TECHNICAL MANUAL

ORGANIZATIONAL MAINTENANCE REPAIR PARTS AND SPECIAL TOOLS LISTS

FOR

RADIO SET AN/ARC-102 (NSN 5821-00-050-8255)

HEADQUARTERS, DEPARTMENT OF THE ARMY

19 OCTOBER 1981
ORGANIZATIONAL MAINTENANCE REPAIR PARTS AND SPECIAL TOOLS LISTS
FOR
RADIO SET AN/ARC-102 (NSN 5821-00-050-8255)
Current as of 28 May 1981

REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS
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know of a way to improve the procedures, please let us know. Mail your let-
ter, DA Form 2028 (Recommended Changes to Publication and Blank
Forms), or DA Form 2028-2 located in back of this manual direct to Com-
mander, US Army Communications-Electronics Command,ATTN: DRSEL-
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In either case, a reply will be furnished direct to you.

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       0107 Amplifier (No parts authorized) ............................... 1
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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, direct support, and general support maintenance of the AN/ARC-102. 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 Number and Part Number Index. A list, in National item identification number (NIIN) sequence, of all National stock numbers (NSN) appearing in the listings, followed by a list, in alphabetic 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 tailed 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:

<table>
<thead>
<tr>
<th>Code</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>PA</td>
<td>Item procured and stocked for anticipated or known usage.</td>
</tr>
</tbody>
</table>

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:

<table>
<thead>
<tr>
<th>Code</th>
<th>Application/Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>O</td>
<td>Support item is removed, replaced, used at the organizational level.</td>
</tr>
</tbody>
</table>

(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:

<table>
<thead>
<tr>
<th>Code</th>
<th>Application/Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>H</td>
<td>The lowest maintenance level capable of complete repair of the support item is the general support level.</td>
</tr>
<tr>
<td>Z</td>
<td>Nonreparable. No repair is authorized.</td>
</tr>
</tbody>
</table>

(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:
4. Special Information

a. The following publication pertains to the AN/ARC-102 and its component
   [TM 11-5821-248-12, Radio Set AN/ARC-102]

b. The illustrations in this manual are identical to those published in [TM 11-5821-248-34P]. 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 alphabetic 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 repair parts list.

6. Abbreviations

Not applicable.

(Next printed page is 4)
Figure 1. Radio Set, AN/ARC-102.
<table>
<thead>
<tr>
<th>FIG</th>
<th>ITEM</th>
<th>NATIONAL STOCK CODE</th>
<th>SMR STOCK NO</th>
<th>PART NO</th>
<th>FSCM NUMBER</th>
<th>DESCRIPTION</th>
<th>QTY</th>
<th>U/M</th>
<th>UNIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>5</td>
<td>PAOHD 5821-00-604-3307</td>
<td>80058</td>
<td>RT698ARC102</td>
<td>EA 1</td>
<td>TRANSCEIVER</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>6</td>
<td>PAOHD 5821-00-019-8405</td>
<td>80058</td>
<td>C3940ARC94</td>
<td>EA 1</td>
<td>CONTROL, RADIO SET</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>7</td>
<td>PAOHD 5821-00-050-8168</td>
<td>80058</td>
<td>PP3702ARC102</td>
<td>EA 1</td>
<td>POWER INVERTER</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

GROUP 00 RADIO SET, AN/ARC-102
Figure 2. Chassis Assembly.
<table>
<thead>
<tr>
<th>FIG NO</th>
<th>ITEM NO</th>
<th>SMR CODE</th>
<th>STOCK NUMBER</th>
<th>FSCM NUMBER</th>
<th>USABLE ON</th>
<th>CODE</th>
<th>QTY</th>
<th>U/M</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>17</td>
<td>PAOZ2</td>
<td>5355-00-538-6979</td>
<td>13499</td>
<td>506-6101-002</td>
<td>KNOB</td>
<td>EA 1</td>
<td></td>
</tr>
</tbody>
</table>

GROUP 0101 CHASSIS ASSEMBLY
Figure 3. Radio Set Control C-3940/ARC-24.
<table>
<thead>
<tr>
<th>FIG</th>
<th>ITEM</th>
<th>SMR NO</th>
<th>STOCK NO</th>
<th>CODE</th>
<th>NUMBER</th>
<th>FSCM NUMBER</th>
<th>GROUP</th>
<th>DESCRIPTION</th>
<th>QTY</th>
<th>IN</th>
<th>U/M</th>
<th>UNIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>27</td>
<td>PAOZ1</td>
<td>5355-00-828-5433</td>
<td>13499</td>
<td>548-4140-002</td>
<td>GROUP 02 RADIO SET CONTROL C-3940/ARC-94</td>
<td>EA</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>28</td>
<td>PAOZ1</td>
<td>6240-00-155-7836</td>
<td>96906</td>
<td>MS25237-327</td>
<td>LAMP, INCANDESCENT</td>
<td>EA</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>30</td>
<td>PAOZ1</td>
<td>5355-00-865-3144</td>
<td>13499</td>
<td>546-6251-002</td>
<td>KNOB, COUNTER</td>
<td>EA</td>
<td>4</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>3</td>
<td>33</td>
<td>PAOZ1</td>
<td>5355-00-883-1601</td>
<td>13499</td>
<td>546-6250-002</td>
<td>KNOB, SWITCH</td>
<td>EA</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## NATIONAL STOCK NUMBER AND PART NUMBER INDEX

**NOTE:** LATEST NATIONAL STOCK NUMBER AND PART NUMBER ASSIGNMENTS ARE INCLUDED AT END OF INDEX

<table>
<thead>
<tr>
<th>STOCK NUMBER</th>
<th>FIGURE</th>
<th>ITEM</th>
<th>STOCK NUMBER</th>
<th>FIGURE</th>
<th>ITEM</th>
</tr>
</thead>
<tbody>
<tr>
<td>5821-00-019-8405</td>
<td>1</td>
<td>6</td>
<td>5355-00-828-5433</td>
<td>3</td>
<td>27</td>
</tr>
<tr>
<td>5821-00-050-8168</td>
<td>1</td>
<td>7</td>
<td>5355-00-865-3144</td>
<td>3</td>
<td>30</td>
</tr>
<tr>
<td>5355-00-538-6979</td>
<td>2</td>
<td>17</td>
<td>5355-00-883-1601</td>
<td>3</td>
<td>33</td>
</tr>
<tr>
<td>5821-00-604-3307</td>
<td>1</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FSCM PART NUMBER</th>
<th>FIGURE</th>
<th>ITEM</th>
<th>FSCM PART NUMBER</th>
<th>FIGURE</th>
<th>ITEM</th>
</tr>
</thead>
<tbody>
<tr>
<td>C3940ARC94</td>
<td>1</td>
<td>546-6250-002</td>
<td>13499</td>
<td>546-6250-002</td>
<td>3</td>
</tr>
<tr>
<td>PP3702ARC102</td>
<td>1</td>
<td>7</td>
<td>13499</td>
<td>546-6251-002</td>
<td>3</td>
</tr>
<tr>
<td>RT698ARC102</td>
<td>1</td>
<td>5</td>
<td>13499</td>
<td>548-4140-002</td>
<td>3</td>
</tr>
<tr>
<td>506-6101-002</td>
<td>2</td>
<td>17</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## LATEST NATIONAL STOCK NUMBER ASSIGNMENTS

<table>
<thead>
<tr>
<th>STOCK NUMBER</th>
<th>FIGURE</th>
<th>ITEM</th>
</tr>
</thead>
<tbody>
<tr>
<td>6240-00-155-7836</td>
<td>3</td>
<td>28</td>
</tr>
</tbody>
</table>

## LATEST PART NUMBER ASSIGNMENTS

<table>
<thead>
<tr>
<th>FSCM PART NUMBER</th>
<th>FIGURE</th>
<th>ITEM</th>
</tr>
</thead>
<tbody>
<tr>
<td>MS25237-327</td>
<td>3</td>
<td>28</td>
</tr>
</tbody>
</table>
RECOMMENDED CHANGES TO EQUIPMENT TECHNICAL PUBLICATIONS

SOMETHING WRONG WITH THIS PUBLICATION?

FROM:
Print Your Unit's Complete Address
Commander
Stateside Army Depot
ATTN: AMSTA-US
Stateside, N.J. 07703

DATE SENT
10 July 1975

PUBLICAATION NUMBER
TM 11-5840-340-12

PUBLICAATION DATE
23 Jan 74

PUBLICAATION TITLE
Radar Set AN/PRC-76

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

Recommend that the installation antenna alignment procedure be changed throughout to specify a $2^\circ$ IFF antenna lag rather than $1^\circ$.

REASON: Experience has shown that with only a $1^\circ$ lag, the antenna servo system is too sensitive to wind gusting in excess of 25 knots, and has a tendency to rapidly accelerate and deaccelerate as it hunts, causing strain to the drive train. Hunting is minimized by adjusting the lag to $2^\circ$ without degradation of operation.

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.

Add new step f.1 to read, "Replace cover plate removed in step e.1, above."

REASON: To replace the cover plate.

Zone C 3. On J1-2, change "+24 VDC to "+5 VDC."

REASON: This is the output line of the 5 VDC power supply. +24 VDC is the input voltage.
FILL IN YOUR UNIT'S ADDRESS

DEPARTMENT OF THE ARMY

OFFICIAL BUSINESS

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Fort Monmouth, New Jersey 07703
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THEN JOT DOWN THE DOPE ABOUT IT ON THIS FORM CAREFULLY TEAR IT OUT, FOLD IT AND DROP IT IN THE MAIL.

FROM (PRINT YOUR UNIT'S COMPLETE ADDRESS):

DATE SENT:

PUBLICATION NUMBER:
TM 11-5821-248-20P

PUBLICATION DATE:
19 OCT 1981

PUBLICATION TITLE:
Radio Set AN/ARC-102

BE EXACT PIN-POINT WHERE IT IS IN THIS SPACE TELL WHAT IS WRONG AND WHAT SHOULD BE DONE ABOUT IT:

PAGE NO. PARA. FIGURE NO. TABLE NO.

PRINTED NAME GRADE OR TITLE AND TELEPHONE NUMBER

SIGN HERE

DA FORM 2028-2

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Brigadier General, United States Army
The Adjutant General

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General, United States Army
Chief of Staff