

# LIST OF OVERHAUL MODIFICATIONS

## EXPEDITOR

(This EO replaces EO 05-45B-6B dated 13 Jun 62)

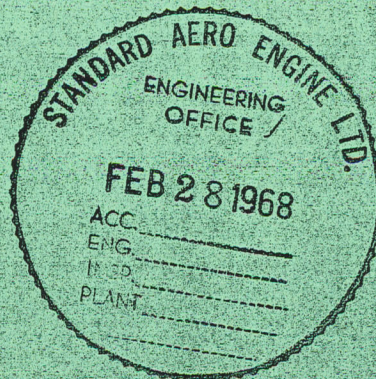
### TABLE OF CONTENTS

EO NO	DATE OR MOD DATA	DESCRIPTION	OVERHAUL CLASS	LEAFLET ISSUED
05-45B-6B/1	14 Oct 53	Wiring and Piping Corrective Modification	NA	Yes
/2		(Rescinded) Radio Wiring Standardization		
/3	28 Sep 55	Retrofit Installation of Integrally Moulded Engine Control Knobs	NA	Yes
/4	22 Sep 61	Relocation of Gyrosyn Compass Amplifier	NA	Yes
/5	16 Nov 56	Wing Stringer Reinforcement	NA	Yes
/6		(Assigned)		
* /7		(Assigned)		
* /8	3 Aug 67	Magnetic Particle Inspection (MPI) and Spar Repair and Reinforcement		Yes

\* Asterisks appearing opposite entries denote changes since last issue

ISSUED ON AUTHORITY OF THE CHIEF OF THE DEFENCE STAFF







3 Aug 67

## MODIFICATION

# MAGNETIC PARTICLE INSPECTION (MPI) AND SPAR REPAIR AND REINFORCEMENT

(This EO replaces EO 05-45B-6B/8 dated 9 Jun 67)

EQUIPMENT AFFECTED:	Centre Section Spar Assembly
AIRCRAFT AFFECTED:	All Expeditor Aircraft
BY WHOM WORK WILL BE PERFORMED:	Contractors and RD
WHEN WORK WILL BE PERFORMED:	As directed by Materiel Command HQ
RCAF FORM ENTRIES:	L14-1B, L14-6B
RETURNS:	On completion advise MATCOM HQ by Message

## PURPOSE

1 To carry out magnetic particle inspection (MPI) and rework areas one and two (consisting of welding steel plates) as outlined in Beechcraft Service Bulletins referred to in the modification data following.

## MODIFICATION DATA

2 This is a record type EO. This EO is not complete within itself. The purpose of this EO is to identify the modification, MPI Inspection, tabulate all affected Expeditor aircraft. (Proposed by FAA Airworthiness Directive 67-8-2 on all UE Expeditor aircraft).

(a) The magnetic particle inspection (MPI) is to be carried out in accordance with Beechcraft Service Bulletin 66-10, 64-15, 64-16, 64-17 and FAA Airworthiness Directive No. 67-8-2 dated 20 Mar 67.

(b) In addition to the above MPI the following (which will necessitate removal of port and starboard outer wing assemblies, and MLG assemblies) is to have MPI also.

(1) MPI outer wing to centre wing fittings (left and right, upper and lower) is to be carried out on first five aircraft only being processed through plant.

## NOTE

If results are negative (i. e. no cracks evident) on the first five aircraft inspected, the MPI on outer wing to centre wing assemblies is to be discontinued on the remaining aircraft being processed through plant.

(2) All lower centre wing spar clusters from lower fuselage wing root to outboard end, left and right (upper and lower).

(3) MLG hinge points and clusters, left and right.



MODIFICATION DATA (Cont'd)

(c) Repair and rework for areas 1 and 2, which consists of welding steel plates, is outlined in Beechcraft Service Bulletin 64-52 dated Dec 64, Rev. Feb 65.

PARTS REQUIRED

3 All parts required will be supplied by the RCAF and are listed as Kits 791 and 792-1 in Beechcraft Service Bulletin 64-52.

WEIGHT, LOADING AND BALANCE DATA

4 The weight and balance change resulting from the instructions contained herein is negligible.

ADDITIONAL DATA

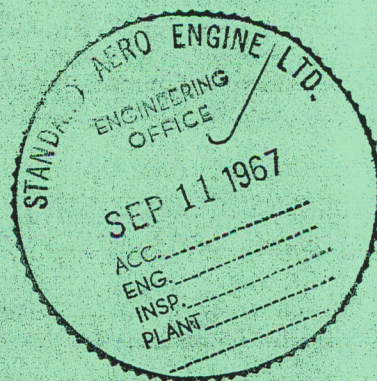
5 The following additional data applies:

(a) Messages ACAE 1263, 1264 dated 15 and 16 May 67 refer.

(b) This modification is the result of Beechcraft Service Bulletin 66-10 May 64, 64-15 Aug 64, Rev. Jan 65, 64-16 Aug 64, Rev. Dec 64, 64-17 Aug 64, Rev. Dec 64, 64-52 Dec 64, Rev. Feb 65 and FAA Airworthiness Directive AD 67-8-2.

(c) The X-Ray requirement outlined in the above mentioned Bulletins is not required, 6RD will carry this out in accordance with EO 05-45B-5/131.

(d) With reference to the NOTE in paragraph 2(b)(1). If results of MPI are positive, on the first five aircraft to be inspected, MATCOM HQ will advise of further action to be taken.



ISSUED ON AUTHORITY OF THE CHIEF OF THE DEFENCE STAFF

Prepared by:  
MATCOM/SSOAC/AE3



# MODIFICATION

## WIRE STRINGER REINFORCEMENT

EQUIPMENT AFFECTED: Expeditor 3 Aircraft

BY WHOM WORK WILL BE PERFORMED: CAIR Contractor

WHEN WORK WILL BE PERFORMED: During CAIR

RCAF FORM ENTRIES: L14-6

MODIFICATION OF SPARES IN STOCK: NA

### PURPOSE

1 To eliminate fracturing of stringers holding the fuel cell sump door and to reinforce the bracket retaining stringer.

### MODIFICATION DATA

2 The following is the sequence of operations:

- (a) Install parts in accordance with Figures 1 to 4.
- (b) Part 111-11006-7, hinge reinforcement stringer 32, may be found installed and if so, is to be left as is.
- (c) If stringer 32 is cracked it should be repaired in accordance with EO 05-45B-3, Appendix A10, using replacement part given in Part 8 of the EO. If the cut-out in the stringer is cracked, the stringer shall be repaired as above but the cut-out should be radiused larger than that existing.

### PARTS REQUIRED

3 All parts required for this modification are to be supplied by the contractor.

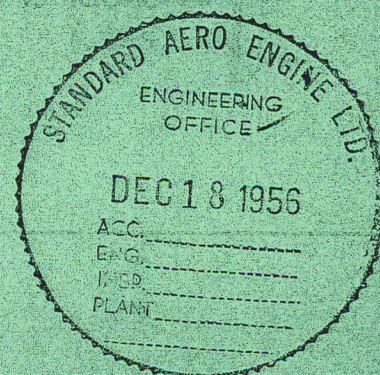
111-11006-3	Bracket retaining stringer 32
111-11006-5	Bracket retaining stringer 33
111-11006-7	Hinge reinforcement stringer 32
2MBA3646	Stiffener - top hat section

### PARTS RENDERED SURPLUS OR OBSOLETE

4 The two small brackets replaced are to be scrapped.

### WEIGHT, LOADING AND BALANCE DATA

5 NA.





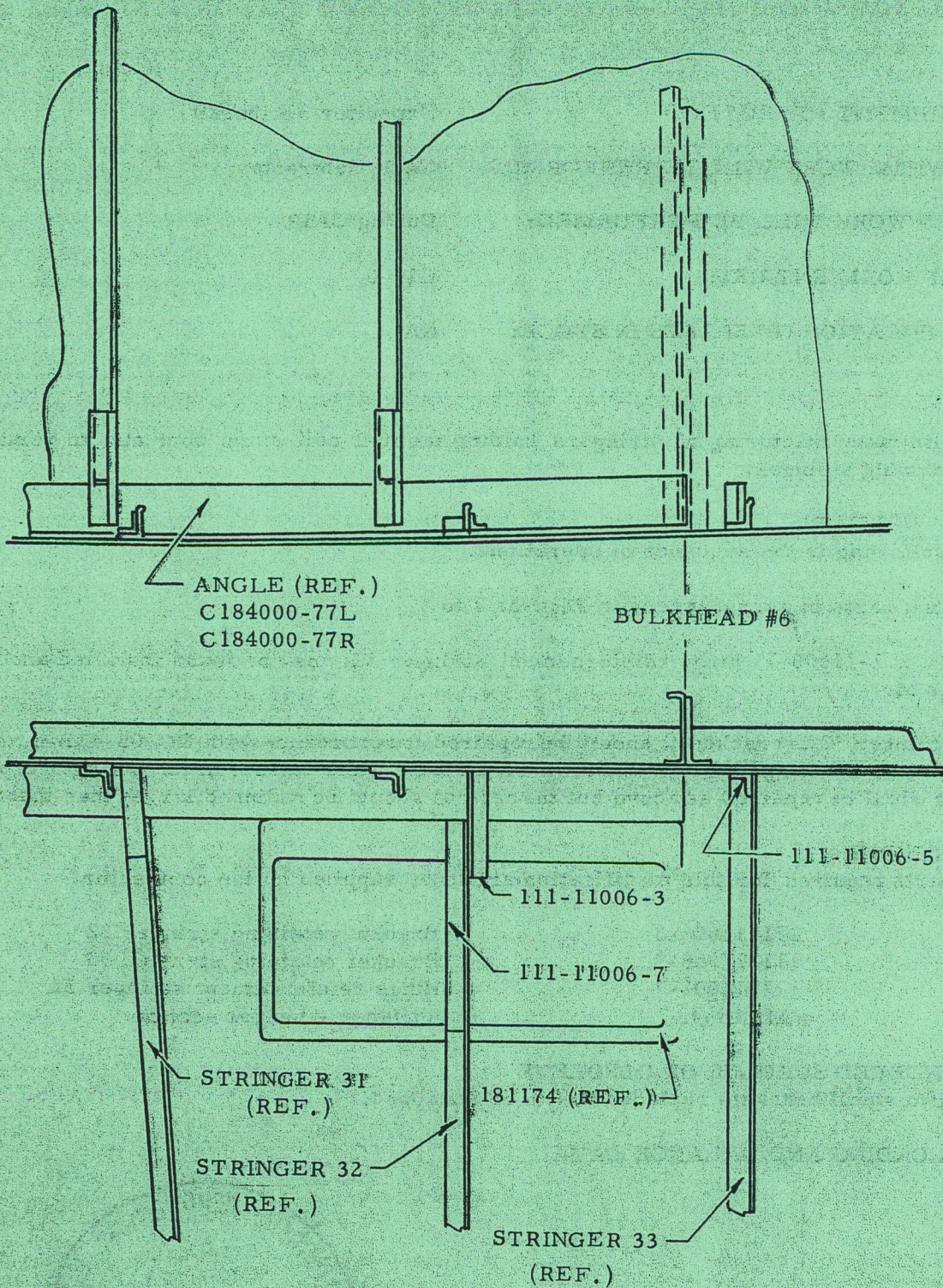


Figure 1



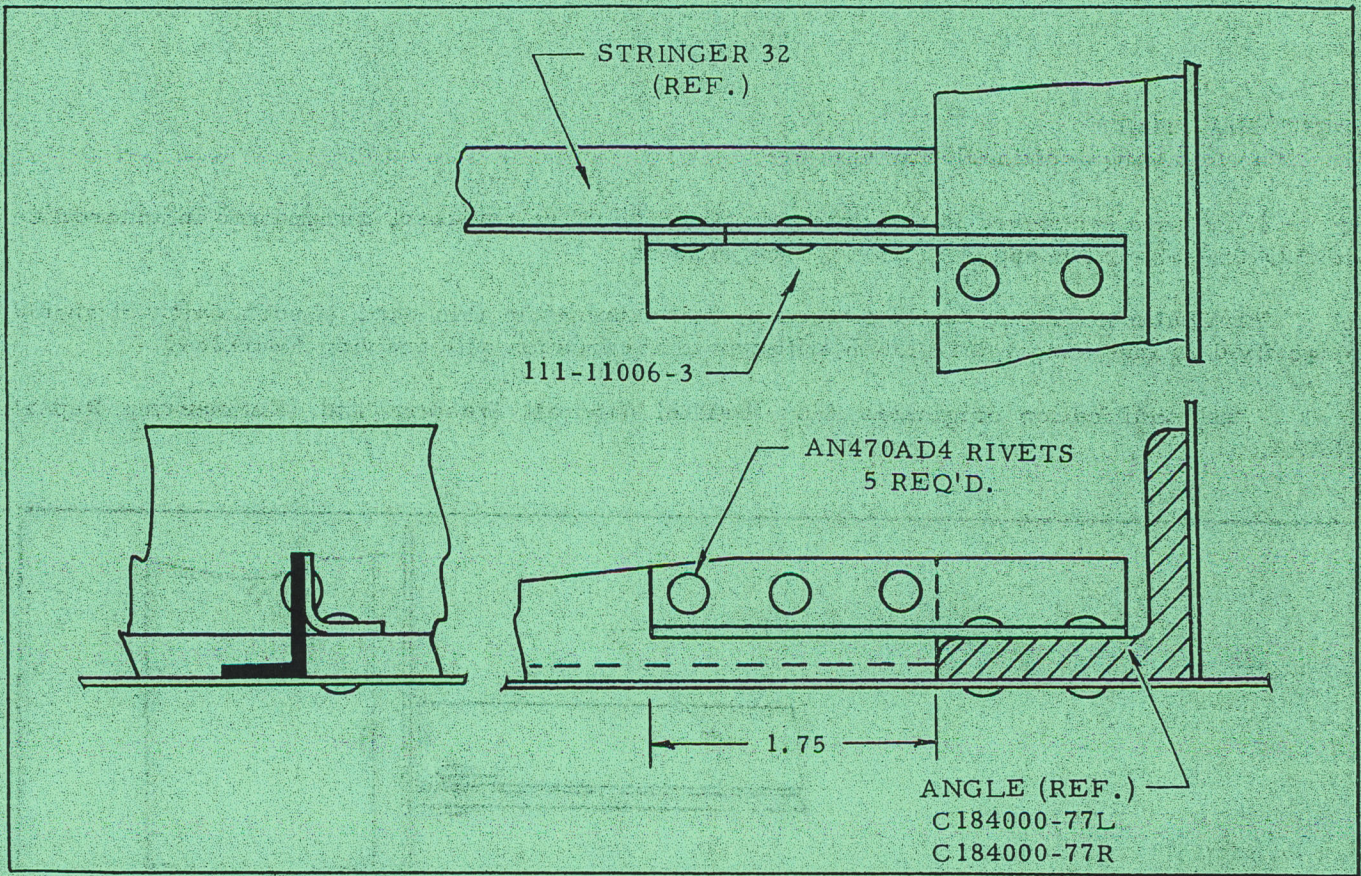


Figure 2

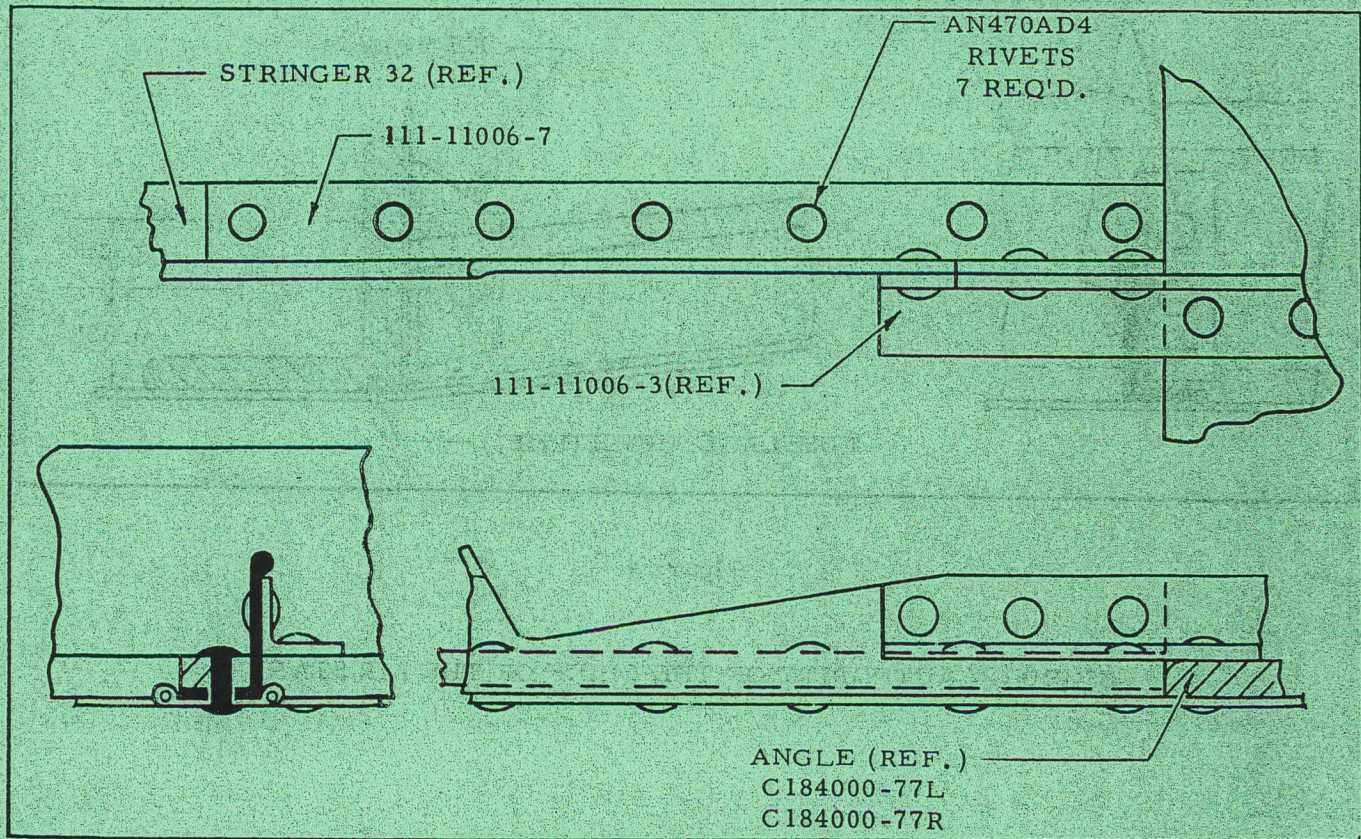


Figure 3



## ADDITIONAL DATA

6 The following additional data applies:

- (a) If the skin is cracked in this area, it either should be replaced, or repaired in accordance with EO 05-45B-3, Appendix A1 or A3, skin repairs.
- (b) Particular attention should be paid to "oil canning" in this area. If such exists it should be rectified by installing a 3MBA3646 stiffener in accordance with drawing 3MBA3647.
- (c) This modification originates from Bristol Aircraft Western Ltd. Engineering Report ER6043.

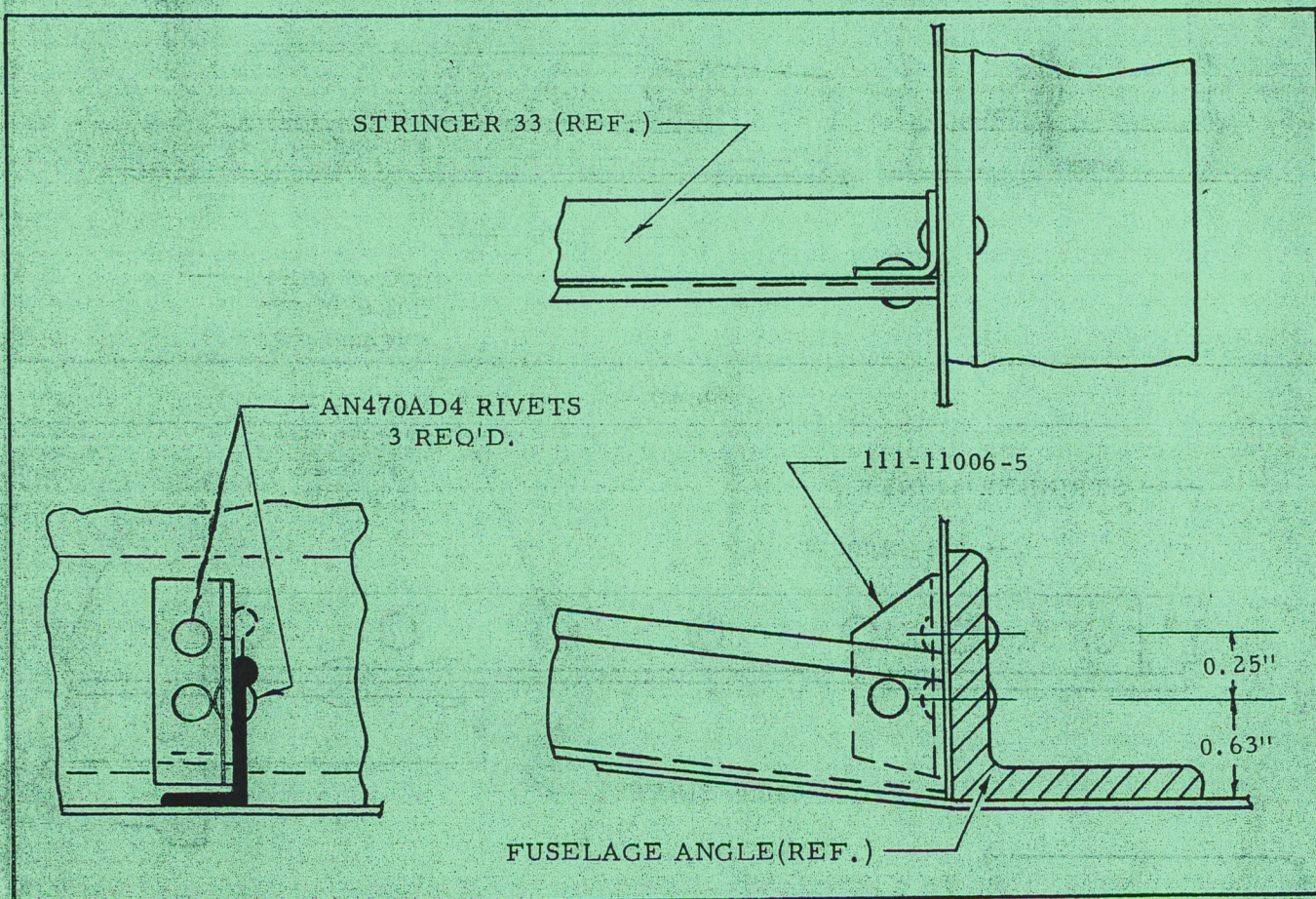


Figure 4

ISSUED ON AUTHORITY OF THE CHIEF OF THE AIR STAFF

Prepared By:  
AMC/SACO/ACR



# MODIFICATION RELOCATION OF GYROSYN COMPASS AMPLIFIER

(This EO replaces EO 05-45B-6B/4 dated 27 Sep 56)

EQUIPMENT AFFECTED:	Expeditors 3N, 3MN and 3TM
BY WHOM WORK WILL BE PERFORMED:	Contractors
WHEN WORK WILL BE PERFORMED:	CAIR
RCAF FORM ENTRIES:	L14-1B, L14-6
MODIFICATION OF SPARES IN STOCK:	NA

## PURPOSE

1 To provide ease of access and quick disconnect mounting.

## MODIFICATION DATA

2 Work is to be carried out in accordance with Bristol Aircraft Western Ltd., Drawing numbers as listed below:-

#111-71013  
#4MBA-6930

## PARTS REQUIRED

3 NA

## PARTS RENDERED SURPLUS OR OBSOLETE

4 NA

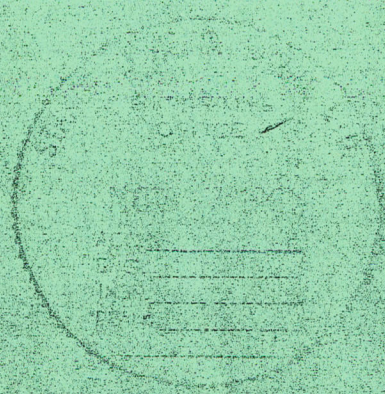
## WEIGHT, LOADING AND BALANCE DATA

5 Negligible.

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Prepared By:  
AMC/SACO/ACA







28 Sep 55

# MODIFICATION

## RETROFIT INSTALLATION OF INTEGRALLY MOULDED ENGINE CONTROL KNOBS

EQUIPMENT AFFECTED: All Expeditor 3N, 3NM, 3T and 3TM Aircraft not already so fitted

BY WHOM WORK WILL BE PERFORMED: Contractors

WHEN WORK WILL BE PERFORMED: During CAIR

RCAF FORM ENTRIES: L14, Log Set

MODIFICATION OF SPARES IN STOCK: NA

### PURPOSE

1 To standardize all propeller, throttle, mixture oil shutter and manifold head control levers to a type with integrally moulded knobs designed to be identifiable by touch.

### MODIFICATION DATA

2 The installation of new control levers will be carried out as outlined in Beech Drawing 644-189055 amended to Beech Contact Order A21111.

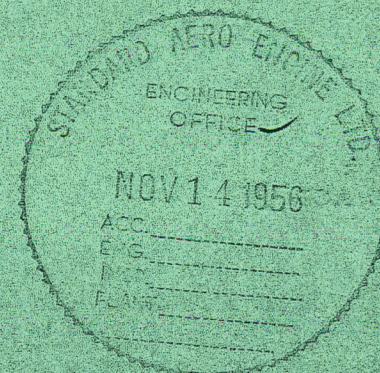
### PARTS REQUIRED

3 The following is a list of the new levers required to effect this modification. All necessary parts are to be supplied by the contractor:

RCAF REF.	PART	DESCRIPTION	QUANTITY
26JU/	644-189057-8	Lever assembly-oil shutter	2
26JU/	644-189057-10	Lever assembly-manifold heat	2
26JU/	694-189063-10	Lever assembly-mixture control	2
26JU/	644-189056	Lever assembly-propeller	2
26JU/	694-189061-10	Lever assembly-throttle	2

### NOTE

AMC records indicate the first 166 aircraft were produced with the old removable type knobs and the next 24 aircraft with new propeller, throttle and mixture controls, but retaining the old oil shutter and manifold knobs. Subsequent to the 190th aircraft, all were manufactured with new moulded knobs fitted.





## PARTS RENDERED SURPLUS OR OBSOLETE

4 When this modification is carried out, it will render the following items surplus and obsolete; these shall be disposed of in accordance with CAP 16, Vol. 1, Chap. Q13/1:

RCAF REF.	PART	DESCRIPTION	QUANTITY
26JU/	404-189069	Lever assembly-propeller	2
26JU/	404-189066	Lever assembly-manifold heat	2
26JU/	404-189067	Lever assembly-throttle	2
26JU/	404-189065	Lever assembly-oil shutter	2
26JU/	404-189069	Lever assembly-mixture	2

## WEIGHT, BALANCE AND LOADING DATA

5 The effect on weight and C of G is negligible.

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Prepared By:  
AMC/SACO/ACR



17 Jun 55

MODIFICATION

RADIO WIRING STANDARDIZATION

*Rescinded*

EQUIPMENT AFFECTED: Expeditor 3 Aircraft fitted with AF/ICA67 VHF

BY WHOM WORK WILL BE PERFORMED: Contractor Mobile Repair Parties

WHEN WORK WILL BE PERFORMED: As directed by AMCHQ

RCAF FORM ENTRIES: L14, Log Book

MODIFICATION OF SPARES IN STOCK: NA

PURPOSE

1 To standardize radio wiring in Expeditor aircraft fitting with AF/ICA67 VHF, and incorporate radio console and sidetone modifications that could not be put on some aircraft due to wiring changes.

MODIFICATION DATA

2 The modification is carried out in accordance with MBA Engineering report ER #1960, new wiring diagrams developed by MBA will have two copies left at the unit where aircraft are modified, reproducible copy will be held by AMC and extra copies if required are to be demanded through regular channels.

PARTS REQUIRED

3 All parts required for this modification are to be supplied by the contractor.

PARTS RENDERED SURPLUS OR OBSOLETE

4 All parts rendered surplus or obsolete by this modification are to be disposed of in accordance with CAP 16, Vol 1, Chap 13.

WEIGHT, LOADING AND BALANCE DATA

5 Nil

ADDITIONAL DATA

6 This modification will include the following modifications and subsequently cancel the following EOs:

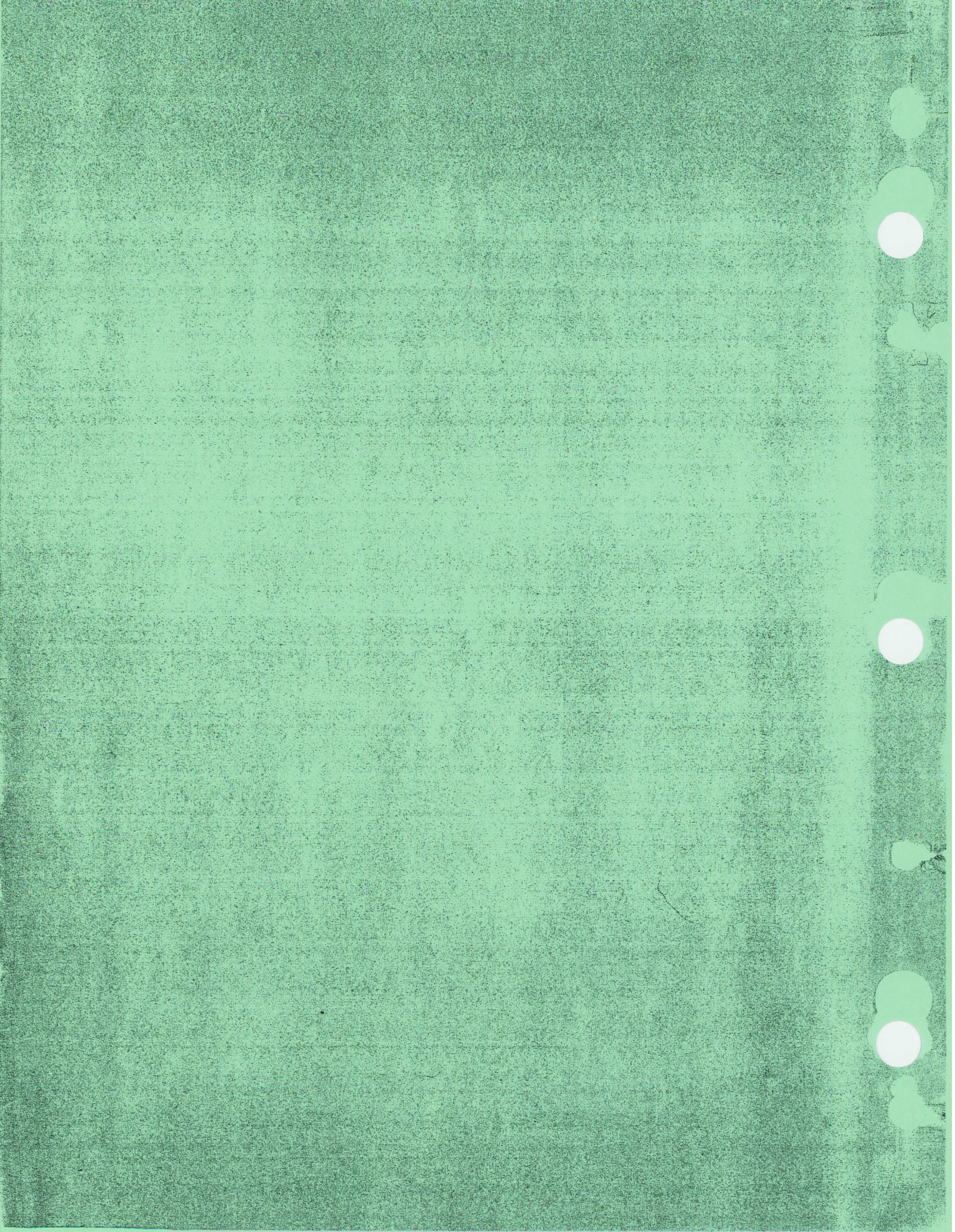
- |                 |               |                 |                 |
|-----------------|---------------|-----------------|-----------------|
| EO 05-45B-6A/7  | VOL. CHANGE   | EO 05-45B-6A/29 | STAND WIRING    |
| EO 05-45B-6A/12 | SIDETONE      | EO 05-45B-6A/46 | SW. CHANGE      |
| EO 05-45B-6A/27 | SIDETONE      | EO 05-45B-6A/47 | RESISTOR CHANGE |
| EO 05-45B-6A/28 | CONTROL PANEL |                 |                 |

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Prepared By:  
AMC/STelO/TelAF

THIS E.O. ~~15 45~~ <sup>15</sup> IS APPLICABLE TO  
*M.R.P. modification program to be carried out H. Louch*  
 on this mod. PROJECT ENGINEER







# MODIFICATION

## WIRING & PIPING

### CORRECTIVE MODIFICATION

EQUIPMENT AFFECTED: All Expeditor 3N, 3NM and 3TM Aircraft

BY WHOM WORK WILL BE PERFORMED: Contractors Mobile Repair Parties

WHEN WORK WILL BE PERFORMED: As directed by AMC

RCAF FORM ENTRIES: L14, Log Book

MODIFICATION OF SPARES IN STOCK: NA

#### PURPOSE

1 To bring certain functional systems of Expeditor production aircraft up to a standard of airworthiness acceptable to the RCAF.

#### MODIFICATION DATA

2 This modification will be carried out in accordance with MacDonald Bros., Engineering Report #1917, and the following Drawings:

4 MBA-13483  
4 MBA-13482  
4 MBA-13374

4 MBA-13151  
3 MBA-13487

#### PARTS REQUIRED

3 All parts required for this modification are to be supplied by the contractor.

#### PARTS RENDERED SURPLUS OR OBSOLETE

4 All parts rendered surplus or obsolete by this modification are to be disposed of in accordance with CAP 16, Vol. 1, Chap. 13.

#### WEIGHT, LOADING AND BALANCE DATA

5 This modification will add approximately five pounds to the aircraft, evenly distributed about the C of G.

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Prepared By:  
AMC/SACO/ACR

