DEPARTMENT OF THE ARMY TECHNICAL MANUAL

ORGANIZATIONAL MAINTENANCE REPAIR PARTS AND SPECIAL TOOLS LISTS MOTOR GENERATORS PU20/C, PPU20A/C, PU20B/C AND PU-20C/C (FSN 6125-244-8451); AND PU-33/C (FSN 6125-556-8623)

Headquarters, Department of the Army, Washington, DC 29 November 1974

Current as of 18 September 1974

Paragraph	Page
SECTION I. INTRODUCTION	
Scope	2
Ceneral	2
Explanation of columns ., 1-3	2
Special information	4
Location of repair parts	4
Abbreviations (Nonapplicable)	5
Reporting of equipment publication improvements	5
Reporting of equipment publication improvements	6
IV. SPECIAL TOOLS, TEST AND SUPPORT EQUIPMENT (Nonapplicable)	
V. INDEX—FEDERAL STOCK NUMBER AND REFERENCE NUMBER CROSS	0
REFERENCE TO FIGURE AND ITEM NUMBER	. 8

^{*}This manual supersedes TM 11-6125-200-20P, 26 March 1962.

SECTION I

1-1. Scope

This manual lists repair parts and special tools required for the performance of organizational maintenance of the PU-20C, PU-20A/C, PU-20B/C, PU-20C/C, and PU-33/C. The PCCN for the PU-20/C, PU-20A/C, PU-20B/C, and PU-20/C is GTBAAU and the PU-33/C is GTBAAV.

1-2. General

This repair parts and special tools list is divided into the following sections:

- a. Prescribed Load Allowance (PLA) Section II. Not applicable.
- b. Repair Parts List Section III. A list of repair parts authorized for the performance of maintenance at the organizational level. This repair parts list is arranged in alphabetical order.
- c. Special Tools, Test and Support Equipment Section IV. Not applicable
- d. Index Federal Stock Number and Reference Number Cross-Reference to Figure and Item Number Section V. A list, in ascending numerical sequence, of all Federal stock numbers appearing in the listings, followed by a list, in alphameric sequence, of all reference numbers appearing in the listings. Federal stock number and reference numbers are cross-referenced to each illustration figure and item number or reference designation appearance.

1-3. Explanation of Columns

The following provides an explanation of columns in the tabular lists -

- a. source, Maintenance, and Recoverability Codes (SMR).
- (1) Source code. Indicates the manner of acquiring support items for maintenance, repair, or overhaul of end items. Source codes are —

Code Explanation

- PA Item procured and stocked for anticipated or known usage.
- PB Item procured and stocked for insurance purposes because essentiality dictates that a minimum quantity be available in the supply systems.

Code Explanation

- **PC** Item procured and stocked and which otherwise would be coded PA except that it is deteriorative in nature.
- PD Support item, excluding support equipment, procured for initial issue or outfitting and stocked only for subsequent or additional initial issues or outfitting. Not subject to automatic replenishment.
- **PE** Support equipment procured and stocked for initial issue or outfitting to specified maintenance repair activities.
- PF Support equipment which will not be stocked . but which will be centrally procured on demand.
- PG— Item procured and stocked to provide for sustained support for the life of the equipment. It is applied to an item peculiar to the equipment which because of probable discontinuance or shutdown of production facilities would prove uneconomical to reproduce at a later time.
- KD An item of depot overhaul/repair kit and not purchased separately. Depot kit defined as a kit that provides items required at the time of overhaul or repair.
- KF An item of a maintenance kit and not purchased separately. Maintenance kit defined as a kit that provides an item that can be replaced at organizational or direct support or general support levels of maintenance.
- **KB** Item included in both a depot over- . haul/repair kit and a maintenance kit
- **MO** Item to be manufactured or fabricated at organizational level.
- **MF** Item to be manufactured or fabricated at direct support maintenance level.
- **MH** Item to be manufactured or fabricated at general support maintenance level.
- **MD** Item to be manufactured or fabricated at depot maintenance level.
- **AO** Item to be assembled at organizational level.
- **AF** Item to be assembled at direct support maintenance level.
- **AH** Item to be assembled at general support maintenance level.
- **AD** Item to be assembled at depot maintenance level.

- **XA** item is not procured *or* stocked because the requirements for the item will result in the replacement of the next higher assembly.
- **XB** Item is not procured or stocked. If not available through salvage, requisition.
- **XC** Installation drawing, diagram instruction sheet, field service drawing, that is identified by manufacturers' part number.
- **XD** Support items can be requisitioned with justification.

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) Use(third position). The maintenance code entered in the third position indicates the lowest maintenance level authorized to remove, replace, and use the support item. The maintenance code entered in the third position indicates one of the following levels of maintenance.

Code Application Explanation

O— Support item is removed, replaced, used at the organizational level of maintenance.

NOTE

.4 code "C" may be used in this position to denote crew or operator maintenance performed within organizational maintenance.

- **F** Support item is removed, replaced, used at the direct support maintenance level.
- **H** Support item is removed, replaced, used at the general support maintenance.
- **D** Support items that are removed, replaced, used at depot only.
- (b) Repair (fourth position). 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). When a maintenance code is not used a dash (-) sign is entered. For multi-service equipment/systems or when a code is entered, this position will contain one of the following mainte-

nance codes as assigned by the service(s) that require the code -

Code ApplicationlEzplanation

- **O** The lowest maintenance level capable of complete repair of the support item is the organizational level.
- **F** The lowest maintenance level capable of complete repair of the support item is direct support.
- H The lowest maintenance level capable of complete repair of the support item is general support.
- D— The lowest maintenance level capable of complete repair of the support item is the depot level.
- L Repair restricted to designated Specialized Repair Activity.
- **Z** Non-repairable. No repair is authorized.
- B— No repair is authorized. The item may be reconditioned by adjusting, lubricating, etc., at the user level. No parts or special tools are procured for the maintenance of this item.
- (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 —

Code Explanation

- Z Nonrepairable item. When unserviceable, condemn and dispose at the level indicated in the first digit of the maintenance code.
- O— Repairable item. When uneconomically repairable, condemn and dispose at organizational level.
- **F** Repairable item. When uneconomically repairable, condemn and dispose at the direct support level.
- **H** Repairable item. When uneconomically repairable, condemn and dispose at the general support level.
- Period Problem 2 Proble
- L— Repairable item. Repair, condemnation, and disposal not authorized below depot/Specialized Repair Activity level.
- A Item requires special handling or condemnation procedures because of specific reasons (i.e., precious metal content, high dollar value, critical material or hazardous material).

b. Federal Stock Number Indicates the Federal stock number assigned to the item and will be used for requisitioning purpose:

NOTE

To convert a Federal stock number to a National stock number (NSN), add "00" after the Federal Stock classification (FSC) code (first four digits). For example, FSN 6625553-0142 when converted in NSN 6625-00-553-0142.

- c. *Description*. Indicates the Federal item name and a minimum description required to identify the item. The last line indicates the reference number followed by the applicable Federal Supply Code for Manufacturer (FSCM) in parentheses. The FSCM is used as an element in item identification to designate manufacturer or distributor or Government agency, etc., and is identified in SB 708-42.
- d. Unit of Measure (U/M). Indicates the standard or basic quantity by which the listed item is used in performing the actual maintenance function. This measure is expressed by a two~character alphabetical abbreviation; e.g., ea, in, pr, etc., and is the basis used to indicate quantities and allowances in subsequent columns. 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.
- e. Quantity Incorporated in Unit. This column indicates the quantity of the item used in the equipment. Subsequent appearances of the same item in the same assembly are indicated by the letters "REF".
 - f. 15-Day Organizational Maintenance Allowance.
- (1) The repair parts indicated by an asterisk in the allowance column represent those authorized for use at the organizational category, and will be requisitioned on an "as required" basis, until stockage is based on demand in accordance with AR 710-2.
- (2) More Army commanders are authorized to approve reduction in the range of support items authorized for use in units within their commands. Recommendations for increase in range of items authorized for use will be forwarded to Commander, US Army Electronics Command, A'ITN: AMSEL-MA-DM, Fort Monmouth, NJ., 07703. Any changes approved will be reflected in a revision to the RPSTL.
- (3) Allowance quantities are indicated in the special tools list section for special tools, TMDE, and other equipment.
 - g. Illumination. This column is divided as follows:
 - (1) Figure number. Indicates the figure number

of the illustration on which the item is shown in TM 11-6125-200-20.

(2) *Item number.* Indicates the item number or reference designation used to reference the item in the illustration.

1-4. Special Information

Code	Used ON
A7F	Pu-20/C
BBQ	Pu-20A/C
BBR	PU-20B/C
BBS	PU-20C/C
A7G	PU-33/C

b. The following publications pertain to the equipment and its components:

TM 11-612520010	Operator's Manual: Motor
	Generator's PU-20/C,
	PU-20A/C, PU-20B/C,
	PU-20C/C, and PU-33/C.
TM 11-6125-200-20	Organizational Mainte-
	nance Manual: Motor
	Generators PU-20/C, PU-
	20A/C, PU-20B/C, PU-
	20C/C, and PU-33/C.

1-5. Location of Repair Parts

- a. This manual contains one cross-reference index (see V) to be used to locate a repair part when either the Federal stock number or reference number (manufacturer's part number) is known. The first column in the index is prepared in numerical or alphanumeric sequence in ascending order. The reference numbers (manufacturer's part numbers) are listed immediately following the last listed Federal stock number in the index of Federal stock numbers.
- *b.* When the Federal stock number or reference number is known, follow the procedures given in (1) and (2) below.
- (1) Refer to the index of Federal stock numbers (see V) and locate the Federal stock number on reference number. The FSN and reference number are cross-referenced to the applicable figure and item number or reference designation.
- (2) Refer to the repair parts list (see III) and locate the figure number (col 7a) and item number or reference designation (col 7b) as noted in the FSN index.
- c. When the figure and item number or reference designation are known, scrutinize columns 7a and 7b of the repair parts list (see III) until the item is

located.

d. When the FSN, reference number, figure number, item number and reference designation are not known, scrutinize column 3 of the repair parts list (see III), which is arranged in alphabetical order.

1-6. Abbrevlations

Not applicable.

1-7. Reporting of Equipment Publication Improvements

The reporting of errors, omissions, and recommendations for improving this publication by the individual user is encouraged. Reports should be submitted on DA Form 2028 (Recommended Changes to Publications) and forwarded direct to Commander, US Army Electronics Command, ATTN: AMSEL-MA-DM, Fort Monmouth, NJ, 07703.

SECTION	III										
(1)	(2)	(3)		(4)	(5)	(6)				(7)	
	FEDERAL	DESCRIPTION		UNIT	QTY INC		ITENANC	ANIZATIO	NAL	ILLUSTR (A)	ATION (B)
SMR	STOCK	DESCRIPTION		OF	IN	(A)	(B)	(C)	(D)	FIGURE	ITEM
CODE	NUMBER	REFERENCE NUMBER & MFR CODE	USABLE ON CODE	MEAS	UNIT	1-5	6-20	21-50	51-100	NO	NO
PAOZZ	3030-204-2071	BELT, "V": 0401	3.70	EA	2	*	*	*	*		0401
PAOZZ	3030-204-2071	A71 (02717) BELT, "V": 0402	A7G	EA	REF	*	*	*	*		0402
111022	3030 201 2072	A71 (02717)	A7G	2	1122						0102
PAOZZ	3030-250-6136	BELTS, "V": MATCHED SET: MP41		EA	1	*	*	*	*	16	MP41
D3.077	E3EE 660 13E0	A35-2 (20796)	BBS		2	_	_			1.5	MDC
PAOZZ	5355-668-1379	KNOB MP6 S309-64BBDD (75376)	A7G,A7F,BBQ,BBR	EA	1					15	MP6
PAOZZ	5355-680-8478	KNOB RT1	,,,	EA	1	*	*	*	*	11	RT1
		5150 (44655)	BBS								
PAOZZ	5977-243-2527	BRUSH ELECTRICAL CONTACT: E155		EA	4	*	*	*	*	12	E155
PMOZZ	3911-243-2321	SCD98143-7 (80063)	A7G,A7F,BBQ,BBR	EM	4					12	EIJJ
PAOZZ	5977-243-2527	BRUSH ELECTRICAL CONTACT: E156	-, , 2,	EA	REF	*	*	*	*	12	E156
	5000 040 0500	SCD98143-7 (ZZZZZ)	A7G,A7F,BBQ,BBR								-155
PAOZZ	5977-243-2527	BRUSH ELECTRICAL CONTACT: E157 SCD98143-7 (ZZZZZ)	A7G,A7F,BBQ,BBR	EA	REF	*	*	*	*	12	E157
PAOZZ	5977-243-2527	BRUSH ELECTRICAL CONTACT: E158	A/G,A/I,DDQ,DDK	EA	REF	*	*	*	*	12	E158
		SCD98143-7 (ZZZZZ)	A7G,A7F,BBQ,BBR								
PAOZZ	5977-247-5362	BRUSH ELECTRICAL CONTACT: E104 GND BRUSH;	170 170 DD0 DDD	EA	1	*	*	*	*	9	E104
PAOZZ	5977-234-9528	SCD47073 (80063) BRUSH, ELECTRICAL CONTACT: E8	A7G,A7F,BBQ,BBR	EA	2	*	*	*	*	13	E8
		A3928-4 (35662)	BBS								
PAOZZ	5977-245-2063	BRUSH, ELECTRICAL CONTACT: E12		EA	4	*	*	*	*	13	E12
WD077		A18390-4 (35662)	BBS		6	_	_		*	10	121
XDOZZ		COLLET: 0121 25492 (29201)	A7G,A7F,BBQ,BBR	EA	0					10	121
XDOZZ		COLLET: 0122	,,,	EA	REF	*	*	*	*	10	122
		25492 (29201)	A7G,A7F,BBQ,BBR								
XDOZZ		COLLET: 0123	170 17E DDO DDD	EA	REF	*	*	*	*	10	123
XDOZZ		25492 (29201) COLLET: 0124	A7G,A7F,BBQ,BBR	EA	REF	*	*	*	*	10	124
		25492 (29201)	A7G,A7F,BBQ,BBR								
XDOZZ		COLLET: 0125		EA	REF	*	*	*	*	10	125
XDOZZ		25492 (29201) COLLET: 0126	A7G,A7F,BBQ,BBR	EA	REF	*	*	*	*	10	126
ADOLL		25492 (29201)	A7G,A7F,BBQ,BBR	n.	KEI					10	120
PAOZZ	5977-224-6622	ELECTRODE: E106		EA	4	*	*	*	*	10	E106
D3.077	E077 004 6600	SCB47068 (80063)	A7G,A7F,BBQ,BBR			_	_			1.0	m1 21
PAOZZ	5977-224-6622	ELECTRODE: E131 SCB47068 (80063)	A7G,A7F,BBQ,BBR	EA	REF	•	•	•	•	10	E131
PAOZZ	5977-224-6622	ELECTRODE: E132	,,,	EA	REF	*	*	*	*	10	E132
		SCB47068 (80063)	A7G,A7F,BBQ,BBR								
PAOZZ	5977-224-6622	ELECTRODE: E133	170 170 DD0 DDD	EA	REF	*	*	*	*	10	E133
XDOZZ		SCB47068 (80063) FITTING PIPE: H160	A7G,A7F,BBQ,BBR	EA	2	*	*	*	*	18	н160
		25509 (29201)	A7G,A7F,BBQ,BBR		_						
XDOZZ		FITTING PIPE: H162		EA	REF	*	*	*	*	18	H162
D3.077	E220 2E1 4100	25509 (29201)	A7G,A7F,BBQ,BBR	EA	1				*		H108
PAOZZ	5330-351-4182	GASKET H108 25555 (29201)	A7G,A7F,BBQ,BBR	EA	1						HIUO
XDOZZ		GASKET H109		EA	1	*	*	*	*		H109
		25772 (29201)	A7G,A7F,BBQ,BBR		_						
PAOZZ	6115-406-0269	CHUCK, ELECTRODE: H182 SCB47129 (80063)	A7G,A7F,BBQ,BBR	EA	1	*	*	*	*	18	H182
PAOZZ	5310-406-0271	NUT, HEXAGON: H183	11/0/11/1 /220/2210	EA	1	*	*	*	*	10	H183
		SCB47130 (80063)	A7G,A7F,BBQ,BBR								
PAOZZ	5310-655-9781	NUT, PLAIN, HEXAGON: H262	370 37E DD0 DDC	EA	6	*	*	*	*	10	H262
PAOZZ	5310-655-9781	81052 (21450) NUT, PLAIN, HEXAGON: H263	A7G,A7F,BBQ,BBR	EA	REF	*	*	*	*	0	H263
		81052 (21450)	A7G,A7F,BBQ,BBR							•	
PAOZZ	5310-655-9781	NUT, PLAIN, HEXAGON: H264		EA	REF	*	*	*	*	10	H264
PAOZZ	E210 6EE 0701	81052 (21450) NUT, PLAIN, HEXAGON: H265	A7G,A7F,BBQ,BBR	EA	REF					10	H265
PAULL	5310-655-9781	81052 (21450)	A7G,A7F,BBQ,BBR	EA	KEF					10	H205
PAOZZ	5310-655-9781	NUT, PLAIN, HEXAGON: H266	-, , 2,	EA	REF	*	*	*	*	10	H266
		81052 (21450)	A7G,A7F,BBQ,BBR								
PAOZZ	5310-655-9781	NUT, PALIN, HEXAGON: H267 81052 (21450)	A7G,A7F,BBQ,BBR	EA	REF	*	*	*	*	10	H267
XDOFD		MOTRO ALTERNATING CURRENT: B1	A/G,A/I,DDQ,DDK	EA	1	*	*	*	*		В1
		MA17882 (35662)	BBS								
DACGG	2020 520 0250	DELT HILL 0401		E 3	2		*	*	*	1.5	0.403
PAOZZ	3030-529-0350	BELT "V": 0401 46A (24161)	A7F,BBQ,BBR	EA	2		-	-		15	0401
PAOZZ	3030-529-0350	BELT "V": 0402	r, DDV, DDK	EA	REF	*	*	*	*	15	0402
		46A (24161)	A7F,BBQ,BBR								
PAOZZ	5977-351-6952	BRUSH, ELECTRICAL CONTACT: E8	DDD	EA	2	*	*	*	*		E8
PAOZZ	5977-351-6952	SCD104365-1 (80063) BRUSH, ELECTRICAL CONTACT: E9	BBR	EA	REF	*	*	*	*		E9
		SCD104365-1 (80063)									-

TM11-612	5-	200-	20F
SECTION	ΙI	I	

(1)	(2)	(3)		(4)	(5) OTY	(6) 15-D	AY ORGA	ANIZATIO	NAL	(7) ILLUSTRA	ATION
	FEDERAL	DESCRIPTION		UNIT	INC		TENANCE			(A)	(B)
SMR	STOCK			OF	IN	(A)	(B)	(C)	(D)	FIGURE	ITEM
CODE	NUMBER	REFERENCE NUMBER & MFR CODE	USABLE ON CODE	MEAS	UNIT	1-5	6-20	21-50	51-100	NO	NO
PAOZZ	2920-356-2056	SPRING, SPIRAL TORSION: 021		EA	4	*	*	*	*	14	021
		B3310 (08835)	BBR								
PAOZZ	2920-355-2056	SPRING, SPIRAL TORSION: 022		EA	REF	*	*	*	*	14	022
		B3310 (08835)	BBR								
PAOZZ	2920-356-2056	SPRING, SPIRAL TORSION: 023		EA	REF	*	*	*	*	14	023
		83310 (08835)	BBR								

TM11-6125-200-20P

SECTION V

INDEX - FEDERAL STOCK NUMBER AND REFERENCE NUMBER

CROSS-REFERENCE TO FIGU	JRE AND ITEM	NUMBER					
	FIGURE	ITEM		FIGURE	ITEM		
STOCK NUMBER	NO	NO	STOCK NUMBER	NO	NO		
2920-356-2056	14	21	5977-224-6622	10	E106		
2920-356-2056	14	22	5977-224-6622	10	E131		
2920-356-2056	14	23	5977-224-6622	10	E132		
3030-204-2071		0401	5977-224-6622	10	E133		
3030-204-2071		0402	5977-234-9528	13	E8		
3030-250-6136	16	MP41	5977-243-2527	12	E155		
3030-529-0350	15	0401	5977-243-2527	12	E156		
3030-529-0350	15	0402	5977-243-2527	12	E157		
			5977-243-2527	12	E158		
			5977-245-2063	13	E12		
5310-406-0271	10	H183	5977-247-5362		E104		
5310-655-9781	10	H262	5977-351-6952		E8		
5310-655-9781	10	H263	5977-351-6952		E9		
5310-655-9781	10	H264					
5310-655-9781	10	H265	6115-406-0269	18	H182		
5310-655-9781	10	H266					
5310-655-9781	10	H267					
5330-351-4182		H108					
5355-668-1379	8	MP6					
5355-680-8478	11	RT1					
REFERENCE	MFR	FIG	ITEM	REFERENCE	MFR	FIG	ITEM
NO	CODE	NO	NO	NO	CODE	NO	NO
- 4 0 0 0 0 4	2555		-10		00050		
A18390-4	35662	13	E12	SCD98143-7	80063	12	E155
A35-2	20796	16	MP41	S309-64BBDD	75376	8	MP6
A3928-4	35662	13	E8	25492	29201	10	121
A71	02717		0401	25492	29201	10	122
A71	02717	1.4	0402	25492	29201	10	123
B3310	08835	14	021	25492	29201	10	124
B3310	08835	14	022	25492	29201	10	125
B3310	08835	14	023	25492	29201	10	126
MA17882	35662	1.0	B1	25509	29201	18	H160
SCB47068	80063	10	E106	25509	29201	18	H162
B47068	80063	10	E131	25555	29201		H108
SCB47068	80063	10	E132	25772	29201	1.5	H109
SCB47068	80063	10	E133	46A	24161	15	0401
SCB47129	80063	18	H182	46A	24161	15	0402
SCB47130	80063	10	H183	5150	44655	11	RT1
SCD104365-1	80063		E8	81052	21450	10	H262
SCD104365-1	80063		E9	81052	21450	10	H263
SCD47073	80063		E104	81052	21450	10	H264
SCD98143-7	ZZZZZ	12	E156	81052	21450	10	H265
SCD98143-7	ZZZZZ	12	E157	81052	21450	10	H266
SCD98143-7	ZZZZZ	12	E158	81052	21450	10	H267

8

FRED C. WEYAND

General United States Army

Chief of Staff

```
Official
```

VERNE L. BOWERS

Major General, United States Army
The Adjutant General

Distribution:

```
Active Army:
                                         LBAD (14)
      USASA (2)
                                         TOAD (14)
      CNGB (1)
      Dir Trans (1)
                                         ATAD (10)
     COE (1)
                                        USA Dep (2)
     TSG (1)
                                       Sig Sec USA Dep (2)
      USAARENBD (1)
                                        Sig Dep (2)
                                        ATS (1)
      AMC (1)
      MICOM (2)
                                       MAAG (1)
      TECOM (2)
                                        USARMIS (1)
      HISA (Ft Monmouth)(18)
                                        USAERDAA (1)
      USACC (4)
                                        USAERDAW(1)
     TRADOC (2)
                                       Sig FLDMS (1)
                                       Ft Richardson (ECOM Ofc) (2)
     ARADCOM (2)
      ARADCOM Rgn (2)
                                        Units org under fol TOE: 1- ea.
                                          9-47
      OS Maj Comd (4)
                                          9-87
      LOGCOMD (4)
                                          9-227
      MDW (1)
                                          11-16
     Armies (2)
                                          11-97
      Corps (2)
                                          11-98
      Ft Gordon (10)
                                          11-117
      Ft Huachuca (10)
                                          11-500(AA-AC)
      Ft Carson (5)
                                          29134
      WSMR (1)
      Svc Colleges (1)
                                          29-136
                                          32-56
      USASESS (5)
                                          32-57
      USAINTCS (3)
                                          44-535
      USAADS (2)
                                          44-536
      USAFAS (2)
                                          44-537
      USAARMS (2)
                                          44-545
      USAIS (2)
                                          44-546
      USAES (2)
                                         44-547
      AD (l) except
                                          44-548
        SAAD (30)
```

ARNG & USAR: None.

For explanation of $\,$ abbreviations used, see AR 310-50.

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:

Free Military and Government Manuals

- SincerelyIgor Chudovhttp://igor.chudov.com/
- Chicago Machinery Movers