

**SUPPLEMENTARY MAINTENANCE INSTRUCTIONS**

**RADIO COMPASS AN/ARN-7 LOOP HOUSING -  
ANTI-STATIC PAINTING**

1 In order to reduce the effect of precipitation static in aircraft Radio Compasses the Housings of all LP-21 series Loop Antennas, excepting LP-21-L and LP-21-LM, whether installed in aircraft or elsewhere, held as maintenance kits or stock items, are to be inspected and if not marked on both sides of the aft end of housing "Paint only with Paint, Graphite, Ref. 33A/381" or "Paint only with Conducting Paint Stock No. 6GK1486-1", are to be painted in accordance with the following instructions.

NOTE

This Engineering Order does not apply to Loops LP-21-L and LP-21-LM. The Housings of these loops are constructed of conducting material and their bases are painted with conducting paint.

GENERAL

- 2 Removal of loop housing from aircraft is not necessary.
- 3 Base plates of loops are not to be painted.
- 4 Patching or re-touching damaged coatings is not satisfactory - repaint housing and base completely.
- 5 Only Graphite Paint Ref. 33A/381 is to be used. NO SUBSTITUTE IS PERMISSIBLE.

LOOP HOUSINGS AND BASES NOT  
PREVIOUSLY PAINTED WITH  
CONDUCTING PAINT

- 6 Make a note of all information shown so that it can be re-applied after painting.
- 7 Clean external surfaces of housing and base with a clean rag slightly dampened with solvent, if necessary.

NOTE

- Whilst cleaning carefully avoid damage to band of sealing tape around loop housing, seal between housing and base, or seal between base and aircraft skin.
- 8 Remove loose or cracked paint, if any, using coarse sandpaper or a wire brush.
- 9 Use a rag moistened with solvent and remove ALL paint from a band around the base approximately one inch wide and with upper edge approximately one inch below the top of the base.
- 10 On loops LP-21-A or LP-21-AM only. Using a sharp knife trim gasket between housing and base to make edge flush with top edge of base.
- 11 Stir the graphite paint thoroughly and, using the ends of the bristles of a small brush, work the paint into and around the joint between housing and base.
- 12 Cover the entire outer surface of housing and base with an even coating of the graphite paint.
- 13 After first coat is thoroughly dry (3 to 5 hours), stir paint thoroughly and apply a second coat.
- 14 When second coat is thoroughly dry reproduce information previously shown using yellow, orange or white paint.
- 15 Print, paint or stencil on both sides of the aft end of the housing in 3/8" high yellow, orange or white lettering "PAINT ONLY WITH GRAPHITE PAINT REF. 33A/381".
- 16 Print, paint or stencil on both sides of

the base in 3/8" high yellow, orange or white lettering "LOOP \* (NON-STATIC)".

LOOP HOUSINGS AND BASES MARKED "PAINT ONLY WITH CONDUCTING PAINT STOCK NO. 6GK1486-1"

\* - Fill in Type No. of loop e.g. LP-21-A.

LOOP HOUSINGS AND BASES PREVIOUSLY PAINTED WITH CONDUCTING PAINT WHICH NEED REPAINTING

17 Proceed as for para 6 to 16 inclusive except that the US Signal Corp painting instruction "Paint only with conducting paint Stock No. 6GK1486-1" is not to be reproduced.

18 Remove instruction and proceed as for para 15 of this order.

19 The Conducting Paint necessary for use to comply with above instruction can be obtained through usual supply channels and should be demanded as Ref. 33A/381 Paint, Graphite, slate grey, (General Electric No. 3053) stating amount required. One pint will paint approximately 15 loops.

ISSUED ON AUTHORITY OF THE CHIEF OF THE AIR STAFF

NOTE

This Engineering Order does not apply to loops LP-21-L and LP-21-LM. The housings of these loops are constructed of conducting material and their bases are painted with conducting paint.

GENERAL

- 1. Removal of loop housing from aircraft is not necessary.
- 2. Base plates of loops are not to be painted.
- 3. Repairing or re-touching damaged coatings is not satisfactory - repaint housing and base completely.
- 4. Only Graphite Paint Ref. 33A/381 is to be used. NO SUBSTITUTE IS PERMISSIBLE.

LOOP HOUSINGS AND BASES NOT PREVIOUSLY PAINTED WITH CONDUCTING PAINT

- 1. Make a note of all information shown so that it can be re-applied after painting.
- 2. Clean external surfaces of housing and base with a clean rag slightly dampened with solvent if necessary.

500 Prepared By: AMC/S TEL SO/TEL4