Gulfstream (Grumman American/ American Aviation) AA-5 Series Aeroplanes

AD/AA-5/1 Rudder Control - Spring Replacement NK

Applicability: All models.

Document: American Aviation SB No. 131.

Compliance: For aircraft with more than 1000 hours total time in service as at 25 July 1972 - within 50 hours time in service after 25 July 1972 and thereafter at intervals not exceeding 1000 hours time in service. For aircraft with less than 1000 hours total time in service - before achieving 1000 hours total time in service and thereafter at intervals not exceeding 1000 hours time in service.

AIRWORTHINESS DIRECTIVE

On the effective date specified below, and for the reasons set out in the background section, the CASA delegate whose signature appears below revokes Airworthiness Directive AD/AA-5/2.

Gulfstream (Grumman American/ American Aviation) AA-5 Series Aeroplanes

AD/AA-5/2 Front Seat - Modification 6/2009

Requirement: CANCELLED.

This AD is cancelled on 4 June 2009.

Background: This AD, issued in 1972, required modification to the front seat in accordance with American Aviation SB No. 129 to make the front seat latching more pronounced and positive. The AD compliance was prior to issue of a certificate of Airworthiness. As all aircraft would have been modified, the AD is no longer required.

David Villiers
Delegate of the Civil Aviation Safety Authority

24 April 2009

AIRWORTHINESS DIRECTIVE

On the effective date specified below, and for the reasons set out in the background section, the CASA delegate whose signature appears below revokes Airworthiness Directive AD/AA-5/3.

Gulfstream (Grumman American/ American Aviation) AA-5 Series Aeroplanes

AD/AA-5/3 Fuel Tank Vent Lines - Modification 6/2009

Requirement: CANCELLED.

This AD is cancelled on 4 June 2009.

Background: This AD, issued in 1972, required modification of the fuel tank vent lines in accordance with American Aviation SB No. 128 to ensure no lines have low spots that could lead to the vent line being blocked. The AD compliance was before the issue of a Certificate of Airworthiness. As all aircraft would have been modified, the AD is no longer required.

James Coyne
Delegate of the Civil Aviation Safety Authority

24 April 2009

AIRWORTHINESS DIRECTIVE

On the effective date specified below, and for the reasons set out in the background section, the CASA delegate whose signature appears below revokes Airworthiness Directive AD/AA-5/4.

Gulfstream (Grumman American/ American Aviation) AA-5 Series Aeroplanes

AD/AA-5/4 Aileron - Additional Drain Holes 6/2009

Requirement: CANCELLED.

This AD is cancelled on 4 June 2009.

Background: This AD, issued in 1972, required modification of the ailerons in accordance with American Aviation SB No. 132 by incorporating additional drain holes. The AD compliance was within 100 hours time in service after 30 November 1972. As all aircraft would have been modified, the AD is no longer required.

James Coyne
Delegate of the Civil Aviation Safety Authority

24 April 2009

AIRWORTHINESS DIRECTIVE

On the effective date specified below, and for the reasons set out in the background section, the CASA delegate whose signature appears below revokes Airworthiness Directive AD/AA-5/5.

Gulfstream (Grumman American/ American Aviation) AA-5 Series Aeroplanes

AD/AA-5/5 Elevator Trim Tab Hinge - Inspection 6/2009

Requirement: CANCELLED.

This AD is cancelled on 4 June 2009.

Background: This AD, issued in 1973, required inspection of the elevator trim tab hinge in accordance with American Aviation SB No. 136 to ensure sufficient hole edge margin. The AD compliance was within 100 hours time in service after 31 May 1973. As all aircraft would have been inspected, the AD is no longer required.

James Coyne
Delegate of the Civil Aviation Safety Authority

24 April 2009

AIRWORTHINESS DIRECTIVE

On the effective date specified below, and for the reasons set out in the background section, the CASA delegate whose signature appears below revokes Airworthiness Directive AD/AA-5/6.

Gulfstream (Grumman American/ American Aviation) AA-5 Series Aeroplanes

AD/AA-5/6 Fuel Tank Vent Lines - Modification 6/2009

Requirement: CANCELLED.

This AD is cancelled on 4 June 2009.

Background: This AD, issued in 1973, required modification of the fuel tank venting system which included the replacement of all PVC plastic hose connectors with fuel resistant rubber hose connectors and replacement of spring wire type hose clips with screw type hose clips. The AD compliance was within 100 hours time in service after 31 August 1973. As all aircraft would have been modified by now, the AD is no longer required.

James Coyne
Delegate of the Civil Aviation Safety Authority

24 April 2009

AD/AA-5/7 Amdt 1 — Wing Structure - Service Life — 9/75

Applicability: All models.

Requirement: Retirement of "Service Life Limited Components" shall be carried out on or before reaching the Manufacturer's service lives stated below:

Component	Aircraft Model	Part Number	Service Life Hours
Inboard Spar Assembly	AA-5 & 5A AA-5B	5102310-501 5102310-502	12,000 12,000
Shoulder Bolt	AA-5 & 5A AA-5B	901044-1/2 901044-2	7,250 7,250
Wing Spar Assembly	AA-5 & 5A AA-5A & 5B	5201002-501 5201004-501	12,500 12,500
Wing Outboard Spar Assembly	AA-5 & 5A AA-5B	5201189-501 5201189-501	12,500 12,500

Compliance: As detailed in requirement.

AD/AA-5/8 Amdt 1 — Control Cables and Pulleys - Inspection — 10/74

Applicability: All model AA-5 with S/Nos. AA5-0001 to AA5-0209.

Requirement: Thoroughly clean and inspect all rudder, aileron and elevator cables as per Grumman American SB No. 127A.

Note: To adequately inspect the cables it will be necessary to actuate the controls to the full deflection to expose the complete cable pulley contact area for examination.

Compliance: Within 100 hours time in service after 29 November 1974 and thereafter at intervals not exceeding 100 hours time in service.

AD/AA-5/9 Rudder Control Bars - Inspection 10/85

Applicability: All models.

Requirement: To confirm that rudder control bars Part No. 601031-501 are correctly welded inspect visually as follows:

1. View both rudder control bars located inside the lower forward fuselage.
2. Inspect weld joints at junction of rudder cable attach arm and rudder control bar. Each joint must have a weld bead at four locations, i.e. fore and aft bottom and fore and aft top.
3. Inspect weld joints at junction of rudder pedal tees and rudder control bar. Each joint must have a weld bead at four locations, i.e. fore and aft bottom and fore and aft top.
4. If inspection reveals missing welds, replacement or repairs to an approved scheme must be incorporated before further flight.

Compliance: Before further flight.

AD/AA-5/10 Carburettor Mixture Control - Modification NK Amdt 1

Applicability: Model AA5B with S/Nos. AA5B-0001 to AA5B-0215.

Document: Grumman American Aviation SB No. 150A.

Compliance: Within 100 hours time in service after 10 February 1976.

AIRWORTHINESS DIRECTIVE

On the effective date specified below, and for the reasons set out in the background section, the CASA delegate whose signature appears below revokes Airworthiness Directive AD/AA-5/11.

Gulfstream (Grumman American/ American Aviation) AA-5 Series Aeroplanes

AD/AA-5/11 Centre Spar Console - Inspection and Modification 6/2009

Requirement: CANCELLED.

This AD is cancelled on 4 June 2009.

Background: This AD, issued in 1976, required inspection and, if required, modification of the centre spar console in accordance with Grumman American SB No. 151 to ensure cable travel was unrestricted. The AD compliance was within 100 hours time in service after 30 January 1976. As all aircraft would have been inspected, the AD is no longer required.

James Coyne
Delegate of the Civil Aviation Safety Authority

24 April 2009

AIRWORTHINESS DIRECTIVE

On the effective date specified below, and for the reasons set out in the background section, the CASA delegate whose signature appears below revokes Airworthiness Directive AD/AA-5/12.

Gulfstream (Grumman American/ American Aviation) AA-5 Series Aeroplanes

AD/AA-5/12 Flap Surfaces - Inspection 6/2009

Requirement: CANCELLED.

This AD is cancelled on 4 June 2009.

Background: This AD, issued in 1976, required inspection of the flap trailing edge in accordance with Grumman American Aviation SL No. 75-8 to ensure proper bonding of the upper and lower skins. The AD compliance was within 100 hours time in service after 27 February 1976. As all aircraft would have been inspected, the AD is no longer required.

David Villiers
Delegate of the Civil Aviation Safety Authority

24 April 2009

AD/AA-5/13 Upper Cowl Centre Hinge - Inspection and Replacement NK

Applicability: All models: AA5 with S/Nos. AA5-0641 to AA5-0834; AA5A with S/Nos. AA5A-0001 to AA5A-0050, AA5A-0054 to AA5A-0056; AA5B with S/Nos. AA5B-0001 to AA5B-0169, AA5B-0171 and AA5B-0180 to AA5B-0183.

Document:

1. Grumman American SB No. 152; OR
2. FAA AD 76-01-02.

Compliance: Inspect within 100 hours time in service after 16 April 1976 and thereafter at intervals not exceeding 100 hours time in service until replaced.

AIRWORTHINESS DIRECTIVE

On the effective date specified below, and for the reasons set out in the background section, the CASA delegate whose signature appears below revokes Airworthiness Directive AD/AA-5/14.

Gulfstream (Grumman American/ American Aviation) AA-5 Series Aeroplanes

AD/AA-5/14 Spar/Skin Spacer - Inspection and Removal 6/2009

Requirement: CANCELLED.

This AD is cancelled on 4 June 2009.

Background: This AD, issued in 1976, required removal of the spacers located between the wing spar and skin in each fuel tank in accordance with Grumman American Aviation SB No. 153 to avoid the spacers becoming dislodged. The AD compliance was within 100 hours time in service after 31 May 1976. As all aircraft would have been modified, the AD is no longer required.

David Villiers
Delegate of the Civil Aviation Safety Authority

24 April 2009

AIRWORTHINESS DIRECTIVE

On the effective date specified below, and for the reasons set out in the background section, the CASA delegate whose signature appears below revokes Airworthiness Directive AD/AA-5/15.

Gulfstream (Grumman American/ American Aviation) AA-5 Series Aeroplanes

AD/AA-5/15 Fuel Line - Inspection 6/2009

Requirement: CANCELLED.

This AD is cancelled on 4 June 2009.

Background: This AD, issued in 1976, required inspection of the fuel line for chafing in accordance with Grumman American SB No. 154. The AD compliance was within 100 hours time in service after 31 August 1976. As all aircraft would have been inspected by now, the AD is no longer required.

James Coyne
Delegate of the Civil Aviation Safety Authority

24 April 2009

AIRWORTHINESS DIRECTIVE

On the effective date specified below, and for the reasons set out in the background section, the CASA delegate whose signature appears below revokes Airworthiness Directive AD/AA-5/16 Amdt 1.

Gulfstream (Grumman American/ American Aviation) AA-5 Series Aeroplanes

AD/AA-5/16 Amdt 1 Pre Certification Requirements - Modification 3/2008

Requirement: CANCELLED.

This AD is cancelled on 13 March 2008.

Background: This unique Australian AD required installation of placards “Open” and “Closed” adjacent to the outside canopy and installation of a placard specifying periods during which smoking is prohibited. As the requirements for the “Open” and “Closed” placards are contained in AD/GENERAL/4 and the placard prohibiting smoking is contained in CAR 255, the requirements for this directive are no longer appropriate or necessary.

David Punshon
Delegate of the Civil Aviation Safety Authority

1 February 2008

AD/AA-5/17 Structural and Control Surface Bondlines - Inspection NK

Applicability: Model AA5 with S/Nos. 0001 and subs. Model AA-5A with S/Nos. 0001 to 0196. Model AA-5B with S/Nos. 0001 to 0324.

Document:

1. Grumman American SB No. 155; or
2. FAA AD 76-17-03.

Compliance: Within 25 hours time in service after 21 September 1976 and there- after at intervals not exceeding 100 hours time in service until modified in accordance with SB No. 155.

AIRWORTHINESS DIRECTIVE

On the effective date specified below, and for the reasons set out in the background section, the CASA delegate whose signature appears below revokes Airworthiness Directive AD/AA-5/18.

Gulfstream (Grumman American/ American Aviation) AA-5 Series Aeroplanes

AD/AA-5/18 Circuit Protection Separation - Modification 6/2009

Requirement: CANCELLED.

This AD is cancelled on 4 June 2009.

Background: This AD, issue in 1977, required modification of the circuit protection. The AD compliance was within 100 hours time in service after 28 February 1977. As all aircraft would have been modified by now, the AD is no longer required.

James Coyne
Delegate of the Civil Aviation Safety Authority

24 April 2009

AD/AA-5/19 Carburettor Heat Valve - Inspection and Modification NK

Applicability: All models AA-5 with S/Nos. AA5-0641 to AA5-0834, and all models AA-5A with S/Nos. AA5A-0001 to AA5A-0321.

Document: Grumman American SB No. 159.

Compliance:

1. For Part 1 of the SB Instructions - before further flight.
2. For Parts II and III of the SB Instructions - in accordance with the Service Bulletin.

AD/AA-5/20 Alternate Static Selector Valve - Inspection NK

Applicability: Aeroplanes S/Nos. AA5A-0001 to AA5A-0340 and AA5B-0001 to AA5B-0451. Also all aeroplanes modified by the addition of Gerdes A-1390 alternate static valve shipped from Grumman prior to 19 March 1977.

Document:

1. Grumman American SB 160; or
2. FAA AD 77-08-03.

Compliance: Within 100 hours time in service after 31 May 1977.

AIRWORTHINESS DIRECTIVE

On the effective date specified below, and for the reasons set out in the background section, the CASA delegate whose signature appears below revokes Airworthiness Directive AD/AA-5/21.

Gulfstream (Grumman American/ American Aviation) AA-5 Series Aeroplanes

AD/AA-5/21 Glove Box - Modification 6/2009

Requirement: CANCELLED.

This AD is cancelled on 4 June 2009.

Background: This AD, issued in 1978, required modification of the aircraft by sealing the gap formed between the forward face of the glove box and instrument facia to prevent objects passing through. The AD compliance was within 100 hours time in service after 31 December 1978. As all aircraft would have been modified by now, the AD is no longer required.

David Villiers
Delegate of the Civil Aviation Safety Authority

24 April 2009

AIRWORTHINESS DIRECTIVE

On the effective date specified below, and for the reasons set out in the background section, the CASA delegate whose signature appears below revokes Airworthiness Directive AD/AA-5/22.

Gulfstream (Grumman American/ American Aviation) AA-5 Series Aeroplanes

AD/AA-5/22 Aileron Torque Tube - Inspection and Modification 6/2009

Requirement: CANCELLED.

This AD is cancelled on 4 June 2009.

Background: This AD, issued in 1979, required inspection and, if necessary, modification of the aileron torque tube in accordance with Grumman American SB No. 163 to ensure the assembly was completed with bonding agent. The AD compliance was within 25 hours time in service after 4 July 1979. As all aircraft would have been inspected by now, the AD is no longer required.

David Villiers
Delegate of the Civil Aviation Safety Authority

24 April 2009

AD/AA-5/23 Aileron System - Inspection and Modification NK Amdt 3

Applicability: All models AA-5, AA-5A and AA-5B with S/Nos. AA5-0001 and subsequent, AA-5A-0001 and subsequent and AA5B-0001 and subsequent.

Document:

1. Gulfstream American SB 165A; or
2. FAA AD 79-22-04, Amendment 39-3600; and

Gulfstream American SB 168.

Compliance: Inspect ailerons, aileron trim tabs and aileron torque tubes within 25 hours time in service after 26 November 1979 and thereafter at intervals not exceeding 100 hours time in service until GAC Service Kit No. 150 is incorporated. After incorporation of Service Kit No. 150 continue inspection of torque tube per SB 168 every 100 hours time in service for 5 consecutive inspections without defect.

Background: The manufacturer has received reports of aileron oscillation in flight and later reports of looseness in the aileron torque tube joints of those aeroplanes modified with Service Kit 150. This revision allows the option of continued repetitive inspection in lieu of incorporation of the service kit. If the Service Kit is installed a programme of inspection of torque tubes is required thereafter.

AD/AA-5/24 Automatic Pilot Disconnection and Recertification NK

Applicability: Model AA-5 S/Nos. AA5-0001 and subsequent;

Model AA-5A S/Nos. AA5A-0001 to AA5A-0884; and

Model AA-5B S/Nos. AA5B-0001 to AA5B-1257; fitted with an automatic pilot and incorporating service kit SK-150 (Refer SB No. 165).

Requirement:

1. Automatic Pilot Disconnection

   An automatic pilot installed in the aircraft must be disconnected in a manner which will not permit use or reconnection during flight. Install a placard in full view of the pilot utilising 6 mm high letters with the words “Autopilot Deactivated”.

2. Automatic Pilot Reconnection

   Before an automatic pilot can be reconnected and the placard removed, the automatic pilot must be modified or readjusted to recertification requirements.

Note: Recertification of the automatic pilot will require approved by DoT details of FAA recertification are usually adequate to obtain DoT approval.

Compliance: For Part 1 - At installation of Service Kit SK-150 (Refer GA SB No. 165).

For Part 2 - After compliance with automatic pilot recertification requirements.

Background: Modification of an aircraft with service kit SK-150 alters the ailerons, which in turn changes stick forces. Such changes will necessitate recertification of the automatic pilot.

AIRWORTHINESS DIRECTIVE

On the effective date specified below, and for the reasons set out in the background section, the CASA delegate whose signature appears below revokes Airworthiness Directive AD/AA-5/25.

Gulfstream (Grumman American/ American Aviation) AA-5 Series Aeroplanes

AD/AA-5/25 Elevator Drain Holes - Inspection and Modification 6/2009

Requirement: CANCELLED.

This AD is cancelled on 4 June 2009.

Background: This AD, issued in 1980, required inspection and, if necessary, modification of the elevator drain holes in accordance with Grumman American SB No. 169 to ensure water was not collecting in the trailing edge of the elevators. The AD compliance was within 100 hours time in service after 30 June 1980. As all aircraft would have been inspected by now, the AD is no longer required.

David Villiers
Delegate of the Civil Aviation Safety Authority

24 April 2009

AD/AA 5/26 Fuel Tanks 2/90

Applicability: Model AA 5, AA 5A and AA 5B.

Requirement: Inspect the fuel tanks, fuel system, and the electric fuel pump filter for fuel tank sealant contamination in accordance with the instructions specified in Gulfstream Aerospace Corporation Service Bulletin No 176.

Note: FAA AD 89-18-08 Amdt 39-6307 refers.

Compliance: Prior to the issue of the next Maintenance Release after 30 April 1990.

Background: Integral fuel tanks were sealed at manufacture with sealant which has since been determined to be unsuitable for use in a high- octane fuel environment. Fuel Tank Repair Service Kit No 140 also specified the use of this sealant, but was subsequently reissued containing the correct sealant as Kit No 140A. The requirement of this AD will ensure against possible fuel contamination and/or flow interruption to the engine.

AD/AA-5/27 Wing Attach Shoulder Bolts 10/95 DM Amdt 1

Applicability: AA-5, AA-5A, AA-5B, and AG-5B aircraft.

Requirement:

1. Remove the subject bolts or other approved replacement bolts, in accordance with American General Aviation SB-185.
2. Inspect the bolts for cracking at the bolt shoulder using either the Magnaflux or Fluorescent Dye NDI technique and discard any bolts with indications of cracking.
3. Install bolts in accordance with the requirements of American General Aviation SB-185.

Compliance: Unless already accomplished, prior to attaining 1000 hours bolt time in service, or within 10 hours time in service after 23 August 1995, whichever occurs last; thereafter at intervals not exceeding 500 hours time in service.

Background: A MDR was received stating that a bolt had been found cracked when inspected using magnaflux, instead of visually, in accordance with the Requirement document. The defect was highlighted in the AAC Major Defect Summary. However, subsequent laboratory examination of the bolt has revealed that the fatigue cracking could be attributable to the rapid change in section at the shoulder and the sharp edge revealed at X230 magnification.

Failure of a shoulder bolt may compromise the structural integrity of an aircraft and could result in a loss of flight control.

Amendment 1 is raised as the result of a random inspection of a second aircraft where one of the bolts was found to be fully fractured.