



SERVICE BULLETIN

SUBJECT: INTRODUCTION OF LIGHTNING PROTECTION
FOR HORIZONTAL STABILIZER
(MODIFICATION N369)

1. Planning Information

A. Effectivity

(1) Aircraft Affected

All Nomad N22-Series and N24-Series aircraft whose log books do not already record the embodiment of Mod N369 or compliance with Service Bulletin NMD-55-14.

Pre-certification implementation of the intent of this service bulletin is recorded in the airframe log book as Mod N369.

(2) Spares Affected

Rework spare horizontal stabilizers in accordance with Para 2.C. using bonding brackets manufactured as in Figure 1, Detail E.

B. Reason

To minimise the risk of damage to the horizontal stabilizer bearings in the event of a lightning strike.

C. Description

A bonding lead is connected between brackets fitted to the horizontal stabilizer and to the rear fuselage structure near the horizontal stabilizer L.H. pivot point.

D. Compliance

At the next 100-hour inspection following receipt of this service bulletin.

E. Approval

The modification detailed herein has been approved pursuant to Air Navigation Regulation 40 and conforms with the type certification requirements.

F. Manpower

One man, three hours.

G. Material - Price and Availability

The parts required (Ref Para 3.A.) are to be locally procured or manufactured by the operator.

H. Tooling - Price and Availability

None required.

J. Weight and Balance

Negligible effect.

K. References

M.M.

L. Publications Affected

Maintenance Manual (M.M.)
Illustrated Parts Catalogue (I.P.C.)

2. Accomplishment Instructions

WARNING: TAKE PRECAUTIONS TO ENSURE THAT THE FLIGHT CONTROLS CANNOT BE OPERATED DURING EMBODIMENT OF THIS MODIFICATION AS SERIOUS INJURY COULD OTHERWISE RESULT.

CAUTION: SUPPORT THE REAR OF THE AIRCRAFT (Ref M.M. 7-00-00).

- A. Remove the dorsal fin (Ref M.M. 55-30-00).
- B. Manufacture the front and rear bonding brackets (Ref Figure 1, Detail E) and the bonding lead (Ref Figure 1, Detail H).
- C. Install the front (horizontal stabilizer) bonding bracket P/N NMD-55-14-1 (Ref Figure 1, Detail A, B, C and D).
 - (1) Position the dia bonding bracket (Ref Figure 1, Detail D) and drill two 0.1285 inch dia holes in the front spar assembly using the holes in the bonding bracket as a drill guide.
 - (2) Clean all primer, grease, etc. from the interfacing surfaces and apply electrical bonding paste.

(3) Attach the bonding bracket to the front spar assembly using a rivet P/N MS20600AD4W-2 in the top mounting position and a rivet P/N MS20600AD4W-4 in the bottom position.

D. Install the rear (stub fin) bonding bracket P/N NMD-55-14-1 (Ref Figure 1, Detail A, F and G).

(1) Position the bonding bracket (Ref Figure 1, Detail G) and drill two 0.1285 inch dia holes in the stub fin front spar assembly using the holes in the bonding bracket as a drill guide.

(2) Clean all primer, grease, etc. from the interfacing surfaces and apply electrical bonding paste.

(3) Attach the bonding bracket to the stub fin front spar assembly using two rivets P/N MS20600AD4W-1.

E. Install bonding lead P/N NMD-55-14-2.

(1) Thoroughly clean and prepare the surface of the front and rear bonding brackets around the bonding lead attachment holes (Ref M.M. 20-20-00).

(2) Attach one end of the bonding lead to the front bonding bracket using the attaching parts and order of assembly shown in Figure 1, Detail J.

(3) Attach the other end of the bonding lead to the rear bonding bracket using the attaching parts and order of assembly shown in Figure 1, Detail J.

F. Operate the horizontal stabilizer over its full range of control and check that the bonding lead does not foul or impede normal operation.

G. Replace the dorsal fin (Ref M.M. 55-30-00).

H. Remove support from the rear fuselage (Ref M.M. 7-00-00).

3. Materials Information

A. Parts Required per Aircraft:

The following parts and materials are to be procured from local sources or manufactured by the operator:

<u>Item P/N</u>	<u>Title</u>	<u>Qty</u>
NMD-55-14-1	Bonding bracket	2
MS20600AD4W-2	Rivet, 1/8 inch, or	1
CR9163-4-2	Rivet, 1/8 inch, Cherry	ALT
MS20600AD4W-4	Rivet, 1/8 inch, or	1
CR9163-4-4	Rivet, 1/8 inch, Cherry	ALT
MS20600AD4W-1	Rivet, 1/8 inch, or	2
CR9163-4-1	Rivet, 1/8 inch, Cherry	ALT
NMD-55-14-2	Bonding lead	1
MS35207-263	Screw, panhead, 10-32 UNF	2
AN960-10L	Washer, steel	4
AN960-PD10L	Washer, aluminium alloy	2
MS35338-43	Spring washer	2
MS21083-N3	Self-locking nut, 10-32 UNF	2
-	Electrical bonding paste, Brisal (or equivalent)	As required

B. Existing Aircraft Parts Modified and Re-identified by the Operator

Nil.

C. Parts Required to Modify Spares

The following parts are required for each spare horizontal stabilizer to be modified:

<u>Item P/N</u>	<u>Title</u>	<u>Qty</u>
NMD-55-14-1	Bonding bracket	1
MS20600AD4W-2	Rivet, 1/8 inch, (top) or	1
CR9163-4-2	Rivet, 1/8 inch, Cherry	ALT
MS20600AD4W-4	Rivet, 1/8 inch, (bottom) or	1
CR9163-4-4	Rivet, 1/8 inch, Cherry	ALT
-	Electrical bonding paste, Brisal (or equivalent)	As required

D. Removed Parts

Nil.

E. Special Tools and Equipment Required

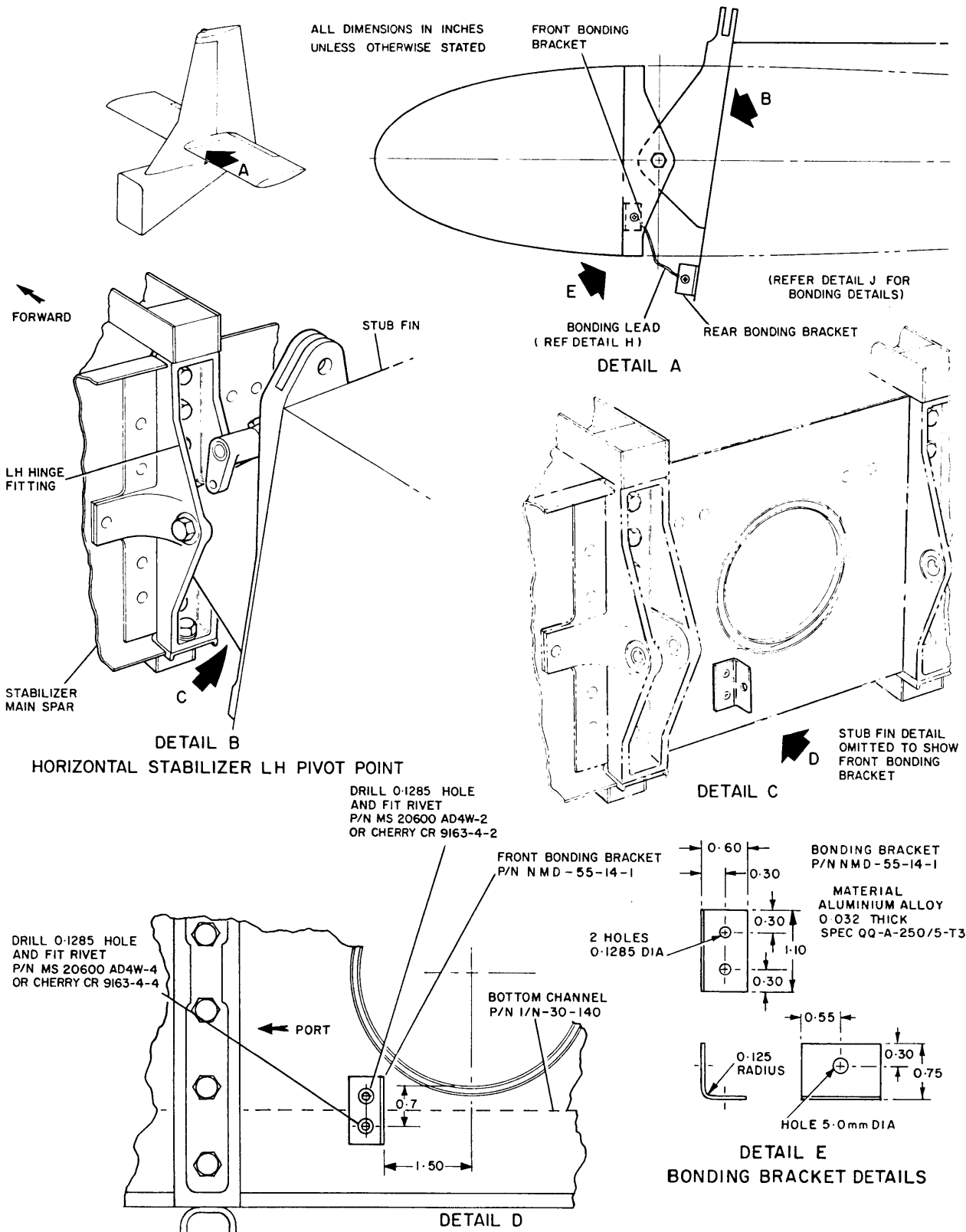
Nil.

F. Superseded Special Tools

Nil.

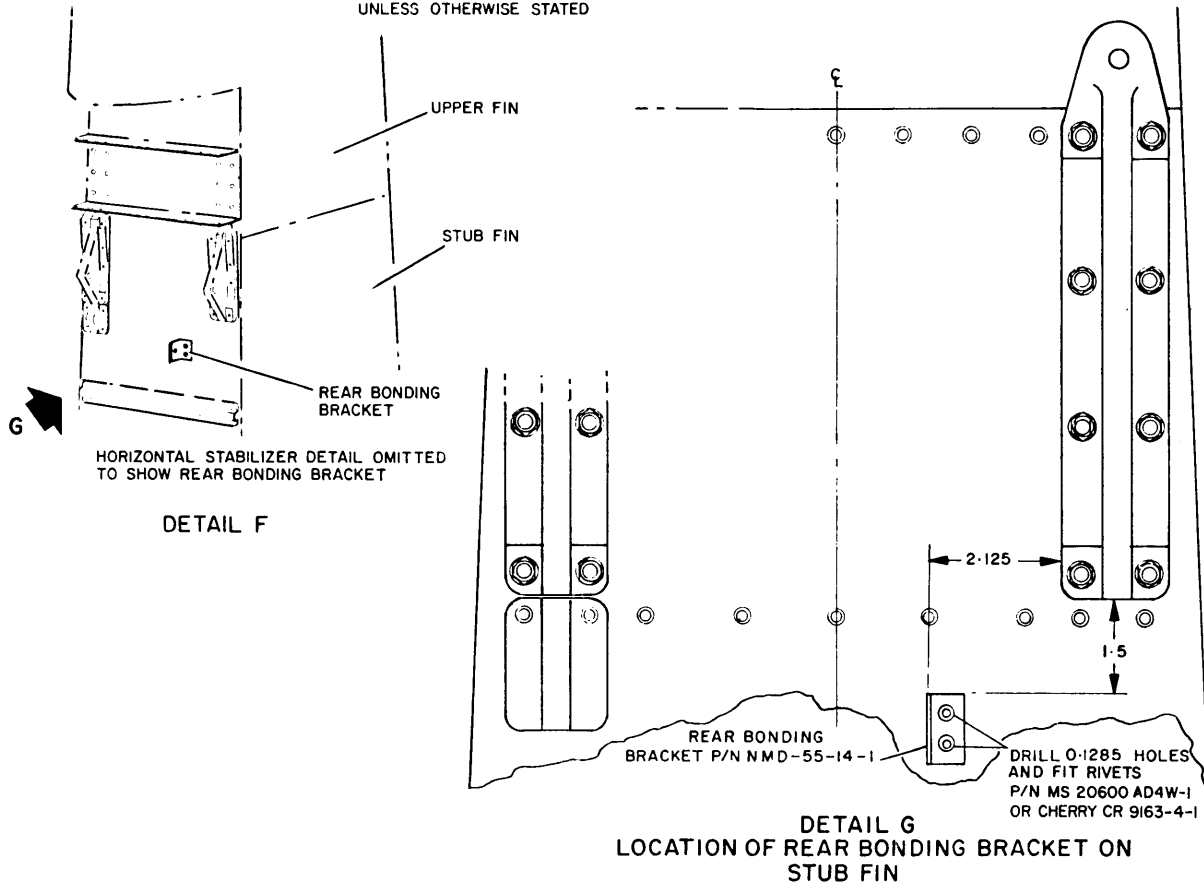
4. Recording Action

Record compliance with Service Bulletin NMD-55-14 in the airframe log book.



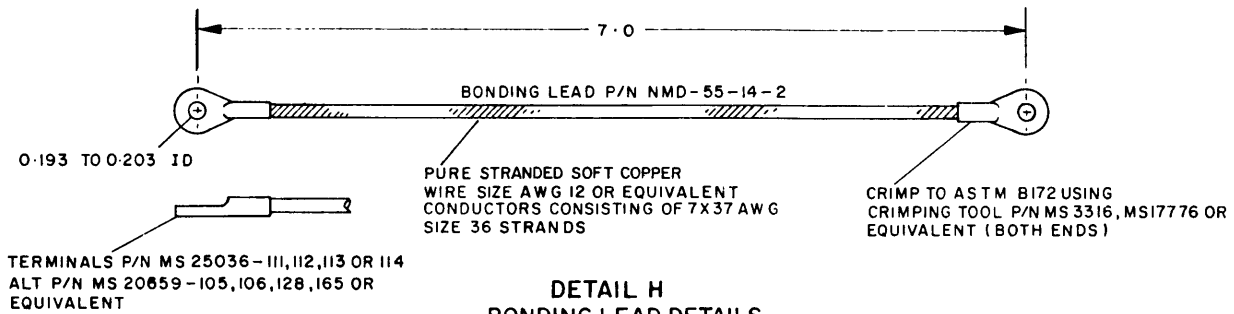
Installation of Modification N369
Figure 1 Sheet 1

ALL DIMENSIONS IN INCHES
UNLESS OTHERWISE STATED

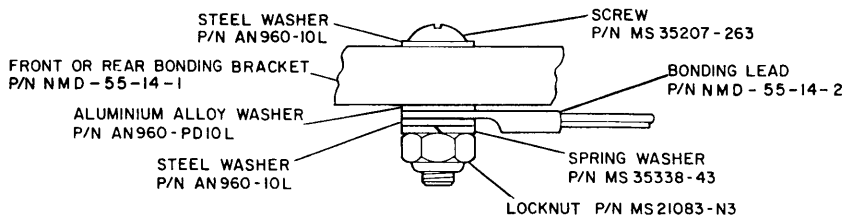


DETAIL F

DETAIL G
LOCATION OF REAR BONDING BRACKET ON
STUB FIN



DETAIL H
BONDING LEAD DETAILS



DETAIL J
BONDING DETAILS

Installation of Modification N369
Figure 1 Sheet 2