

Nomad

SERVICE BULLETIN

STABILISERS — HORIZONTAL STABILISER — ACCESS PANEL INTERCOSTAL ANGLES (MOD N407) AND UPPER AND LOWER SKINS — INSPECTION

1. PLANNING INFORMATION

A. Effectivity

(1) Aircraft affected:

- (a) **N22 Series** line sequence numbers 1 to 9, 11 to 29, 31, 33, 35, 37, 39 to 41, 43, 45, 47 to 59, 61, 63, 65 to 70, 82 to 88, 90 to 95, 97, 100, 102 to 114, 116, 118, 125, 126, 131 to 134, 137, 138, 141, 143 to 170.
- (b) **N24 Series** line sequence numbers 10, 30, 32, 34, 36, 38, 42, 44, 46, 60, 62, 64, 71 to 81, 89, 96, 98, 99, 101, 115, 117, 119 to 124, 127 to 130, 135, 136, 139, 140, 142.

(2) Spares affected:

None

B. Reason

A number of operator Defect Reports have been received which have indicated a problem with cracking of the horizontal stabiliser upper and lower skin (Ref Fig 1, Sht 1 & 2), at the ends of the horizontal stabiliser access hole intercostal angles PN 1D/N-03-596, PN 1E/N-03-596, PN 1F/N-03-596 and PN 1G/N-03-596 (Ref Fig 4 and Fig 5) and in the horizontal stabiliser trailing edge channel (Ref Fig 3).

Reason for Revision 1

To provide for replacing rivets with screws in the access panels and to clarify figures.

C. Description

- (1) A detailed visual inspection is to be performed to inspect for cracks in the horizontal stabiliser upper and lower skins (Ref Fig 1 Shts 1 and 2).
- (2) Inspection is required of the horizontal stabiliser trim tab hinge attachment to the rear spar for the full length of the hinge (Ref Fig 2).
- (3) Inspection is required of the horizontal stabiliser trailing edge rear spar channel (Ref Fig 3).
- (4) A detailed visual inspection is to be made of the Intercostal Angle ends using a mirror and strong light. Access is through the Horizontal Stabiliser upper surface access panels (Ref Figs 4 and 5).
- (5) Recommended revised attachment of access door (1A/N-03-596) as required.

Page No	1	2	3	4	5	6	7	8	9	10
Rev No	1	1	1	1	1	1	1	1	1	1

Nomad

SERVICE BULLETIN

D. **Compliance**

- (1) Incorporation of this Service Bulletin is mandatory.
- (2) At the next 100 hour inspection or within 3 months whichever occurs first following receipt of Service Bulletin NMD-55-34.
- (3) Subsequent inspections are to be carried out at 100 hour intervals or 12 months following the last inspection whichever occurs first.
- (4) Boeing Aerospace Support - ASTA is to be notified of any cracks found.
- (5) Repairs are to be carried out in accordance with Section 2 - Accomplishment Instructions - Part 2 - Repair.

E. **Approval**

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

F. **Manpower**

2 manhours

G. **Materials, Price and Availability**

Local source

H. **Tooling, Price and Availability**

None required

I. **Weight and Balance**

In accordance with Table 1 in Service Bulletin ANMD-55-31 Rev 1

J. **References**

Maintenance Manual	Chap 55-30-00
Structural Repair Manual	Chap 55-10-11

K. **Publications Affected**

Inspection Requirements Manual

2. **ACCOMPLISHMENT INSTRUCTIONS**

A. **Part 1 - 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.

- (1) Visually inspect the horizontal stabiliser upper and lower skin surfaces paying particular attention to those areas indicated in Figure 1.

Nomad

SERVICE BULLETIN

- (2) Perform a visual inspection for cracking in the top surface of the horizontal stabiliser trim tab hinge attachment to the rear spar (Ref Fig 2).
- (3) Disconnect the trim tab from the trim tab control rod in order to provide clear access.
- (4) Lift each of the trim tabs in turn so that the lower trailing edge rear spar channel may be clearly seen and inspect for any cracking along its length (Ref Fig 3).
- (5) Lift each of the trim tabs in turn and inspect the horizontal stabiliser trailing edge along full length for cracks.
- (6) Visually inspect entire surface of LH and RH tip fairings, paying particular attention to attachment edge, for cracks.
- (7) Visually inspect horizontal stabiliser trailing edge upper skin between BL 69.35 and BL 101.95 for cracks (Ref Fig 1).
- (8) Remove each of the six horizontal stabiliser upper surface access panels (Ref Fig 2).

NOTE

1. A number of different attachment methods for the access panels may be encountered. Wherever rivets are found, these should be removed and replaced with 10-32 anchor nuts and screws of appropriate head style.
 2. Any additional work carried out on the Horizontal Stabiliser, other than inspection will require the Horizontal stabiliser to be statically balanced as per SRM Chap 55-10-00.
- (9) Using a suitable borescope, inspect the inside surface of the lower trailing edge rear spar channel between BL 69.35 and BL 101.95 (i.e. outboard of the tab).
 - (10) Using a mirror and strong light inspect the under surface of each of the intercostal stiffener angles for cracks beginning at the end of each angle (Ref Fig 4 and Fig 5).

WARNING

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

- (11) Attach the trim tab control rod disconnected at step (3).
- (12) Re-install each of the horizontal stabiliser access panels.

NOTE

Access panels are to be re-installed using sealing compound PR 1431-G TYPE 1 or PRO-SEAL 890 C-20.

Nomad

SERVICE BULLETIN

B. Part 2 - Repair

Cracks detected on the skins of the horizontal stabiliser shall be repaired in accordance with the Structural Repair Manual, Chapter 55-10-11. Cracked intercostal angles (Refer to Figures 4 and 5) shall be repaired by replacement.

3. MATERIALS INFORMATION

None

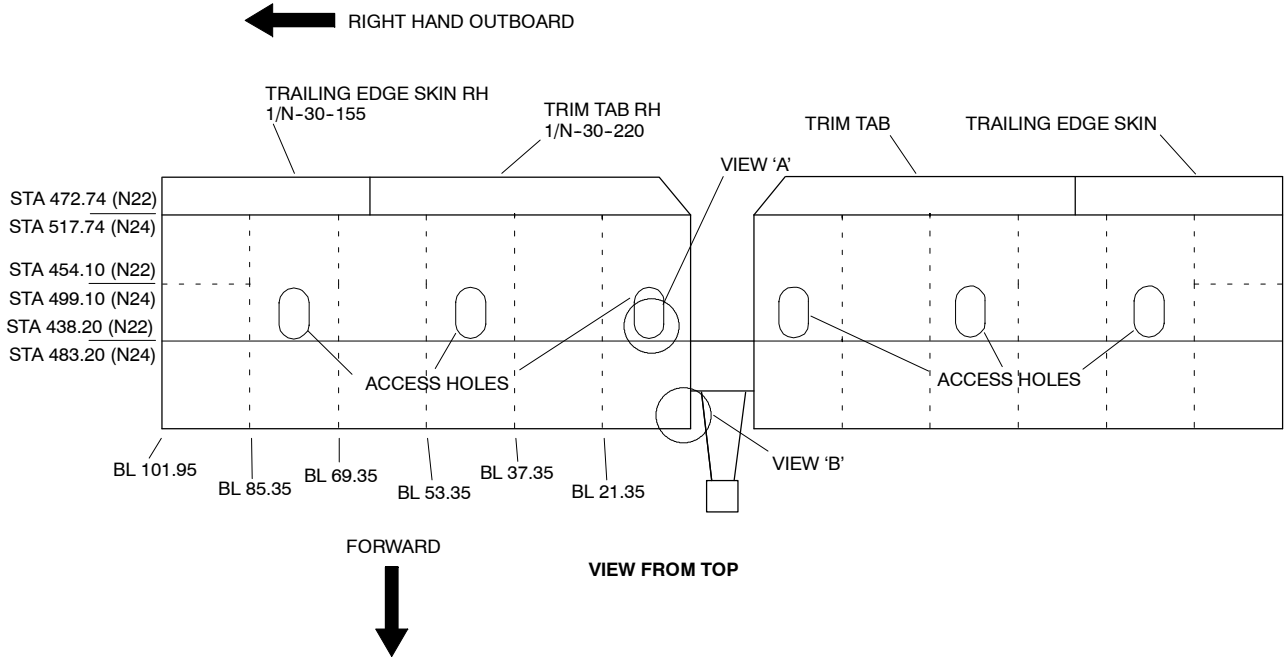
4. SPECIAL TOOLS AND EQUIPMENT

None required

5. RECORDING ACTION

Record compliance with Service Bulletin NMD-55-34 Revision 1 in the Airframe Log Book.

Nomad SERVICE BULLETIN



NOTE:
CRACKING OF THE SKIN SURFACES IS NOT RESTRICTED TO THE AREAS INDICATED IN THESE DRAWINGS AND CARE MUST BE GIVEN TO INSPECTING THE ENTIRE SKIN SURFACES.

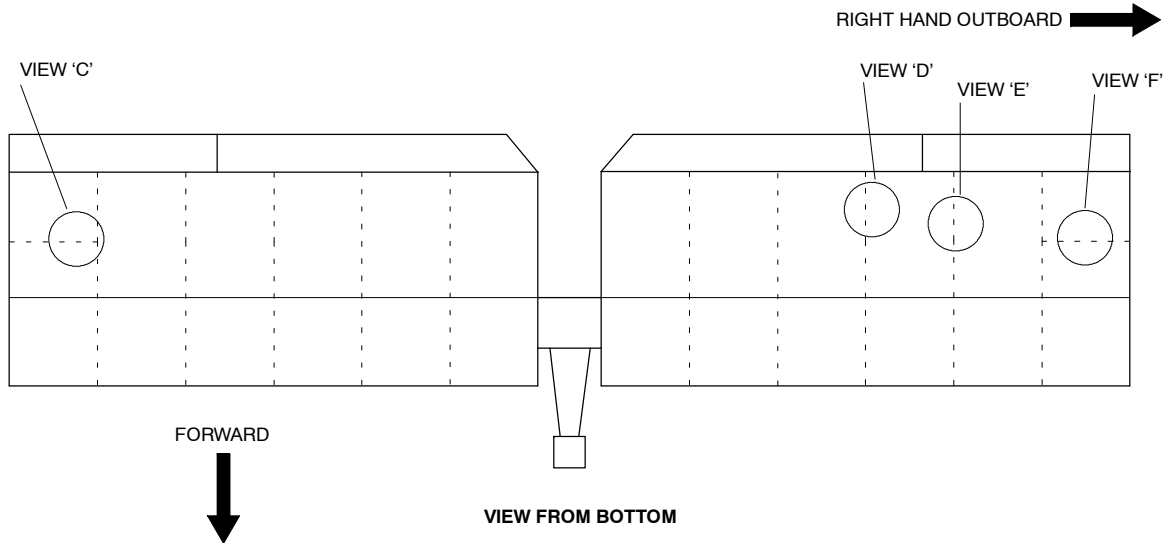


Figure 1 (Sheet 1) Horizontal Stabiliser - Cracking of Upper and Lower Skins

Nomad SERVICE BULLETIN

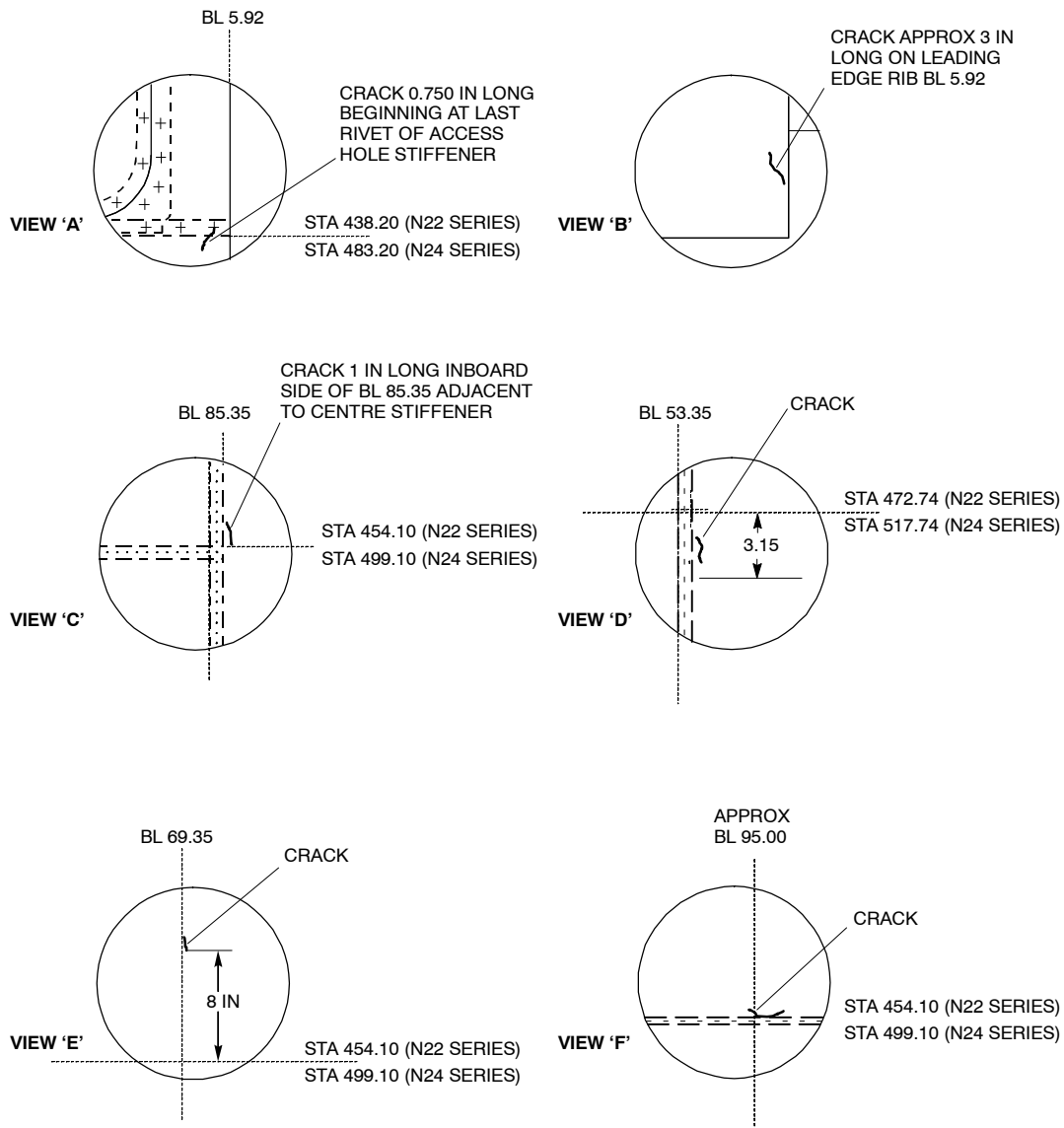


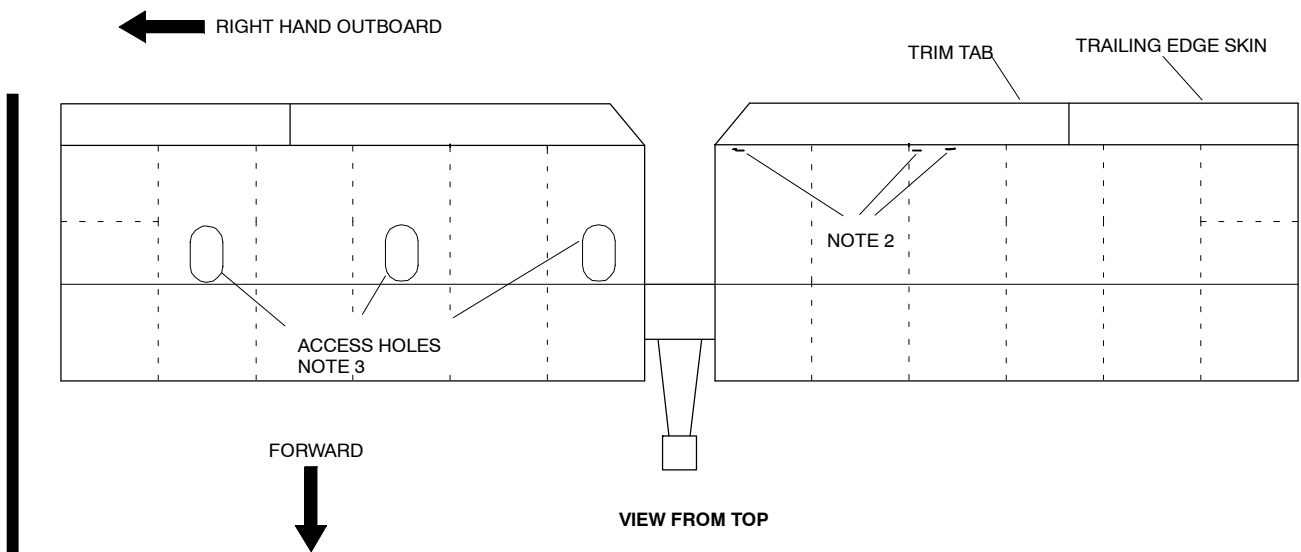
Figure 1 (Sheet 2) Horizontal Stabiliser - Enlarged view of Skin Cracks

22 April 1996
Rev 1 26 June 2001

AEROSPACE TECHNOLOGIES OF AUSTRALIA
ABN 56 008 622 008
A BOEING AUSTRALIA COMPANY

NMD-55-34
Page 6 of 10

Nomad SERVICE BULLETIN



NOTE 1 : DELETED

NOTE 2 : CRACKS HAVE BEEN FOUND AT THE LH TRIM TAB ATTACHMENT TO THE HORIZONTAL STABILISER. THE CRACKS ARE IN THE TOP SURFACE OF THE HORIZONTAL STABILISER AT THE 5TH, 28TH AND 29TH RIVETS STARTING FROM INBOARD

NOTE 3 : ACCESS PANELS APPLICABLE TO BOTH SIDES OF THE HORIZONTAL STABILISER

Figure 2 Cracking in Horizontal Stabiliser Trim Tab Hinge attachment

22 April 1996
Rev 1 26 June 2001

AEROSPACE TECHNOLOGIES OF AUSTRALIA
ABN 56 008 622 008
A BOEING AUSTRALIA COMPANY

NMD-55-34

Page 7 of 10

Nomad SERVICE BULLETIN

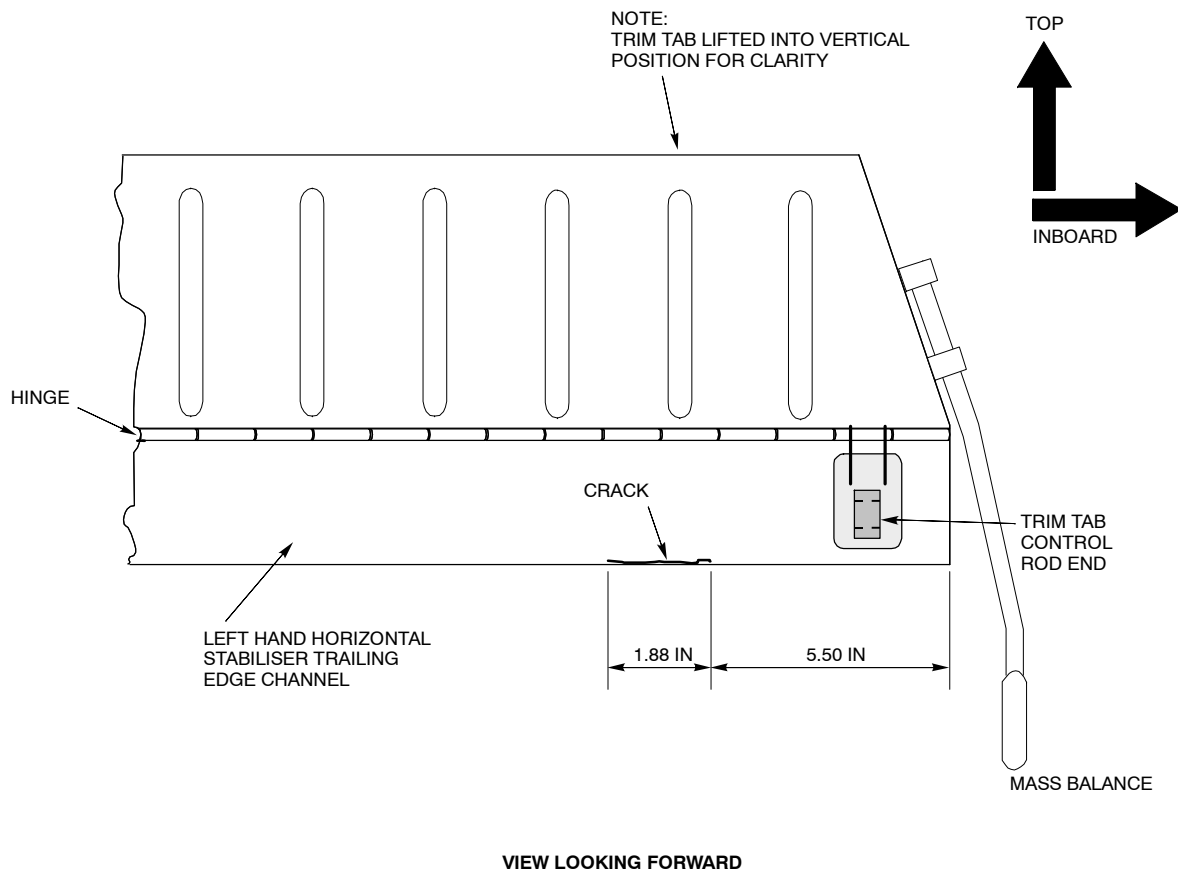


Figure 3 Cracking of Horizontal Stabiliser Inboard Trailing Edge Channel

22 April 1996
Rev 1 26 June 2001

AEROSPACE TECHNOLOGIES OF AUSTRALIA
ABN 56 008 622 008
A BOEING AUSTRALIA COMPANY

NMD-55-34
Page 8 of 10

Nomad

SERVICE BULLETIN

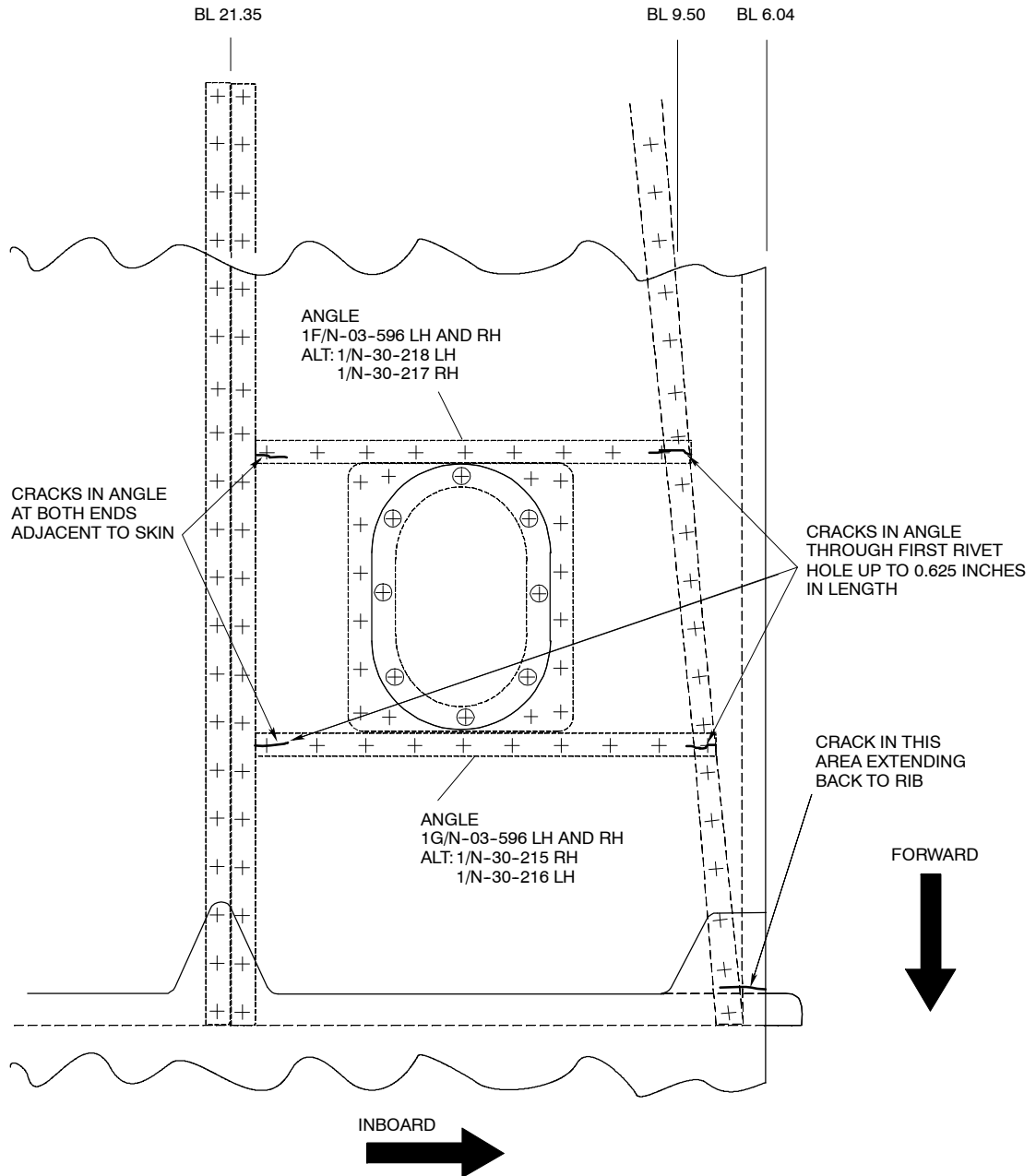


Figure 4 Cracking of Inboard Access Hole Intercostal Angles in Horizontal Stabiliser

22 April 1996
Rev 1 26 June 2001

AEROSPACE TECHNOLOGIES OF AUSTRALIA
ABN 56 008 622 008
A BOEING AUSTRALIA COMPANY

NMD-55-34

Page 9 of 10

Nomad SERVICE BULLETIN

NOTE: CRACKS HAVE BEEN FOUND IN THE ANGLES
SUPPORTING BOTH OF THE ACCESS HOLES

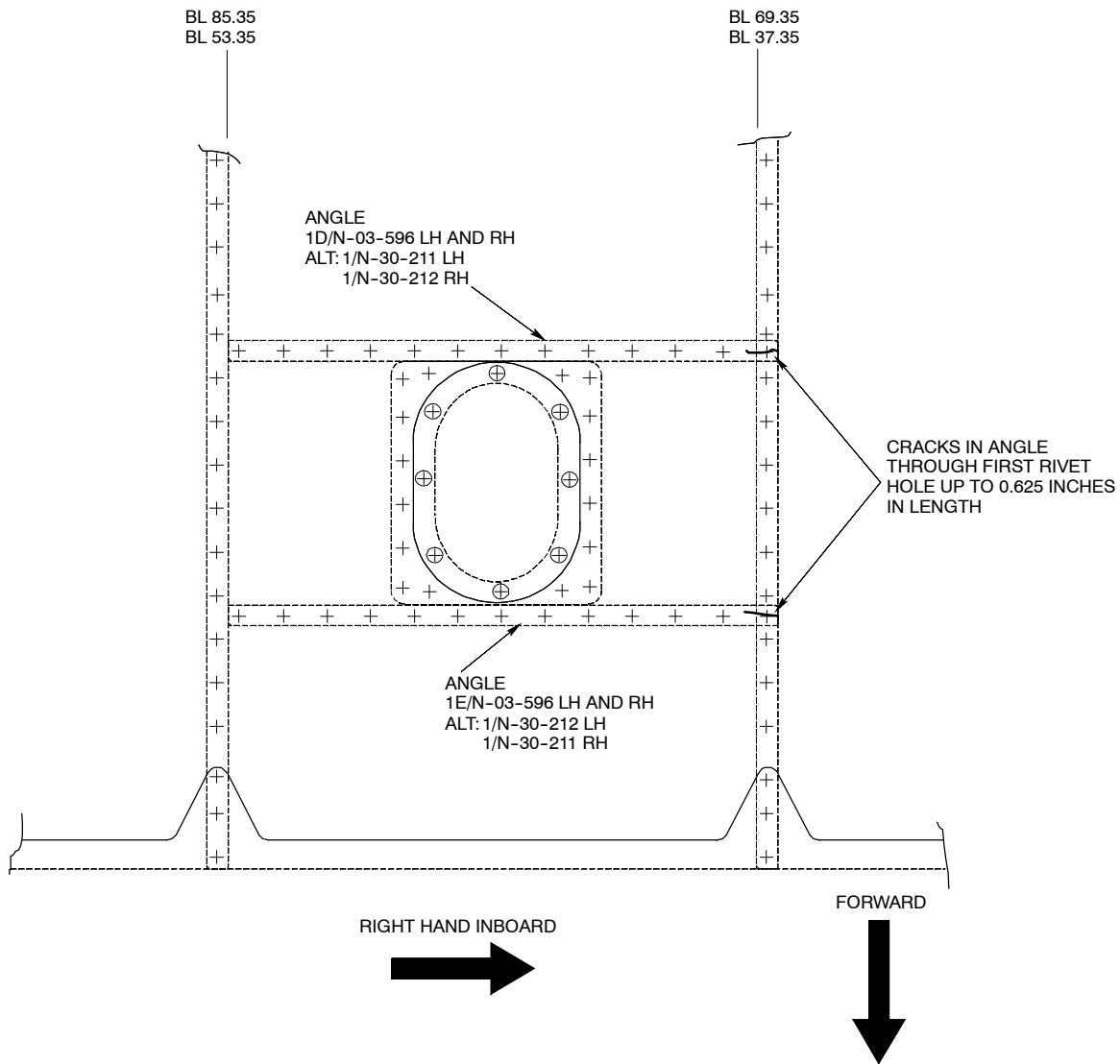


Figure 5 Cracking of Outboard Access Hole Intercostal Angles in Horizontal Stabiliser

22 April 1996
Rev 1 26 June 2001

AEROSPACE TECHNOLOGIES OF AUSTRALIA
ABN 56 008 622 008
A BOEING AUSTRALIA COMPANY

NMD-55-34
Page 10 of 10