#### TECHNICAL MANUAL

### ORGANIZATIONAL MAINTENANCE REPAIR PARTS AND SPECIAL TOOLS LISTS

**FOR** 

TS-538/U, TS-538A/U, TS-538B/U

**AND** 

TS-538C/U

(NSN 6625-00-243-5174)

TECHNICAL MANUAL

No. 11-6625-213-20P

#### ORGANIZATIONAL MAINTENANCE REPAIR PARTS AND SPECIAL TOOLS LISTS

FOR

# TEST SETS TS-538/U, TS-538A/U,TS-538B/U, and TS-538C/U (NSN 6625-00-243-5174)

### Current as of 28 February 1978

#### REPORTING OF ERRORS

You can improve this manual by recommending improvements using DA Form 2028-2 located in the back of the manual. Simply tear out the self addressed form, fill it out as shown on the sample, fold it where shown, and drop it in the mail.

If there are no blank DA Form 2028-2 in the back of your manual, use the standard DA Form 2028 (Recommended Changes to Publications and Blank Forms) and forward to the Commander, USA r m y Communications and Electronics Materiel Readiness Command, ATTN: DRSEL-MA-Q, Fort Monmouth, New Jersey 07703.

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

#### Table of Contents

		Page	Illus Figur
SECTION	ı I.	Introduction	
	II.	Repair parts list	
Group	00	Test Sets TS-538/U, TS-538A/U, TS-538B/U, TS-538C/U	1
	01	Test set assembly (1A3)	2, 3
		0101 Capacitor-resistor assembly (1A3A4) (No parts authorized)	
		0102 Capacitor-resistor assembly (1A3A6) (No parts authorized)	
		0103 Capacitor-resistor assembly (1A3A8) (No parts authorized)	
		0104 Resistor assembly (1A3A15) (No parts authorized)	
		0105 Wave guide assembly (1A3A17)	4
		0106 Oscillator, radio frequency assembly (1A3A12) (No parts authorized)	
		0107 Attenuator, variable assembly (1A3AT1) (No parts authorized)	
	02	Cable Assembly, Radio Frequency CG-299A/U (No parts authorized)	
	03	Cable Assembly, Power, Electrical CX-337/U (No parts authorized)	
SECTION	III.	Special tools list (Not applicable)	
	IV.	National stock number and part number index	

<sup>\*</sup>This manual supersedes TM 11-6625-213-20P, 31 March 1971.

#### SECTION I

#### INTRODUCTION

#### 1. Scope

This manual lists spares and repair parts; special tools; special test, measurement, and diagnostic equipment (TMDE), and other special support equipment required for performance of organizational maintenance of the TS-538/U, TS-538A/U, TS-538B/U, and TS-538C/U. It authorizes the requisitioning and issue of spares and repair parts as indicated by the source and maintenance codes.

#### 2. General

This Repair Parts and Special Tools List is divided into the following sections:

- a. Section II. Repair Parts List. A list of spares and repair parts authorized for use in the performance of maintenance. The list also includes parts which must be removed for replacement of the authorized parts. Parts lists are composed of functional groups in numeric sequence, with the parts in each group listed in figure and item number sequence.
  - b. Section III. Special Tools List. Not applicable.
- c. Section IV. National Stock and Part Number index. A list, in National item identification number (NIIN) sequence, of all National stock numbers (NSN) appearing in the listings, followed by a list, in alphameric sequence, of all part numbers appearing in the listings. National stock numbers and part numbers are cross-referenced to each illustration figure and item number appearance.

#### 3. Explanation of Columns

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

Code Definition

PA—Item procured and stocked for anticipated. or known usage.

XD—A support item that is not stocked. When required, item will be procured through normal supply channels.

#### NOTE

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

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

Code Application/Explanation

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

Code Application/Explanation

- F—The lowest maintenance level capable of complete repair of the support item is the direct support level.
- Z-Nonreparable. No repair is authorized.
- (3) *Recoverability code.* Recoverability codes are assigned to support items to indicate the disposition action on unserviceable items. The recoverability code is entered in the fifth position of the Uniform SMR Code format as follows:

Recoverability codes Definition

- Z-Nonreparable item. When unserviceable, condemn and dispose at the level indicated in position 3.
- F—Reparable item. When uneconomically reparable, condemn and dispose at the direct support level.
- c. National Stock Number. Indicates the National stock number assigned to the item and will be used for requisitioning purposes.
- d. Part Number. Indicates the primary number used by the manufacturer (individual, company, firm, corporation, or Government activity), which controls the design and characteristics of the item by means of its engineering drawings, specifications, standards, and inspection requirements to identify an item or range of items.

#### NOTE

When a stock number item is requisitioned, the repair part received may have a different part number than the part being replaced.

- e. Federal Supply Code for Manufacturer (FSCM). The FSCM is a 5-digit numeric code listed in SB 708-42 which is used to identify the manufacturer, distributor, or Government agency, etc.
- f. Description. Indicates the Federal item name and, if required, a minimum description to identify the item.
- g. Unit of Measure (U/M). Indicates the standard of the basic quantity of the listed item as used in performing the actual maintenance function. This measure is expressed by a two-character alphabetical abbreviation (e.g., ea, in, pr, etc). When the unit of measure differs from the unit of issue, the lowest unit of issue that will satisfy the required units of measure will be requisitioned.
- h. Quantity Incorporated in Unit. Indicates the quantity of the item used in the breakout shown on the illustration figure, which is prepared for a functional group, sub functional group, or an assembly.

#### 4. Special Information

a. Usable on codes are shown in the description column. Uncoded items are applicable to all models. Identification of the usable on codes used in this publication are:

Code	Use on
2KL	TS-538/U
4S2	TS-538A/U
AJ2	TS-538B/U
4S3	TS-538C/U

b. The following publication pertains to the TS-538/U, TS-538A/U, TS-538B/U, and TS-538C/U and their components:

TM 11-6625-213-12, Test Sets TS-538/U, TS-538A/U, TS-538B/U, and TS538C/U

c. The illustrations in this manual are identical to those published in TM 11-6625-213-34P. Only those parts assigned the third position SMR maintenance code "C" or "O" are listed in the tabular listing; therefore, there may be a break in the item number sequence. Only illustrations containing organizational authorized items appear in this manual.

#### 5. How to Locate Repair Parts

- a. When National stock number or part number is unknown.
- (1) *First.* Using the table of contents, determine the functional group within which the item belongs. This is necessary since illustrations are prepared for functional groups and listings are divided into the same groups.
- (2) *Second.* Find the illustration covering the functional group to which the item belongs.
- (3) *Third.* Identify the item on the illustration and note the illustration figure and item number of the item.
- (4) *Fourth.* Using the Repair Parts Listing, find the figure and item number noted on the illustration.
- b. When National stock number or part number is known.
- (1) First. Using the Index of National Stock Numbers and Part Numbers, find the pertinent National stock number or part number. This index is in NIIN sequence followed by a list of part numbers in alphameric sequence, cross-referenced to the illustration figure number and item number.
- (2) *Second.* After finding the figure and item number, locate the figure and item number in the repair parts list.

#### 6. Abbreviations

Not applicable.

(Next printed page is 4)

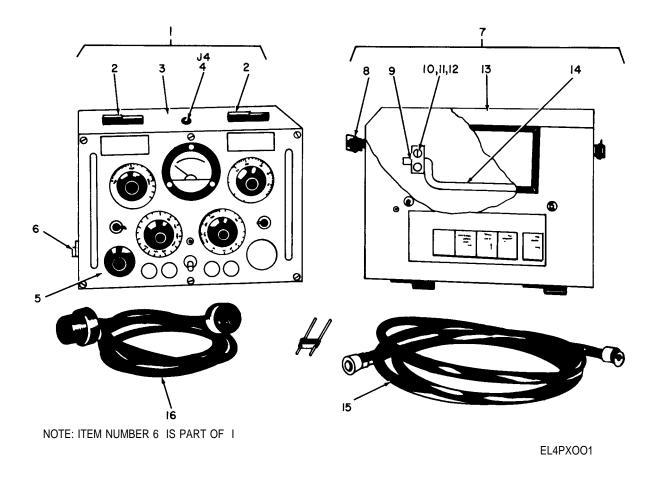


Figure 1. Test Set TS-538/U, TS-538A/U, TS-538B/U, TS-538C/U.

SECTIO (1) ILLUST (A) FIG NO		(2) SMR CODE	(3) NATIONAL STOCK NUMBER	(4) PART NUMBER	(5)	TM11-6625-213-20P (6) DESCRIPTION	USABLE ON	CODE	(7) U/M	(8) QTY INC IN UNIT
						GROUP 00 TEST SET TS-538/U,TS-538A/U,				
						TS-5388/U,TS-538C/U				
1	7	XDOFF		SCD93213	80063	COVER ASSEMBLY			EA	1
1	15	PAOFF	6625-00-577-8287	CG299AU	80058	CABLE ASSEMBLY, RADIO FREQUENCY			EA	1
1	16	PAOFF	5995-00-577-3470	CX337U	80058	CABLE ASSEMBLY, POWER			EA	1

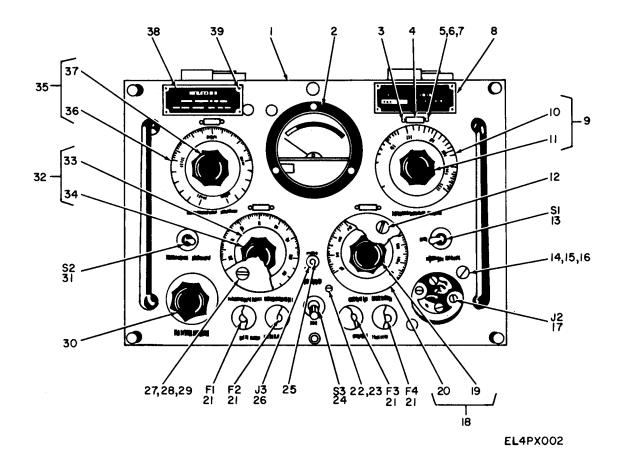


Figure 2. Test Set Assembly (1A3), Front View.

SECTIO (1) ILLUST		(2)	(3)	(4)	(5)	TM11-6625-213-20P (6)		(7)	(8) OTY
(A) FIG NO	(B) ITEM NO	SMR CODE	NATIONAL STOCK NUMBER	PART NUMBER	FSCM	DESCRIPTION	USABLE ON CODE	U/M	INC IN UNIT
						GROUP 01 TEST SET ASSEMBLY (1A3)			
2	11	XDOZZ		SMB282608	80063	KNOB		EA	1
2	19	XDOZZ		SMB282608	80063	KNOB		EA	1
2	21	PAOZZ	5920-00-280-4960	MS90078-11	96906	FUSE, CARTRIDGE		EA	4
2	30	XDOZZ		4104C	04582	KNOB		EA	1
2	34	XDOZZ		SMB282608	80063	KNOB		EA	1
2	37	XDOZZ		SMB282608	80063	KNOB		EA	1

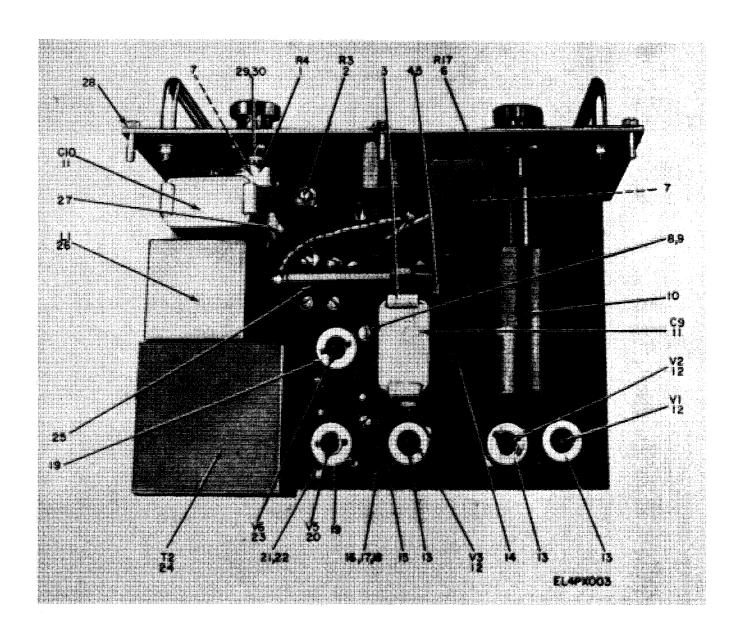


Figure 3. Test Set Assembly (1A3), Top View.

SECTIO (1)	ON II	(2)	(3)	(4)	(5)	TM11-6625-213-20P (6)		(7)	(8) YTO
(A) FIG NO	(B) ITEM NO	SMR CODE	NATIONAL STOCK NUMBER	PART NUMBER	FSCM	DESCRIPTION	USABLE ON CODE	U/M	INC IN UNIT
3	12	PAOZZ	5960-00-262-0160	6J6WA	81349	ELECTRON TUBE		EA	3
3	13	PAOZZ	5960-00-860-7709	M24251-6-2	81349	SHIELD, ELECTRON TUBE		EA	3
3	19	PAOZZ	5960-00-729-8150	TS102U03	80058	SHIELD, ELECTRON TUBE		EA	2
3	20	PAOZZ	5960-00-166-7661	6X4	81349	ELECTRON TUBE		EA	1
3	23	PAOZZ	5960-00-624-4718	OB2WA	81349	ELECTRON TUBE		EA	1

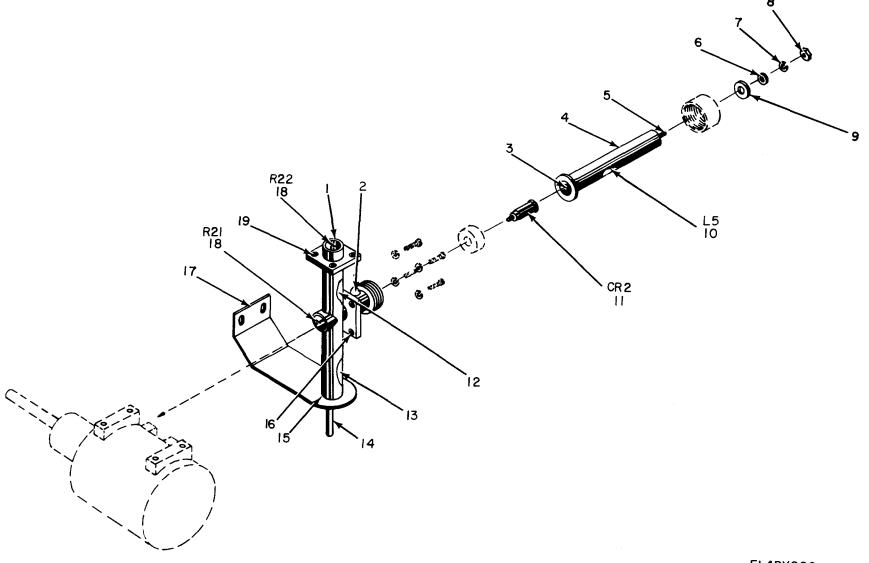


Figure 4. Waveguide Assembly (1A3A17).

EL4PX009

SECTION II (1) ILLUSTRATION	(2)	(3)	(4)	(5)	TM11-6625-213-20P (6)		(7)	(8) OTY
(A) (B) FIG ITEM NO NO	SMR CODE	NATIONAL STOCK NUMBER	PART NUMBER	FSCM	DESCRIPTION	USABLE ON CODE	U/M	INC IN UNIT
					GROUP 0105 WAVEGUIDE ASSEMBLY (1A3A17)			
4 3	PAOZZ	6625-00-544-8808	SCB93859	80063	ADAPTER,CRYSTAL SOCKET		EA	1
4 4	XDOZZ		SCB93865	80063	TUBING		EA	1
4 5	PAOZZ	5940-00-230-8125	4007-8	04582	TERMINAL, LUG		EA	1
4 6	PAOZZ	5310-00-045-5203	MS15795-905	96906	WASHER, FLAT		EA	1
4 7	PAOZZ	5310-00-184-8977	MS35338-98	96906	WASHER, LOCK		EA	1
4 8	PAOZZ	5310-00-934-9763	MS35649-265	96906	NUT, PLAIN, HEXAG		EA	2
4 9	XDOZZ		SCB93730-1	80063	WASHER, NON METALLIC		EA	1
4 10	PAOZZ	5950-00-254-4209	SCB93847	80063	CHOKE, RADIO, FREQUENCY REF DES OF 6K ON 2KL, 4S2, 4S3, L9 ON AJ2		EA	1
4 11	PAOZZ	5961-00-615-4309	IN23B	81349	SEMICONDUCTOR DEVICE, DIODE		EA	1

SECTION IV NOTE:LATEST NAT	NATIONAL	STOCK NUMBE	R AND F	PART NUMBER INDEX SIGNMENTS ARE INCLUDED AT END	TM 11-6625	-213-20	P
	FIGURE	ITEM			FIGURE		ITEM
STOCK NUMBER	NO.	NO.		STCCK NUMBER	NO.		NO.
5960-00-166-7661	3	20		5961-00-615-4309	4		11
5960-00-262-0160	3	12		5960-00-624-4718	3		23
5920-00-280-4960	2	21		5960-00-729-8150	3		19
5995-00-577-3470	į	16 15		5960-00-860-7709	3		13
6625-00-517-8287	1	15					
PART		FIG. I	TEM	PART		FIG.	ITEM
NUMBER	F	SCM NO.	NO.	NUMBER	FSCM	NO.	NO.
CG299AU CX337U	8	3C058 1	15 16	SMB282608 SMB282608	80063 80063	2	11 19
IN238		1349 4	11				
MS90078-11 M24251-6-2		96906 2 31349 3	21 13	4104C	04582 81349	2	30
0B2WA		31349 3 31349 3	23	6J6WA 6X4	81349	3	12 20
SCD93213		30063 1	7		01317	_	
		LATEST NATI	ONAL STOC	CK NUMBER ASS IGNMENTS			
		FIG.	ITEM			FIG.	ITEM
STOCK NUMBER		NO.	NO.	STOCK NUMBER		NO.	NO.
5310-00-045-5203		4	6	5950-00-254-4209		4	10
531 0-00- 184-8977		4	7	6625-00-544-8808		4	3
5940-00-230-8125		4	5	5310-00-934-9763		4	8
		LATEST PART	NUMBER	ASSIGNMENTS			
PART				PART			
NUMBER	FSCM	NO.	NO.	NUMBER	FSCM	NO.	NO.
MS15795-905	96906	4	6	SCB93865	80063	4	4
MS35338-98	96906	4	7	SMB282608	80063	2	34 37
MS35649-265	96906	4	8	SMB282608	80063	2	37
SCB93730-1	80063	4	9	TS102V03	80058	3	19
SCB93847 SCB93859	80063 80063	4	10 3	4007-8	04582	4	5
30033033	00003	4	3				



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

FROM: (YOUR UNIT'S COMPLETE ADDRESS)

Commander

Stateside Army Depot ATTN: AMSTA-US

Stateside, N.J. 07703

DATE 10 July 1975

PUBLICATION NUMBER

TEAR ALONG DOTTED LINE

DATE

TITLE

TM 11-5840 -340-12

23 Jan 74

Radar Set AN/200-76

TM 11	<del>-5</del> 840 -3	340-12		23 Jan 74 Radar Set AN/P-C-76
BE EXACT PIN-POINT WHERE IT IS			REITIS	IN THIS SPACE TELL WHAT IS WRONG AND WHAT SHOULD BE DOME ABOUT IT:
PAGE NO.	PARA- GRAPH	FIGURE NO.	TABLE NO.	AND WHA! SHOULD BE DORE ABOUT 11.
2-25	2-28			Recommend that the installation antenna alignment procedure be changed throughout o specify a 2° IFF antenna lag rather than 1°.
				REASON: Experience has shown that with only a 1° lag, the antenna servo system is too sensitive to wind gusting in excess of 65 knots, and has a tendency to rapidly accelerate and recelerate as it hunts, causing strain to the drive train. Hunting is minimized by adjusting the lag to 2° without degradation of operation
3-10	3-3		3 <b>-</b> 1	Item 5, Function column. Change "2 db" to "3db."
				REASON: The adjustment procedure for the TRANS POWER FAULT indicator calls for a 3 db (500 watts) adjustment to light the TRANS POWER FAULT indicator.
5-6	5-8			Add new step f.l to read, "Replace cover plate removed in tep e.l, above."
				REASON: To replace the cover plate.
		F03	2	Zone C 3. On Jl-2, change "+24 VDC to "+5 VDC."
			S	REASON: This is the output line of the 5 VDC power supply. + 24 VDC is the input voltage.
	1	l	<u></u>	<u> </u>

DA , FORM 2028-2

SSG I. M. DeSpiritof

TYPED NAME, GRADE OR TITLE, AND TELEPHONE NUMBER

999-1776

P.S. -- IF YOUR OUTFIT WANTS TO KNOW ABOUT YOUR MANUAL "FIND," MAI

HISA 1686-75

RECOMMENDED	CHANGES TO	FOLLPMENT	TECHNICAL	MANHALS
K L C C MM L N D L D	COARGES IV	EWUIFMENI	LECHNICAL	MANUALS

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

FROM:	(YOUR	UNIT'S	COMPL	ETE	ADDRESS)
-------	-------	--------	-------	-----	----------

PUBLICATION NUMBER

TEAR ALONG DOTTED LINE

DATE

TITLE TM 11-6625-213-20P 21 July 78 IN THIS SPACE TELL WHAT IS WRONG AND WHAT SHOULD BE DONE ABOUT IT: BE EXACT. . . PIN-POINT WHERE IT IS PAGE TABLE PARA-FIGURE NO. GRAPH NO. NO.

TYPED NAME, GRADE OR TITLE, AND TELEPHONE NUMBER

SIGN HERE:

FOLD BACK

DEPARTMENT OF THE ARMY

OFFICIAL BUSINESS

PENALTY FOR PRIVATE USE, \$300

POSTAGE AND FEES PAID DEPARTMENT OF THE ARMY DOD-314



TEAR ALONG DOTTED LINE

Commander

US Army Communications and

Electronics Materiel Readiness Command

ATTN: DRSEL-MA-Q Fort Monmouth, New Jersey 07703

FOLD BACK

RECOMMENDED	CHANGES TO	FOLLIPMENT	TECHNICAL	MANUALS



THEN. . . JOT DOWN THE DOPE ABOUT IT ON THIS FORM, TEAR IT OUT, FOLD

FROM: (YOUR UNIT'S COMPLETE ADDRESS)

IT AND DROP IT IN THE MAIL!	DATE		
C TORM, TEAR IT OUT, TOES	1		

PUBLICATION NUMBER

TEAR ALONG DOTTED LINE

TITLE

TM 11-6625-213-20P 21 July 78 IN THIS SPACE TELL WHAT IS WRONG AND WHAT SHOULD BE DONE ABOUT IT: BE EXACT. . . PIN-POINT WHERE IT IS FIGURE TABLE GRAPH NO. NO. TYPED NAME, GRADE OR TITLE, AND TELEPHONE NUMBER SIGN HERE:

FILL IN YOUR UNIT'S ADDRESS

FOLD BACK

DEPARTMENT OF THE ARMY

OFFICIAL BUSINESS

PENALTY FOR PRIVATE USE, \$300

POSTAGE AND FEES PAID DEPARTMENT OF THE ARMY DOD-314



TEAR ALONG DOTTED LINE

Commander
US Army Communications and
Electronics Materiel Readiness Command
ATTN: DRSEL-MA-Q
Fort Monmouth, New Jersey 07703

FOLD BACK

Ė	RECOMMENDED	CHANCEC	TO	COLUDAENT	TECHNICAL	MANIIALC
h	CECUMMENDED	CHANGES	10	EUUIPMENI	IECHNICAL	. MARUALS



TITLE

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

FROM: (YOUR UNIT'S COMPLETE ADDRESS)

DATE	<del></del>	 		

PUBLICATION NUMBER

TEAR ALONG DOTTED LINE

TM 11-6625-213-20P

DATE

21 July 78

			_			
BE EXACT	PIN-PO	INT WHE	REITIS	IN THIS SPACE	CE TELL WHAT IS WRO	ONG
PAGE NO.	PARA- GRAPH	FIGURE NO.	TABLE NO.	AND WHAT S	HOULD BE DOME ABO	70111:
	GRAFA	"0.	NO.			
-						
:						
				•		

TYPED NAME, GRADE OR TITLE, AND TELEPHONE NUMBER

SIGN HERE:

DEPARTMENT OF THE ARMY

OFFICIAL BUSINESS

PENALTY FOR PRIVATE USE, \$300

POSTAGE AND FEES PAID DEPARTMENT OF THE ARMY DOD-314



TEAR ALONG DOTTED LINE

Commander

US Army Communications and Electronics Materiel Readiness Command

ATTN: DRSEL-MA-Q Fort Monmouth, New Jersey 07703

FOLD BACK

#### BERNARD W. ROGERS General, United States Army Chief of Staff

#### Official:

#### J. C. PENNINGTON

Brigadier General, United States Army The Adjutant General

#### Distribution:

#### Active Army:

```
SAAD (30)
HISA (Ft Monmouth) (33)
                                                               SHAD (3)
USAINSCOM (2)
                                                               TOAD (14)
COE (1)
                                                             USA Dep (1)
TSG (1)
                                                             Sig USA Dep (2)
USAARENBD (1)
                                                             Units Under Fol TOE:
DARCOM (1)
                                                               29-207
TRADOC (2)
                                                               29-610 (2 each)
OS Maj Comd (4)
                                                                6-100
TECOM (2)
                                                                6-185
USACC (4)
                                                                6 - 186
MDW (1)
                                                                6-200
Armies (2)
                                                                6-201
Corps (2)
                                                                6-300
VFGH (2)
                                                                6-302
Svc Colleges (1)
                                                                6-525
USASIGS (5)
                                                                6-526
USAADS (2)
                                                                6-575
USAFAS (2)
                                                                6-576
USAARMS (2)
                                                                6-700
USAIS (2)
                                                                6-701
USAES (2)
                                                                7-
USAICS (3)
                                                                7-100
MAAG (1)
                                                               11-95
USARMIS (1)
                                                               11-117
USAERDAA (1)
                                                               11-500 (AA-AC)
USAERDAW (1)
                                                               17-
DPG (2)
                                                               17-100
JPG (2)
Ft Carson (5)
                                                               29-134
                                                               37-
Ft Gillem (10)
                                                               37-100
Ft Gordon (10)
                                                               39-51
Ft Huachuca (10)
                                                               57-
Ft Richardson (CERCOM Ofc) (2)
                                                               67 (1 each)
Army Dep (1) except
 LBAD (14)
```

ARNG: None

USAR: None

For explanations used, See AR 310-50 for abbreviations.

PIN: 019435-000

## This fine document...

Was brought to you by me:



## <u>Liberated Manuals -- free army and government manuals</u>

Why do I do it? I am tired of sleazy CD-ROM sellers, who take publicly available information, slap "watermarks" and other junk on it, and sell it. Those masters of search engine manipulation make sure that their sites that sell free information, come up first in search engines. They did not create it... They did not even scan it... Why should they get your money? Why are not letting you give those free manuals to your friends?

I am setting this document FREE. This document was made by the US Government and is NOT protected by Copyright. Feel free to share, republish, sell and so on.

I am not asking you for donations, fees or handouts. If you can, please provide a link to liberatedmanuals.com, so that free manuals come up first in search engines:

<A HREF=http://www.liberatedmanuals.com/>Free Military and Government Manuals</A>

- SincerelyIgor Chudov<a href="http://igor.chudov.com/">http://igor.chudov.com/</a>
- Chicago Machinery Movers