



SERVICE BULLETIN

SUBJECT: HORIZONTAL STABILISER - IMPROVED DURABILITY (MODIFICATION N407B)

1. Planning Information:

A. Effectivity:

(1) Aircraft Affected:

Nomad N22 Series Aircraft:

N22-3M	N22B-19M	N22B-50	N22B-70
N22-4	N22B-20M	N22-51M	N22B-85M
N22B-5M	N22B-21M	N22B-52M	N22B-88M
N22B-6M	N22B-22M	N22B-53	N22B-91M
N22B-7	N22B-23M	N22B-54M	N22B-97M
N22-8M	N22-24M	N22B-56	N22B-100
N22-9	N22B-25	N22B-57	
N22B-11M	N22B-26	N22B-58	
N22B-12M	N22B-27	N22B-59	
N22B-13M	N22B-31M	N22B-61	
N22B-15M	N22B-33	N22B-66	
N22-16M	N22B-35	N22B-67M	
N22-17M	N22B-37	N22B-68	
N22B-18M	N22B-39	N22B-69	

Compliance with this service bulletin will be indicated by a certification for modification N407B in the airframe Log Book.

Nomad N24 Series Aircraft:

N24-30	N24-38	N24-60	N24A-72
N24-32	N24-42	N24A-62	N24A-73
N24-34	N24A-44	N24A-64	N24A-74
N24-36	N24A-46	N24A-71	N24A-75

Compliance with this service bulletin will be indicated by a certification for modification N407B in the airframe Log Book.

(2) Spares Affected:

<u>Part Number</u>	<u>Nomenclature</u>	<u>Recommended Disposition</u>
1/N-30-120	Horizontal Stabiliser	Rework
201/N-30-178	Horizontal Stabiliser	Rework

B. Reason

This Service Bulletin introduces modification N407B to improve the in service durability of the horizontal stabiliser.

C. Description

The modification detailed in this Service Bulletin introduces improved riveting, access panels and increased rigidity of the horizontal stabiliser upper surface.

D. Compliance

Before 1st July, 1980. Modification N285 is to be incorporated in conjunction with this mod (NMD-55-7 Ref No. 50).

E. Approval

The modification described herein has been approved under Regulation 40 by the authorised Design Signatory at Government Aircraft Factories as so authorised by the Secretary to the Department of Transport (Australia) and conforms with the type certificate requirements.

F. Manpower

65 hours 1 man.

G. Material - Price and Availability

The kit required to accomplish this modification shall be procured through the operators local distributor. Kit Part No. NMD-55-10-1 is classified "no charge" and a "no charge" purchase order must be placed upon the distributor within 90 days to receive this offer. Distributors are to place a "no charge" purchase order on GAF through the normal procurement method. Purchase orders are to quote the Service Bulletin number and the aircraft serial number

H. Tooling - Price and Availability

None.

I. Weight and Balance

Changes dictated in accomplishment instructions.

J. References

Illustrated Parts Catalogue (IPC)
Maintenance Manual (MM)
Structural Repair Manual (SRM)

K. Publications Affected

I.P.C. - 55-00-00

2. Accomplishment Instructions

- A. (1) Remove the Horizontal Stabiliser as described in MM 55-20-00.
- (2) Install the six access panels in the tailplane top skin as shown in figure 1 and figure 2.
- (3) On the inboard rib fit, as shown in figure 2 Detail C, the reinforcing doubler plate 1C/N-03-599 to the diaphragm 1S/N-30-121 and 1R/N-30-121.
- (4) On the rear spar inboard end extend the trim tab actuating rod cut out as shown in figure 2 Detail A.
- (5) Add an additional diaphragm and angle at stn 468.89 Ref Figure 2 Detail B.
- (6) Obtaining access through the access panels, inter pitch (with 3/32 inch rivets P/N MS20470AD-3 length to suit) existing rivet pitch along skin to rib joint.

In areas where access is restricted, the use of 1/8 Cherry Max CR 3223 is an approved alternative. Use pigmented jointing compound on assembly of rivets.

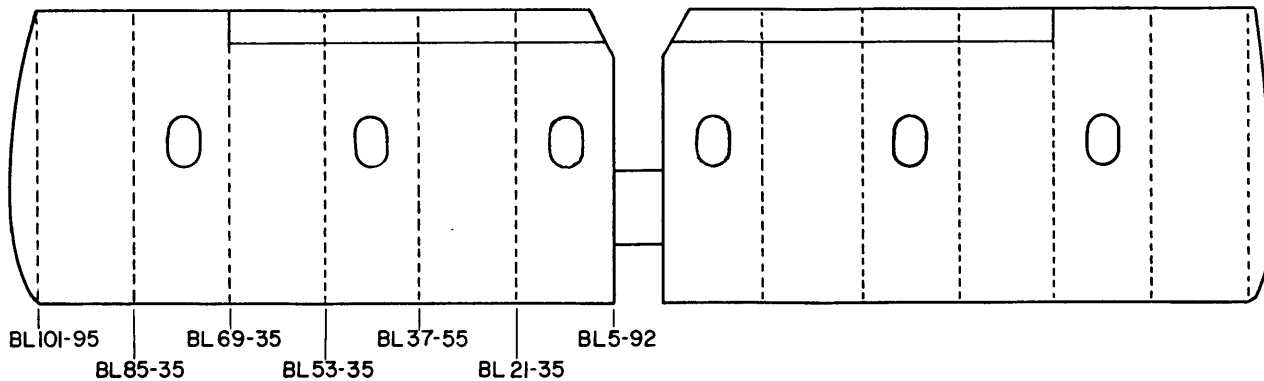
Replace existing AGS 2050 rivets in the leading edge panel (BL 5.92 to BL 21.95 RH and LH) as shown in figure 2 detail D.

All AGS 2050 rivets are to be replaced by solids or cherry rivets if desired.

- (7) Remove the tip fairings and on the outboard rib (BL 101.35) fit the mass balance as shown in figure 3).

Replace tip fairing picking up existing rivet locations starting at the L.E. and working back towards the T/E. Oversize rivets may be used and interpitch if required.

- (8) On completion of the reworks described, clean out the internal structure of tailplane of all foreign bodies (e.g. swarf, rivet tails, etc.), and fit access panel doors using PR 1221 or 1222 compound, or equivalent, to seal doors. Secure doors using eight MS24693-S272 screws and four AGS 2048-420BS rivets as shown as figure 1.
- (9) Balance Horizontal Stabiliser in accordance with Table 1 of this Service Bulletin.



TYPICAL ACCESS PANEL
 BL 37:55 TO 53:35
 & BL69:35 TO 85:35

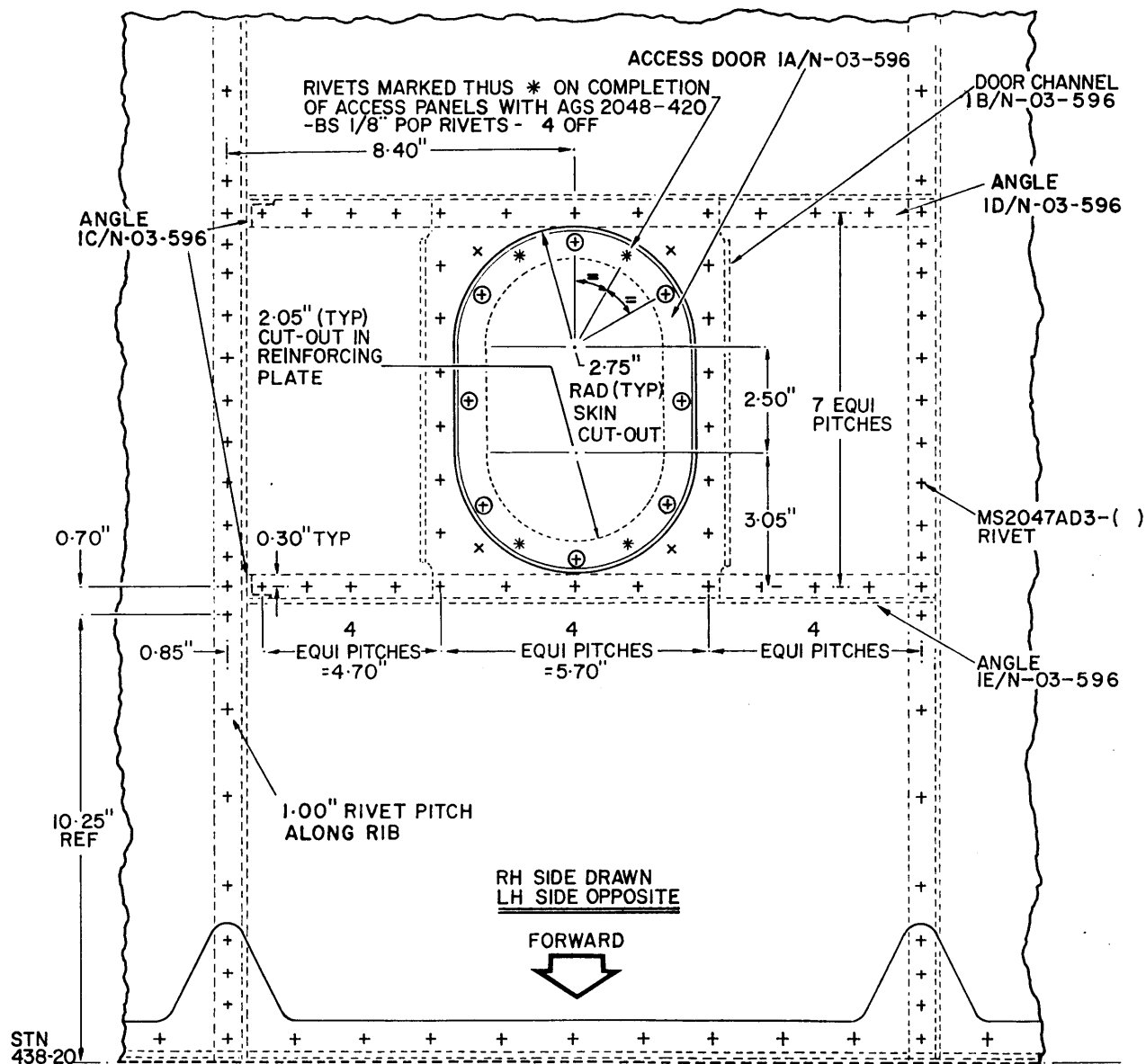


FIGURE 1

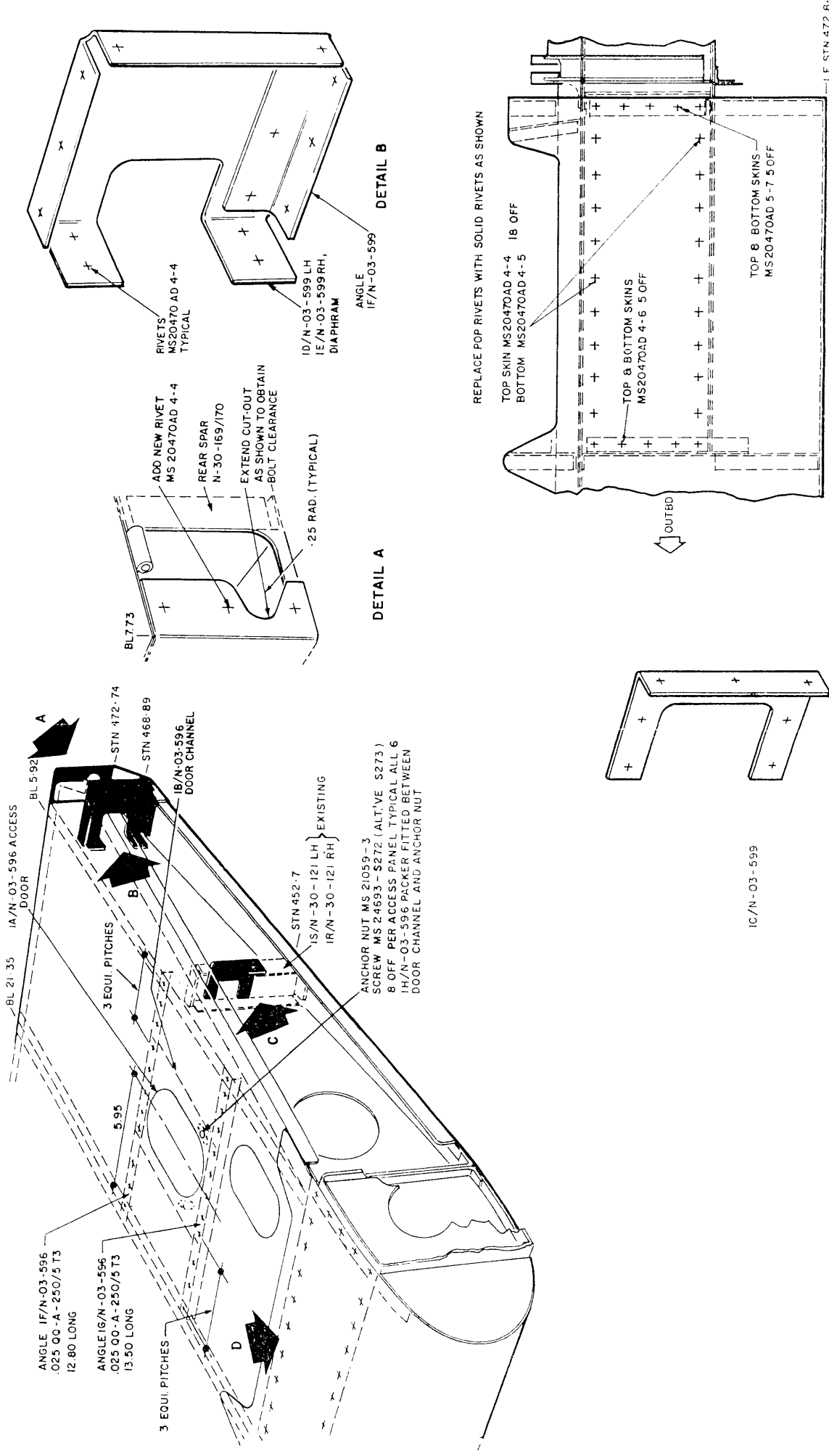
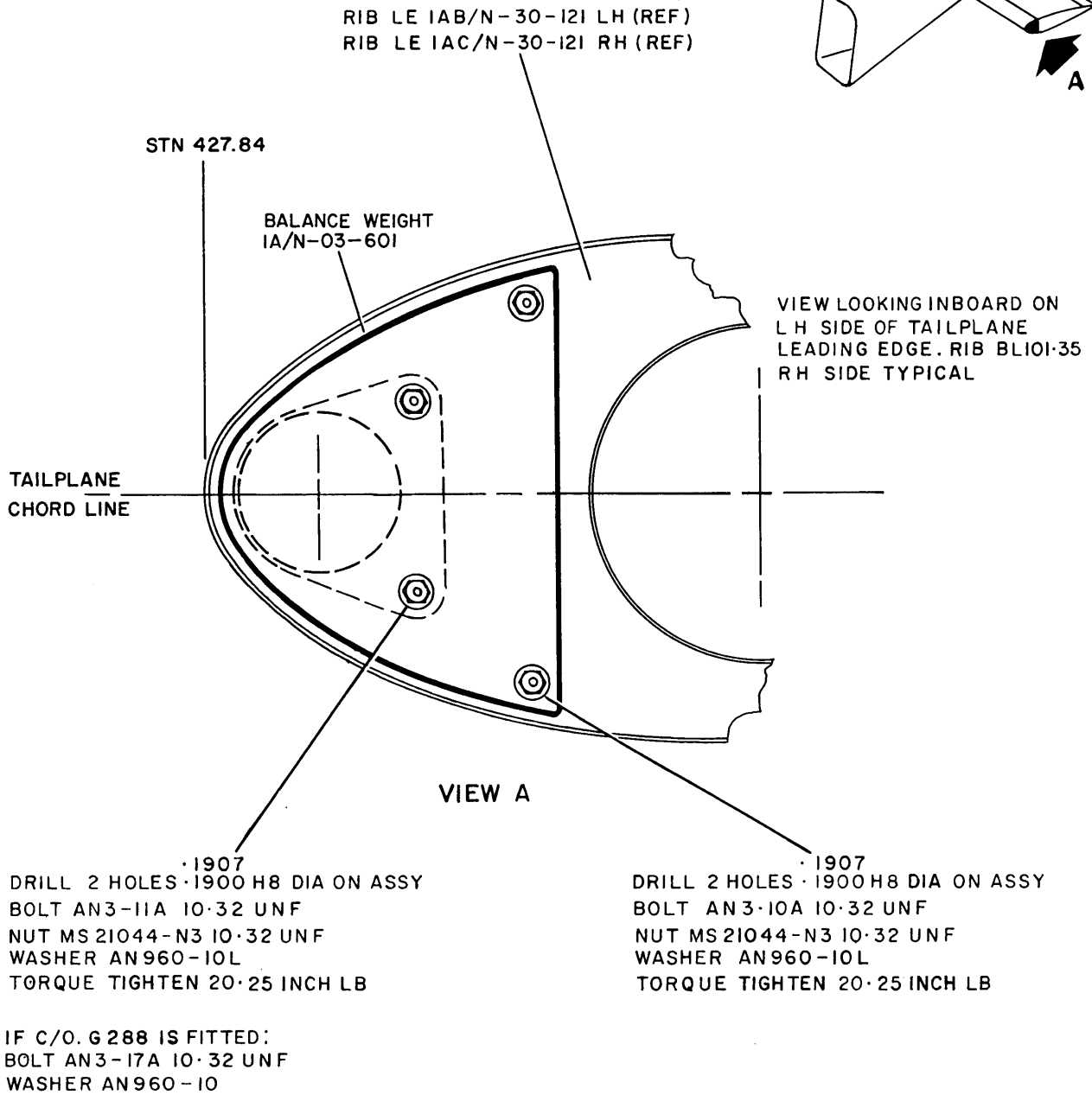
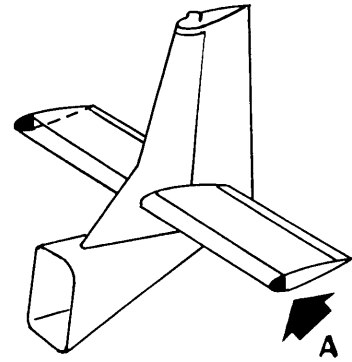


FIGURE 2



2nd May, 1980

FIGURE 3

Structural Repair Manual will be amended to include the revised weights at the next revision.

Revised Horizontal Stabiliser Weight Details

HORIZONTAL STABILISER CONFIGURATION	WEIGHT OF BALANCED HORIZONTAL STABILISER		TOTAL WEIGHT OF MASS BALANCE	
	LB	KG	LB	KG
Two Coats of Polyurethane Paint	138.2 ± 2.0	62.7 ± .90	12.5 ± .50	5.67 ± .23
Two Coats of Polyurethane Paint Plus Customer Option G18	145.09 ± 2.0	65.8 ± .90	10.5 ± .50	4.77 ± .23
Two Coats of Acrylic Paint Plus Customer Option R18A	137.59 ± 2.0	62.4 ± .90	11.5 ± 5.0	5.24 ± .23
Two Coats of Acrylic Paint Plus Customer Option G18	140.46 ± 2.0	63.7 ± .90	8.98 ± .50	4.07 ± .23

TABLE 1

3. Material Information

A. Parts required per Aircraft

(1) One each Kit Part No. NMD-55-10-1 is required per aircraft.

<u>New Part No.</u>	<u>Qty per Kit</u>	<u>Nomenclature</u>
1A/N-03-596	6	Top Plate
1B/N-03-596	6	Reinforcing Channel
1C/N-03-596	8	Angle
1D/N-03-596	4	Angle
1E/N-03-596	4	Angle
1F/N-03-596	2	Angle
1G/N-03-596	2	Angle
1H/N-03-596	48	Packer
1C/N-03-599	2	Angle
1D/N-03-599	1	Diaphragm
1E/N-03-599	1	Diaphragm
1F/N-03-599	2	Angle
1A/N-03-601	2	Balance Weight
AGS2048-420BS	24	Rivet
AN3-10A	4	Bolt
AN3-11A	4	Bolt

	AN960-10L	8	Washer
	AS44LF	90	Rivet
	MS20426AD3-6	96	Rivet
	CR3223-4-2	158	Rivet
OR	CR3243-4-2		
	MS20470AD3-3	3	Rivet
	MS20470AD3-3	230	Rivet
	MS20470AD4-4	860	Rivet
	MS21044N3	8	Nut
	MS21059-3	48	Anchor Nut
	MS24665-153	4	Split Pin
	MS24665-302	1	Split Pin
	MS24693-S272	48	Screw

- (2) The following parts are to be procured from local sources of operators stock.

<u>Part No</u>	<u>Qty</u>	<u>Nomenclature</u>
PR 1221	AR	Compound
or		
PR 1222	AR	Compound
	AR	Pigmented jointing Compound

- (3) Parts to be modified and reidentified by the operator.

<u>Old Part No</u>	<u>Nomenclature</u>	<u>New Part No</u>
1/N-30-120	Tailplane Assy	202/N-30-178 *
201/N-30-178	Tailplane Assy	202/N-30-178 *

* Note

Re-identification of the tailplane assy is not to take place until the incorporation of Service Bulletins NMD-55-7, NMD-55-8, NMD-55-9 and this Service Buleltin.

B. Parts Required to Modify Spares

Spare Tailplanes 1/N-30-120 and 201/N-30-178 are to be reworked to Para 2 of this Service Bulletin. The parts called up in 3A(1) and 3A(2) are required to modify each Tailplane Assy.

Tailplane Assy is to be reidentified after rework in accordance to Para 3A(3).

C. Removed Parts

None.

D. Special Tools and Equipment Required

None.

4. Record Compliance with Modifications N407B in the Airframe Log Book

APPROVED BY:

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GOVERNMENT AIRCRAFT FACTORIES