# LIST OF SPECIAL INFORMATION

# AIRCRAFT GENERAL

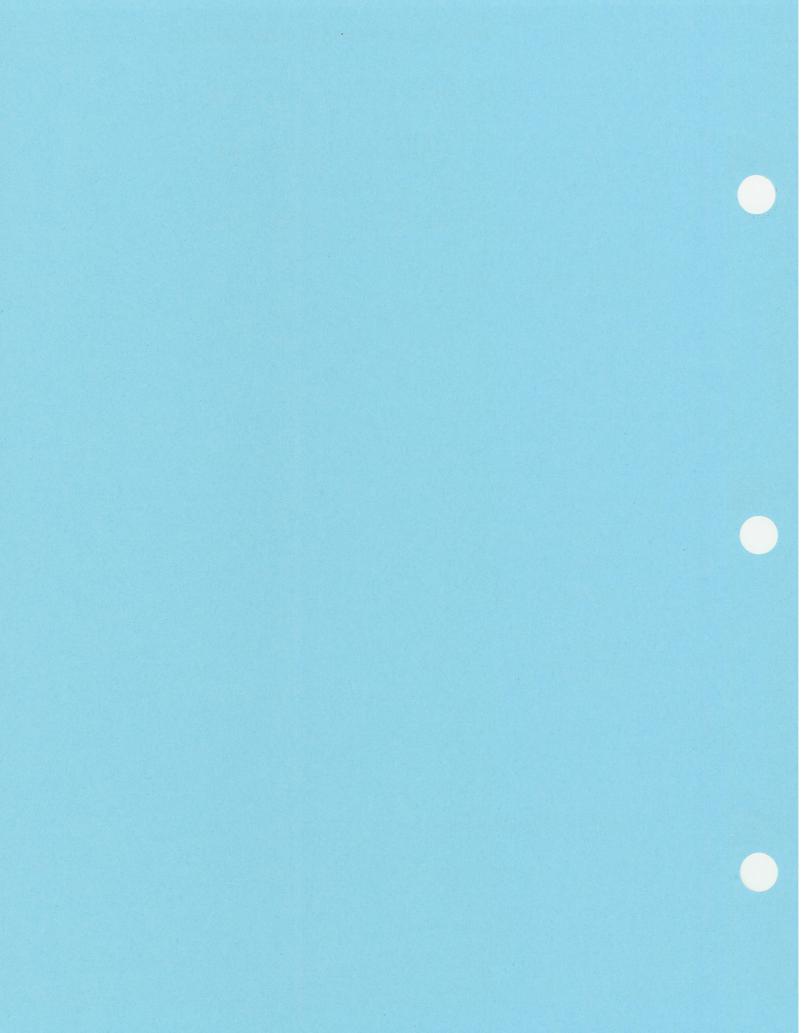
(This EO replaces EO 05-1-5A dated 31 Oct 63)

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	/4	(Replaced by EO 05-25A-5A/8)
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18 Dec 57	/8	Fuel Tank Cover Assemblies
27 Aug 62	/9	Preferred Anstat Type Antenna Fittings
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*31 Jul 64	/12	Conversion of Instruments to White Lustreless Dial Markings

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<sup>\*</sup> Asterisks appearing opposite entries denote changes since last issue.



# CONVERSION OF INSTRUMENTS TO WHITE LUSTRELESS DIAL MARKINGS

### INTRODUCTION

To increase the clarity of aircraft instrument dials AFHQ has now directed that lustreless white paint be substituted in lieu of fluorescent radio-active and non radio-active paints. This EO is published to advise user units of the policy of the conversion programme.

### INFORMATION DATA

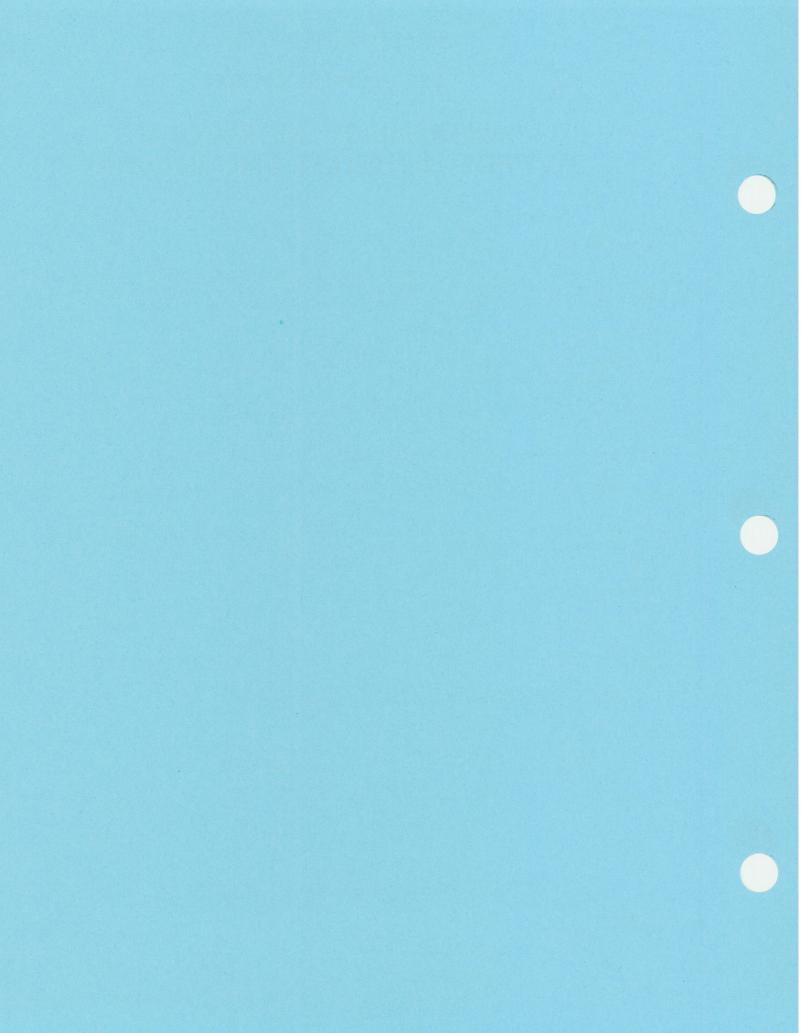
- Conversion to lustreless white dial finish will be carried out during normal repair and/or overhaul on all instruments except:
- (a) Those installed in aircraft which utilize ultra-violet and/or fluorescent instrument lighting.
- (b) Instrumentation on loan from other services or civilian organizations.
- 3 After conversion, instruments will be allotted new part numbers and NATO stock numbers (NSN).
- 4 Units are not to demand under the new NSN until stocks of the old NSN are depleted. Demands for the old stock number will automatically be filled by the newer new as stock levels change.

### ADDITIONAL DATA

- 5 The following additional data applies:
- (a) It is estimated that the complete conversion of any one hear approximately 2 years.
- (b) AFHQ letter 1006A (DAITel) dated 7 Jan 64 refers.

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Prepared by: AMC/SAVO/IES1



# GROUNDING AIRCRAFT TO HANGAR FLOORS

### GENERAL

.1

- The present system of grounding aircraft to hangar floors is effected through cables employing clips alligator (RCAF Stock No. 5940-00-502-4890). The clips being snapped onto grounding rods embedded in the hangar floors.
- It has been noted that this system is not satisfactory when several aircraft require grounding to the same grounding point. This creates congestion, faulty grounds, broken alligator clamps and ground cables.
- 3 To reduce these conditions to a minimum and effect a permanent and positive grounding system, several more satisfactory methods have been investigated and with proper installation can meet the electrical requirements of EO 05-1-2V.
- Because no individual method of ground connection is perfect and a variety of proven satisfactory systems are already in use, it is not mandatory to standardize. Therefore the details of fabrication and installation of the grounding methods outlined in this EO are presented as suggestions which have been used with good results. Engineering Officers may choose according to existing installations and unit fabrication resources.
- It is to be noted that these connectors are suitable for dissipating static electricity from aircraft and refuelling tenders but are not specifically authorized for use in special weapons applications.

### METHOD 1

- 6 Proceed as follows:
- (a) As shown in Figure 1, drill and tap existing hangar floor grounding rod to accommodate a 1/4" bolt.
- (b) Manufacture 2 or more grounding cables as shown in Figure 1 by soldering a fitting of 7/8" brass stock as per detail "A" of Figure 2 to approximately 18" of grounding cable (length may be varied as required).
- (c) Drill required holes in brass cover plate, (countersunk to avoid sharp edges) pass cables through and solder 1/4" lug to other end of cable.
- (d) Attach lug ends to hangar grounding rod using 1/4" bolt and star washers to prevent loosening.
  - (e) Solder a male connector of 1/2" hexagonal brass stock (detail "B" of Figure 2) to required length of cable to reach aircraft.

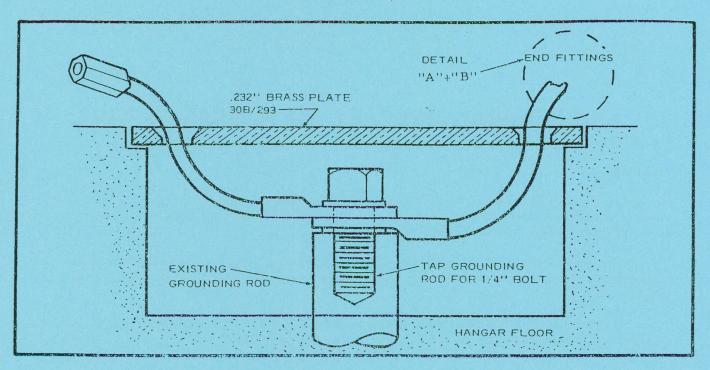


Figure 1

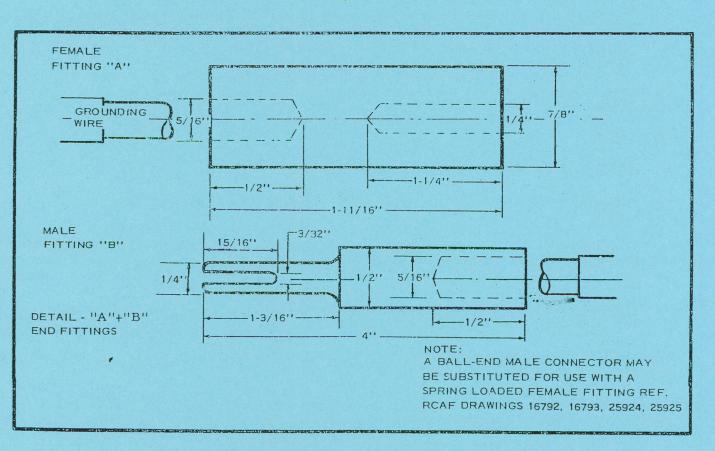


Figure 2

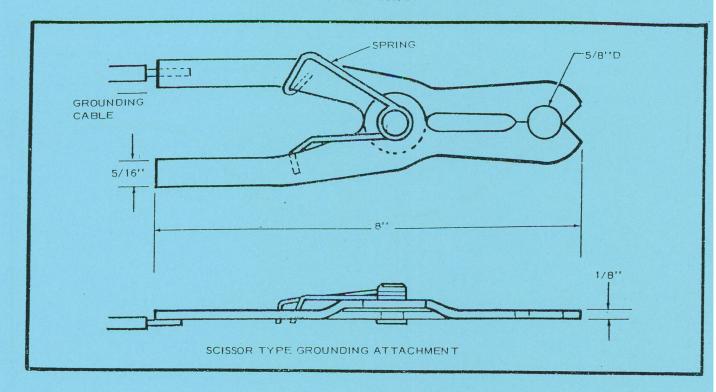


Figure 3

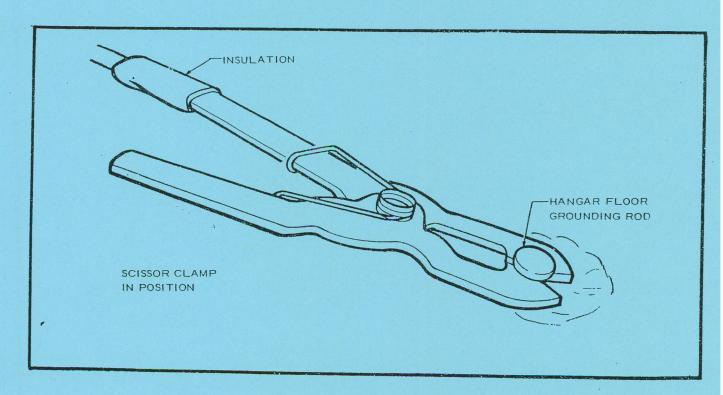


Figure 4

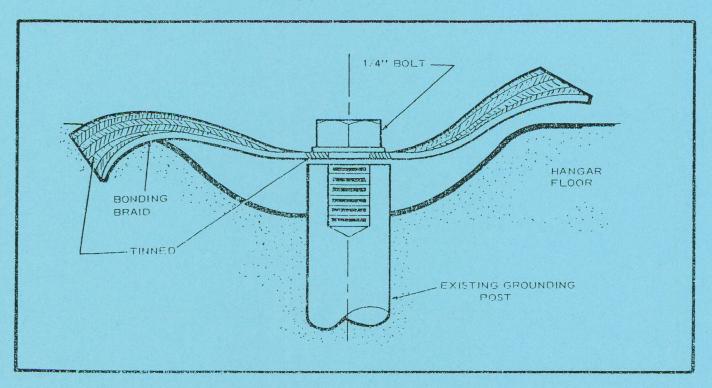


Figure 5

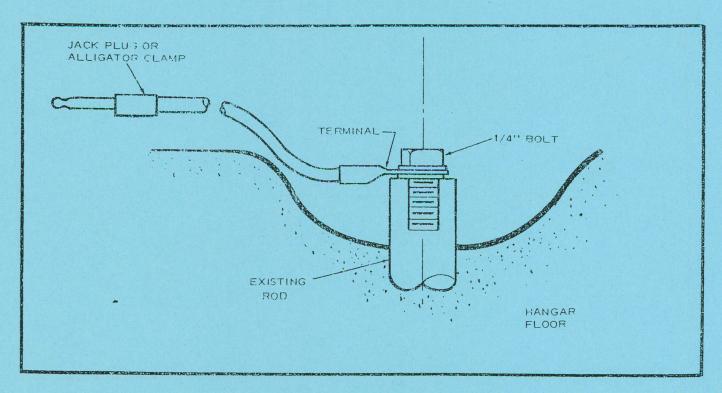


Figure 6

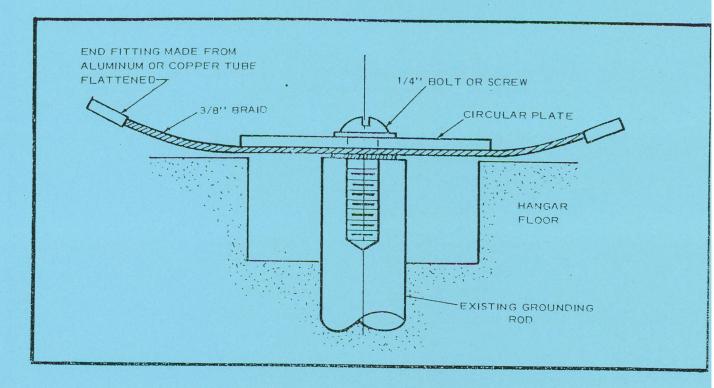


Figure 7

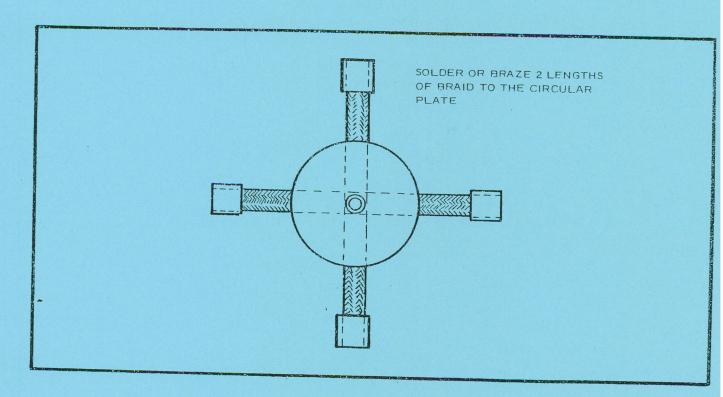


Figure 8

### METHOD 2

This is an improved type of clamp, manufactured from CR steel as per Figures 3 and 4 and attached to cable, length as required. The advantages of this clamp are its flat contour which precludes damage from vehicles running over it and its economy and simplicity of manufacture.

### METHOD 3

- 8 Proceed as follows:
- (a) Tap hole for 1/4" bolt into existing ground rod.
- (b) Silver solder two strips of braid bonding wire at right angles to a circular brass plate. Attach clips to each end of braid by flattening 3/8" copper or aluminum tubing.
- (c) Secure plate to grounding rod through centre, using 1/4" bolt.
- (d) For details of this method see Figures 7 and 8.

### METHOD 4

- 9 A variation of Method 3, used where only two connections are required.
- (a) Tap hole for 1/4" bolt into existing ground rod.
- (b) Using braided bonding wire of suitable length, tin ends approximately 1-1/2" to prevent fraying and 1" in the centre.
- (c) Drill hole through braid and attach to rod using 1/4" bolt, see Figure 5.

### METHOD 5

- 10 Proceed as follows:
- (a) Tap existing ground rod for 1/4" bolt.
- (b) Solder lug to ground wire and attach to rod using 1/4" bolt.
- (c) Using suitable length of wire to reach aircraft, attach a locally manufactured jack for use with aircraft having integral grounding points. Alligator clamps should be used only on aircraft which do not have such points, see Figure 6.

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# PREFERRED DESIGN TYPE OF PITOT STATIC TUBE COVER ASSEMBLY

### INTRODUCTION

This Special Information Leaflet is published to acquaint all users with the preferred type of pitot tube cover which is adaptable to many types of aircraft installations, and which can be manufactured locally.

### INFORMATION DATA

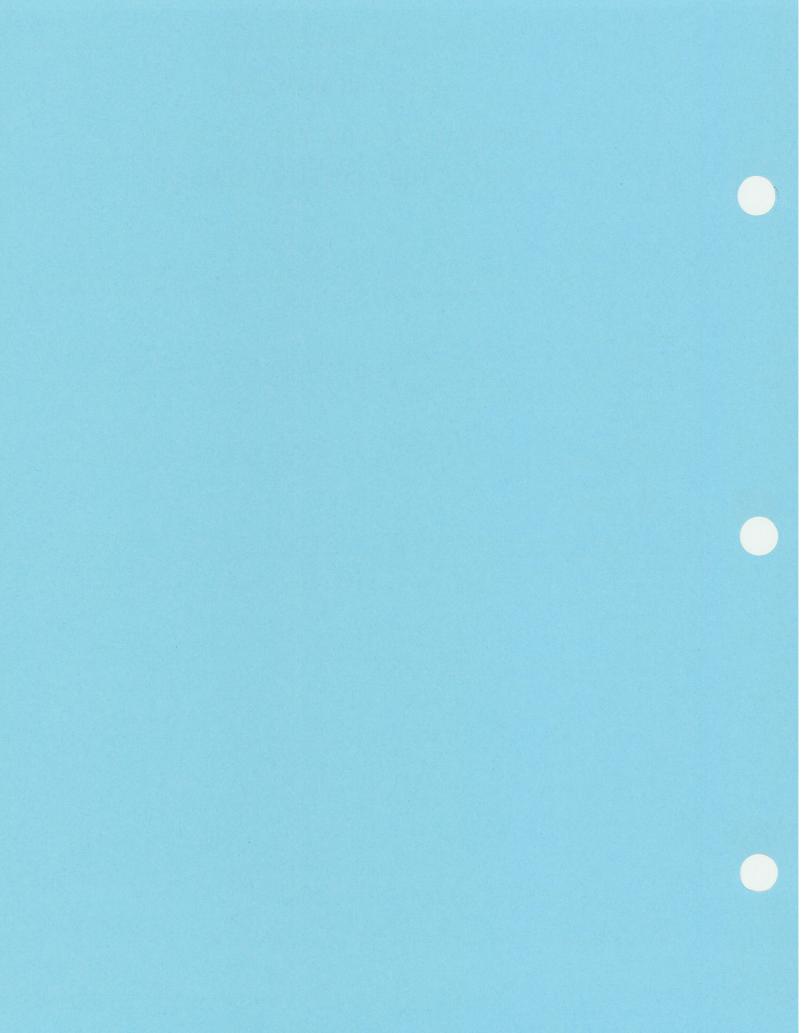
- Specific manufacturing details of this particular design are applicable to the CF101 aircraft and are contained in EO 05-185A-5A/11. Adaptation of this cover assembly to other aircraft pitot tube installations can be readily accomplished by changes in the specific drawing dimensions.
- 3 The design of the cover assembly is acceptable in that, once properly installed, it is not easily disturbed from its installation on the tube either by wind or normal ground handling of the aircraft.

### LOCAL MANUFACTURE

To locally manufacture this assembly user units may demand RCAF Drawings 28039, 28037, 28038 and 48234 now available. Briefly, the cover consists of the standard type slip-on fabric tube and warning streamer to which is fixed a length of elastic cord and an aluminum alloy retainer piece. The design is such that with moderate tension between the installed retainer and the tube cover via the elastic cord, retention of the cover over the tube is maintained.

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Prepared by: AMC/SAVO/IES1





### INTRODUCTION

This special information leaflet is published to acquaint all users with the preferred anstat type antenna fittings and the items they replace.

### INFORMATION DATA

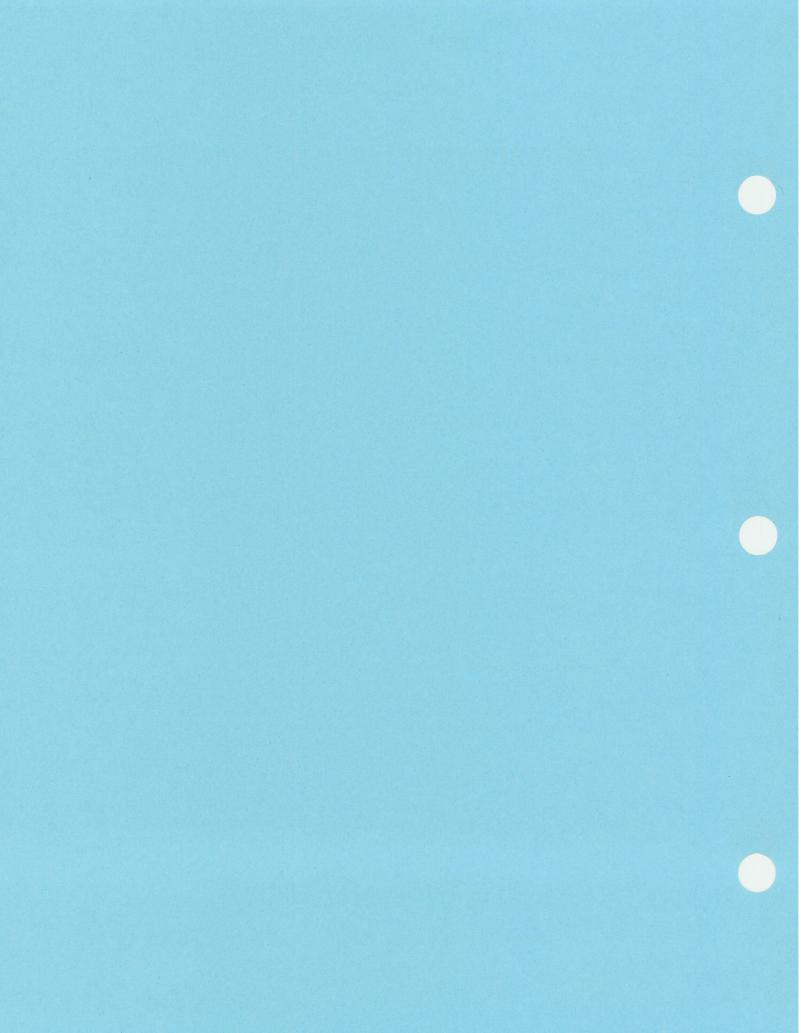
The following is a list of the preferred type fittings and the items that they replace.

PREFERRED TYPE			REPLACES
SEC REF.	PART	DESCRIPTION	
10EP/5970-21-802-5504	IL5/U-6	Insulator, strain tensioner	10EP/21052 10EP/21053 10EP/21054 10EP/24571 10EP/31729 10EP/50638
10EC/54079	MS25052-1A or SI-1-600	Insulator, strain	10EC/24569 10EC/21051
10EC/48963	MS25053-1	Tee	10EP/24568

- 3 These preferred types were selected as the result of a meeting held at AMCHQ with representation from the major users on 31 May 60. Procurement is being taken only on the items listed in the left hand column of para 2 but the replaced items may be issued pending depletion of stocks.
- There may be cases however where a replaced type will be issued in lieu of a preferred type e.g. 10EP/21052 and 10EP/21053 which do not have a chuck assembly fitting nor are they insulated. These items are perfectly serviceable tensioner units provided that the chuck assembly Dayton Part 14021, which consists of chuck assembly and anti-flutter sleeve, is fitted. This is the same chuck and anti-flutter sleeve assembly used on the preferred type and may be demanded by Part Number or salvaged from a broken preferred type. Provision will be made for local procurement on the receipt of a demand. This action is required since limited stocks of 10EP/21052 and 10EP/21053 still remain and can be used to fabricate a serviceable grounded type antenna installation.
- Where a grounded antenna is required the preferred type may be modified by drilling the chuck holder assembly to accept a #4 self-tapping screw. A suitable length of bonding strip can then be connected from the chuck holder to an appropriate location on the aircraft.
- Any further problems encountered in the installation of these fittings are to be brought to the attention of AMCHQ by completing a UCR with a draft modification leaflet drawn up in accordance with EO 00-5-6 for the applicable aircraft.

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Prepared by: AMC/SAVO/T1



# FUEL TANK COVER ASSEMBLIES



A

- Reports have been received from some units on fuel tank filler cap (AC39B5435) hinge pi failures through shearing action.
- 2 Corrective action to be taken as follows:-
- (a) With cover assembly suitably supported, remove the centre post using a pin punch and dismantle the cover assembly.
- (b) Enlarge the pin hole in the centre post to 0.136" using a #29 drill.
- (c) Replace the original hinge pin with a piece of piano wire (0.128" dia. Ref. 30B/1832) o equal length and re-assemble the cover assembly.
- (d) Cut a pin  $1/8" \times 5/8"$  from a rivet (28/8816) and set in base of centre post to complet the assembly.

### NOTE

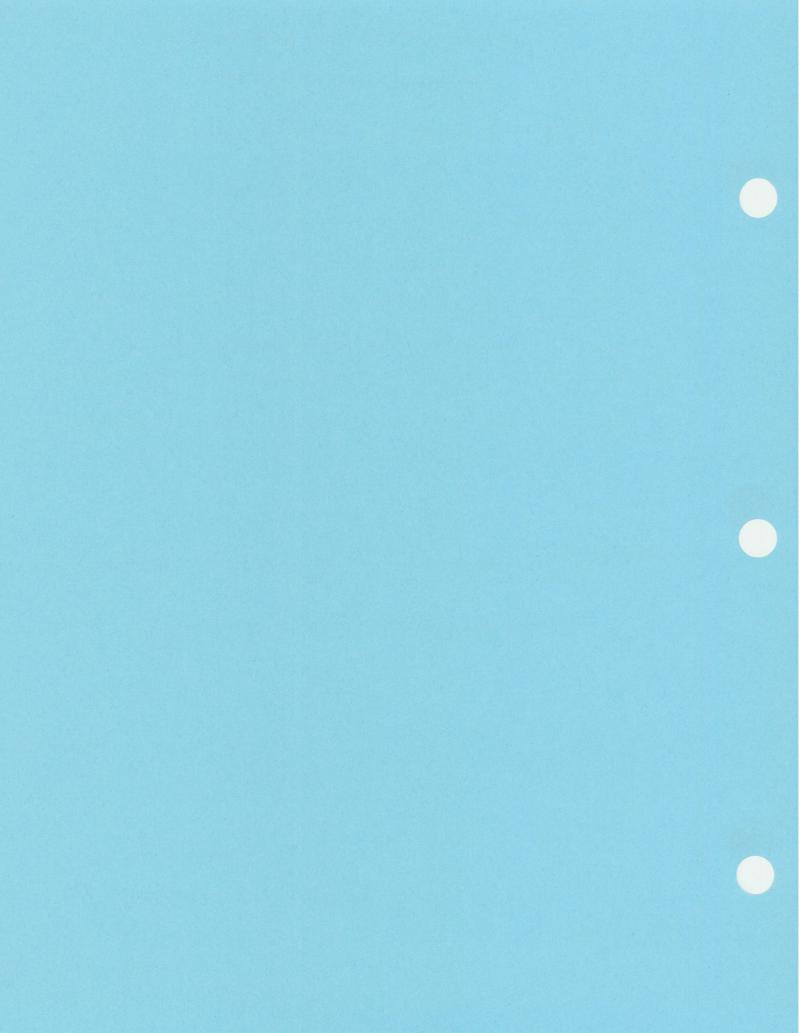
Do not clamp the cover assembly in a vise.

### ADDITIONAL DATA

3 This filler cap is presently fitted to Mitchell and C119 aircraft. This repair scheme cabe adapted to varying sizes of this type of cap by changing the dimensions.

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Prepared By: AMC/SACO/ACA



## ANTI - PRECIPITATION STATIC ANTENNA

(This EO replaces EO 05-1-5A/1 dated 29 Apr 53)

EQUIPMENT AFFECTED:

Lancaster Dakota, Canso, North Star,

Mitchell and Expeditor Aircraft

BY WHOM WORK WILL BE PERFORMED:

Operating Units, RDs and Contractors

WHEN WORK WILL BE PERFORMED:

As required when 126-TS-101 fail only; replacement of serviceable unit NOT

required

RCAF FORM ENTRIES:

L14, Log Book

MODIFICATION OF SPARES IN STOCK:

NA

### PURPOSE

1 To provide details on replacing damaged "ANSTAT" mast adaptor chuck assemblies with a new type.

### INFORMATION DATA

- 2 The following information data applies:
- (a) Anti-precipitation static antenna masts which are found to have damaged mast adaptor chuck assemblies Type 126-TS-101, will be replaced with a new Type 126-TS-101A, designed to take a strain of five hundred pounds. (Failure will be evident when the chuck assembly can no longer hold the antenna wire).
  - (b) The damaged part shall be forwarded to the manufacturer by each unit having failures, for replacement on a no charge basis.
  - (c) Parts will be shipped to:

Technical Enterprises Ltd., Toronto Municipal Airport, Malton, Ontario.

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Prepared By: AMC/STelO/Tel PS

