# Nomad
# ALERT SERVICE BULLETIN

Reference No 285

**TRANSMITTAL LETTER**
**FOR**
**ALERT SERVICE BULLETIN ANMD–53–19**

## FUSELAGE REAR SECTION – STUB FIN – UPPER FIN REAR ATTACHMENT POINTS – INSPECTION

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1. **Reason**

   Ongoing fatigue assessment indicates that the fin attachment on the rear face of the stub fin requires periodic inspection for possible fatigue cracking.

2. **Instructions**

   A. Remove your copy of Service Bulletin ANMD–53–19 and Letter of Transmittal dated 12 May 1995 from Service Bulletin binder and destroy.

   B. Insert Service Bulletin ANMD–53–19 Revision 1 and Letter of Transmittal dated 17 October 95 into the Service Bulletin binder and annotate the index accordingly.

**Revision Status**

| | |
|---|---|
| Original | 12 May 95 |
| Revision 1 | 17 October 95 |

J HEDDLES
TECHNICAL SERVICES MANAGER

# Nomad
# ALERT SERVICE BULLETIN

## FUSELAGE REAR SECTION – STUB FIN – UPPER FIN REAR ATTACHMENT POINTS – INSPECTION

1. **PLANNING INFORMATION**

A. **Effectivity**

All Nomad N22 series and N24 series aircraft.

B. **Reason**

Ongoing fatigue assessment indicates that the fin attachment on the rear face of the stub fin requires periodic inspection for possible fatigue cracking.

C. **Description**

A detailed visual inspection is to be performed to inspect for cracks radiating outwards from the inside of the rear fin attachment bolt holes in the Stub Fin rear face (Ref Fig 1) using one of the methods described in Part 1.

(1) Part 1

(a) Method 1 – Inspection with a long Borescope (30 inch, or greater, overall length)

(b) Method 2 – Inspection with a short Borescope (less than 30 inch overall length)

**NOTE**

Borescopes must be of a diameter to suit a 5/16 inch hole.

(c) Method 3 – Inspection using magnifying glass and strong light.

(2) Part 3 – Repair

D. **Compliance**

(1) Incorporation of this Service Bulletin is mandatory.

(2) If A/C has 5,000 hrs TTIS, or more, this inspection is to be carried out before the next flight.

(3) Subsequent inspections are to be carried out every 3,600 hrs.

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(4) ASTA Defence is to be notified if cracks are found in the areas identified by this Service Bulletin. Reports are to be sent to:

Technical Services Manager
ASTA Defence Logistics
Private Bag No.4
Lara 3212
Victoria Australia

E. **Approval**

(1) The requirement detailed herein has been approved by a person authorised under Civil Aviation Regulation 35 and conforms with the type certification requirements.

(2) The Civil Aviation Authority has been requested to issue an Airworthiness Directive.

F. **Manpower**

(1) Part 1

(a) Method 1 – 2 manhours

(b) Method 2 – 5 manhours

(c) Method 3 – 12 manhours

(2) Part 2

Time taken is negligible and is included in manhours for Part 1.

(3) Part 3

Repair time is dependant on repair requirements following contact with ASTA Defence.

G. **Material**

None required.

H. **Tooling**

None required.

I. **Weight and Balance Change**

None.

J. **References**

| | |
|---|---|
| Maintenance Manual | Chap 55–30–00 and Chap 55–40–00 |

K. **Publications Affected**

| | |
|---|---|
| Inspection Requirement Manual | Part 4 |

2. **ACCOMPLISHMENT INSTRUCTIONS**

A. **Part 1**

(1) Method 1 – Inspection (long Borescope)

**NOTE**

If a long Borescope is used the inspection may be carried out from over the top of the tail plane leading edge or else over the tail plane trailing edge.

**WARNING**

DO NOT OPERATE THE FLIGHT CONTROLS WITH CONTROL COMPONENTS DISCONNECTED OR WHEN PERSONNEL ARE WORKING IN THE AREA CONCERNED. SERIOUS INJURY TO PERSONNEL OR DAMAGE TO FLIGHT CONTROL COMPONENTS AND STRUCTURE COULD OCCUR.

(a) Remove the cover plate on each side of the upper fin to stub fin attachment fittings.

**WARNING**

WHEN CARRYING OUT STEP (B), ONLY ONE BOLT AT A TIME IS TO BE REMOVED.

(b) Taking care not to allow the bolt to rotate, remove the nut and 2 washers from only one bolt and, still without rotating the bolt, carefully push it out.

(c) Using a Borescope inspect the bolt hole for horizontal cracking in the 3 layers of metal plate (Ref Fig 1).

(d) Following the inspection, install the removed bolt in accordance with MM Chap 55–30–00.

(e) Carry out steps (b) to (d) on the second stub fin rear attachment bolt.

(f) Visually inspect the area surrounding the bolt holes for evidence of fretting and/or any other damage.

**CAUTION**

AFTER ALL MAINTENANCE ACTIVITIES INVOLVING FLYING CONTROLS, OR WHENEVER FLYING CONTROL SERVICING AND ACCESS PANELS ARE REMOVED ENSURE THAT THE AREAS CONCERNED ARE CLEAN AND FREE FROM FOREIGN OBJECTS.

(g) On completion of inspection refit the cover plates removed in step (a).

(2) Method 2 – Inspection (short Borescope)

**NOTE**

If a short Borescope is used the inspection can only be carried out from over the tail plane trailing edge. In this case the rudder may require removal in order to allow adequate access for rotation of the Borescope during inspection.

**WARNING**

DO NOT OPERATE THE FLIGHT CONTROLS WITH CONTROL COMPONENTS DISCONNECTED OR WHEN PERSONNEL ARE WORKING IN THE AREA CONCERNED. SERIOUS INJURY TO PERSONNEL OR DAMAGE TO FLIGHT CONTROL COMPONENTS AND STRUCTURE COULD OCCUR.

(a) Remove the cover plate on each side of the upper fin to stub fin attachment fittings.

**WARNING**

WHEN CARRYING OUT STEP (B), ONLY ONE BOLT AT A TIME IS TO BE REMOVED.

(b) Taking care not to allow the bolt to rotate, remove the nut and 2 washers from only one bolt and, still without rotating the bolt, carefully push it out.

(c) Using a Borescope inspect the bolt hole for horizontal cracking in the 3 layers of metal plate (Refer Fig 1).

(d) Following the inspection, install the removed bolt in accordance with MM Chap 55–30–00.

(e) Carry out steps (b) to (d) on the second stub fin rear attachment bolt.

(f) Visually inspect the area surrounding the bolt holes for evidence of fretting and/or any other damage.

**CAUTION**

AFTER ALL MAINTENANCE ACTIVITIES INVOLVING FLYING CONTROLS, OR WHENEVER FLYING CONTROL SERVICING AND ACCESS PANELS ARE REMOVED ENSURE THAT THE AREAS CONCERNED ARE CLEAN AND FREE FROM FOREIGN OBJECTS.

(g) On completion of inspection refit the cover plate removed in step (a).

(3) Method 3 – Inspection (X10 Magnifying Glass)

**WARNING**

DO NOT OPERATE THE FLIGHT CONTROLS WITH CONTROL COMPONENTS DISCONNECTED OR WHEN PERSONNEL ARE WORKING IN THE AREA CONCERNED. SERIOUS INJURY TO PERSONNEL OR DAMAGE TO FLIGHT CONTROL COMPONENTS AND STRUCTURE COULD OCCUR.

**CAUTION**

WHEN REMOVING THE UPPER FIN, CARE IS TO BE TAKEN NOT TO ROTATE THE REAR ATTACHMENT BOLTS AS THE BOLTS ARE BEING REMOVED.

(a) Remove the Rudder (Refer MM Chap 55–40–00), Dorsal Fin and Upper Fin (Refer MM Chap 55–30–00)

(b) Using a X10 magnifying glass and strong light, inspect the rear attachment bolt holes for horizontal cracking in the 3 layers of metal plate (Refer Fig 1).

(c) Visually inspect the area surrounding the bolt holes for evidence of fretting and/or any other damage.

CAUTION

AFTER ALL MAINTENANCE ACTIVITIES INVOLVING FLYING CONTROLS, OR WHENEVER FLYING CONTROL SERVICING AND ACCESS PANELS ARE REMOVED ENSURE THAT THE AREAS CONCERNED ARE CLEAN AND FREE FROM FOREIGN OBJECTS.

(d) When the inspection is completed, and if no cracks are found, reinstall the Upper Fin, Dorsal Fin (Refer MM Chap 55–30–00) and Rudder (Refer MM Chap 55–40–00).

B. **Part 2 – Repair (Refer Fig 1)**

(1) If cracks, fretting and/or any other damage is found either in the corner angle (PN 1A/N–12–195), the doubler (PN 1D/N–12–195) or the web (PN 1C/N–12–195) ASTA Defence is to be contacted for a repair scheme.

3. **MATERIAL INFORMATION**

None Required.

4. **SPECIAL TOOLS AND EQUIPMENT**

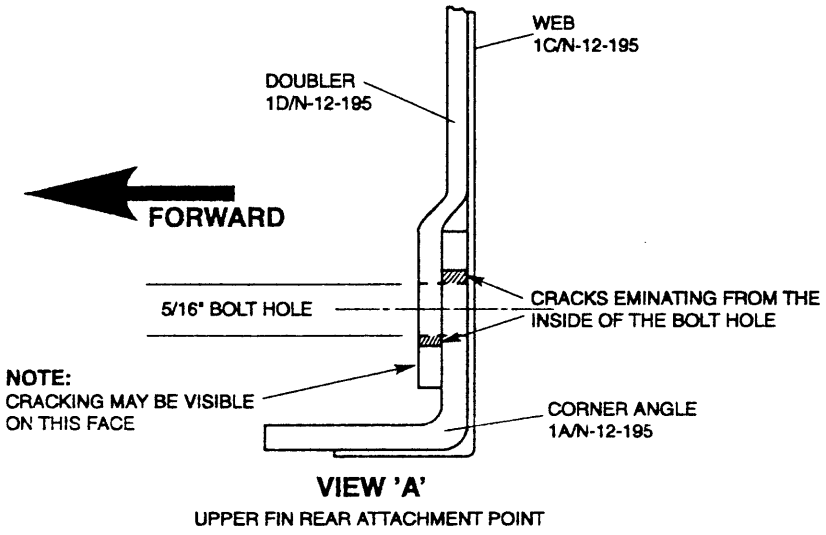
(1) Method 1 – long Borescope (30 inches or longer)

(2) Method 2 – short Borescope (less than 30 inches)

(3) Method 3 – X10 Magnifying Glass and light

5. **RECORDING ACTION**

Record compliance with Service Bulletin ANMD–53–19 in the Airframe Log Book.



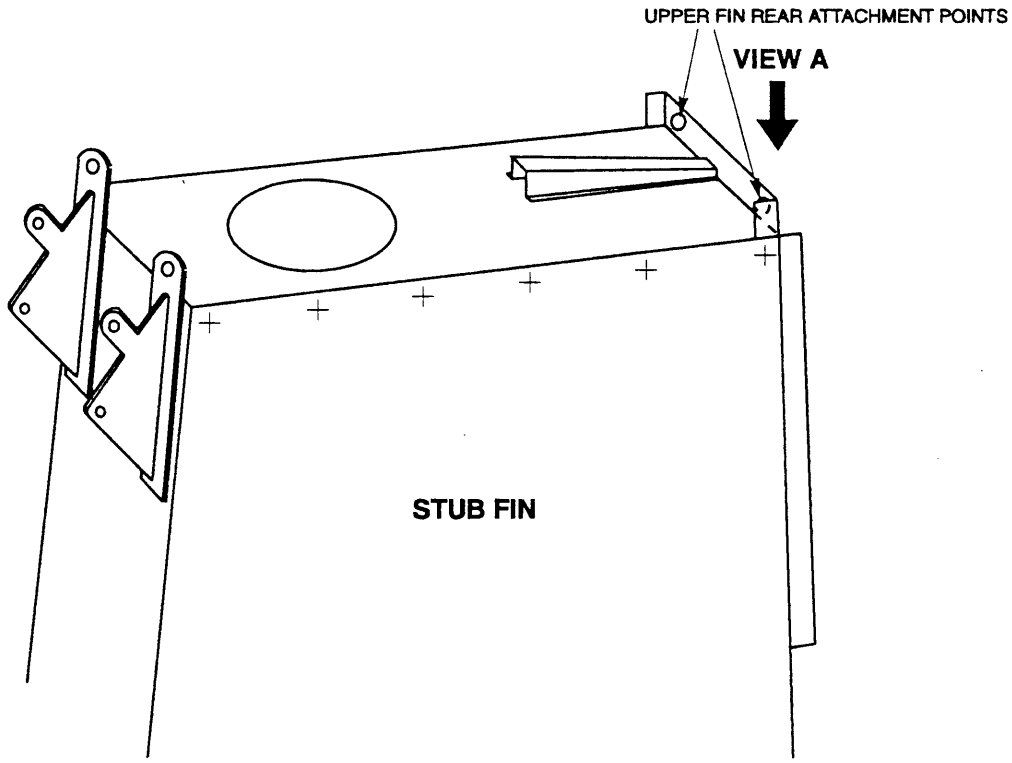




**Figure 1 – Upper Fin to Stub Fin Attachment**