS CABLE ASSEMBLY, SPECIAL PURPOSE, ELECTRICAL CX-12231/U (2 FT)
4. W2 IS CABLE ASSEMBLY, POWER, ELECTRICAL CX-12241/U (6 FT)
5. W2 IS CABLE ASSEMBLY, SPECIAL PURPOSE, ELECTRICAL CX-12238/U (4 FT)
6. W3 IS CABLE ASSEMBLY, SPECIAL PURPOSE, ELECTRICAL CX-12234/U (4 FT)
7. W3 IS CABLE ASSEMBLY, POWER, ELECTRICAL CX-12243/U (3 FT)
8. W3 IS CABLE ASSEMBLY, SPECIAL PURPOSE, ELECTRICAL CX-12239/U (4 FT)
9. W4 IS CABLE ASSEMBLY, SPECIAL PURPOSE, ELECTRICAL CX-12235/U (6 FT)
10. W4 IS CABLE ASSEMBLY, POWER, ELECTRICAL CX-12242/U (5 FT)
11. W5 IS CABLE ASSEMBLY, SPECIAL PURPOSE, ELECTRICAL CX-12237/U (4 FT)
12. W6 IS CABLE ASSEMBLY, SPECIAL PURPOSE, ELECTRICAL CX-12236/U (3 FT)
13. W8 IS CABLE ASSEMBLY, RADIO FREQUENCY CG-3618/U (3 FT)
14. W9 IS CABLE ASSEMBLY, RADIO FREQUENCY CG-3618/U (3 FT)
15. W10 IS CABLE ASSEMBLY, RADIO FREQUENCY CG-3618/U (3 FT)
16. W11 IS CABLE ASSEMBLY, RADIO FREQUENCY CG-3618/U (6 FT)
17. W12 IS CABLE ASSEMBLY, RADIO FREQUENCY CG-3618/U (6 FT)
18. W13 IS CABLE ASSEMBLY, RADIO FREQUENCY CG-3618/U (6 FT)
19. W14 IS CABLE ASSEMBLY, RADIO FREQUENCY CG-3618/U (6 FT)



FO 2-5.1. Interconnection of Test Set Group, Radar OQ-59/APS-94D and Radar Surveillance Set AN/APS-94E.

NOTES:

1. W1 IS CABLE ASSEMBLY, SPECIAL PURPOSE, ELECTRICAL CX-12233/U(4FT)
2. W1 IS CABLE ASSEMBLY, POWER, ELECTRICAL CX-12240/U (6 FT)
3. W2 IS CABLE ASSEMBLY, POWER, ELECTRICAL CX-12241/U (6 FT)
4. W2 IS CABLE ASSEMBLY, SPECIAL PURPOSE, ELECTRICAL CX-12238/U(4FT)
5. W3 IS CABLE ASSEMBLY, SPECIAL PURPOSE, ELECTRICAL CX-12234/U (4 FT)
6. W3 IS CABLE ASSEMBLY, POWER, ELECTRICAL CX-12243/U (3 FT)
7. W3 IS CABLE ASSEMBLY, SPECIAL PURPOSE, ELECTRICAL CX-12239/U (4 FT)
8. W4 IS CABLE ASSEMBLY, SPECIAL PURPOSE, ELECTRICAL CX-12225/U (6 FT)
9. W4 IS CABLE ASSEMBLY, POWER, ELECTRICAL CX-12242/U (5 FT)
10. W5 IS CABLE ASSEMBLY, SPECIAL PURPOSE, ELECTRICAL CX-12237/U (4 FT)
11. W5 IS CABLE ASSEMBLY, SPECIAL PURPOSE, ELECTRICAL SM-C-945892 (4 FT)
12. W6 IS CABLE ASSEMBLY, SPECIAL PURPOSE, ELECTRICAL CX-12236/U (3 FT)
13. W26 IS CABLE ASSEMBLY, SPECIAL PURPOSE, ELECTRICAL SM-C-945901 (4 FT)
14. W27 IS CABLE ASSEMBLY, SPECIAL PURPOSE, ELECTRICAL SM-C-945926 (4 FT)
15. W28 IS CABLE ASSEMBLY, SPECIAL PURPOSE, ELECTRICAL SM-C-945927 (4 FT)
16. W29 IS CABLE ASSEMBLY, SPECIAL PURPOSE, ELECTRICAL SM-C-945932-1 (6 FT)
17. W30 IS CABLE ASSEMBLY, SPECIAL PURPOSE, ELECTRICAL SM-C-945932-2 (6 FT)
18. W31 IS CABLE ASSEMBLY, SPECIAL PURPOSE, ELECTRICAL SM-C-945932-3 (6 FT)
19. W32 IS CABLE ASSEMBLY, SPECIAL PURPOSE, ELECTRICAL SM-C-945932-4 (6 FT)
20. W33 IS CABLE ASSEMBLY, SPECIAL PURPOSE, ELECTRICAL SM-C-945932-5 (6 FT)
21. W34 IS CABLE ASSEMBLY, SPECIAL PURPOSE, ELECTRICAL SM-C-945932-6 (6 FT)
22. W35 IS CABLE ASSEMBLY, SPECIAL PURPOSE, ELECTRICAL SM-C-945932-7 (6 FT)
23. W36 IS CABLE ASSEMBLY, SPECIAL PURPOSE, ELECTRICAL SM-C-945932-8 (6 FT)
24. W37 IS CABLE ASSEMBLY, SPECIAL PURPOSE, ELECTRICAL SM-C-945932-9 (6 FT)
25. W38 IS CABLE ASSEMBLY, SPECIAL PURPOSE, ELECTRICAL SM-C-945932-10 (6 FT)
26. W39 IS CABLE ASSEMBLY, SPECIAL PURPOSE, ELECTRICAL SM-C-945932-11 (6 FT)
27. W40 IS CABLE ASSEMBLY, SPECIAL PURPOSE, ELECTRICAL SM-C-945932-12 (6 FT)
28. W41 IS CABLE ASSEMBLY, SPECIAL PURPOSE, ELECTRICAL SM-C-945932-13 (12FT)
29. W42 IS CABLE ASSEMBLY, SPECIAL PURPOSE, ELECTRICAL SM-C-945932-14 (12FT)



FO 2-5.2. Interconnection of Test Set Group, Radar OQ-59/APS-94D and Radar Surveillance Set AN/APS-94E.

TEAR ALONG PERFORATED LINE

RECOMMENDED CHANGES TO EQUIPMENT TECHNICAL PUBLICATIONS

SOMETHING WRONG WITH THIS PUBLICATION?

FROM: (PRINT YOUR UNIT'S COMPLETE ADDRESS)

DATE SENT

PUBLICATION NUMBER	PUBLICATION DATE	PUBLICATION TITLE

BE EXACT. . .PIN-POINT WHERE IT IS

PAGE NO.	PARA-GRAPH	FIGURE NO.	TABLE NO.

IN THIS SPACE TELL WHAT IS WRONG AND WHAT SHOULD BE DONE ABOUT IT:

PRINTED NAME, GRADE OR TITLE, AND TELEPHONE NUMBER

SIGN HERE:

DA FORM 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.

PIN: 019803-000