
AIRWORTHINESS DIRECTIVE

On the commencement date specified below, and for the reasons set out in the background section, the CASA delegate whose signature appears below repeals Airworthiness Directive (AD) AD/AA-5/23 Amdt 3 and issues the following AD under subregulation 39.001 (1) of CASR and subsection 33 (3) of the *Acts Interpretation Act 1901*. The AD requires that the action set out in the requirement section (being action that the delegate considers necessary to correct an unsafe condition) be taken in relation to the aircraft or aeronautical product mentioned in the applicability section: (a) in the circumstances mentioned in the requirement section; and (b) in accordance with the instructions set out in the requirement section; and (c) at the time mentioned in the compliance section.

True Flight Holdings (Gulfstream / Grumman / American General) AA-5 Series Aeroplanes

AD/AA-5/23 Aileron System – Inspections and Modification 8/2020 Amdt 4

- Applicability: True Flight Holdings (Gulfstream / Grumman / American General), model AA-5 aircraft with serial numbers AA5-0001 and subsequent, model AA-5A aircraft with serial numbers AA-5A-0001 and subsequent, and model AA-5B aircraft with serial numbers AA5B-0001 and subsequent. This AD does not apply to aircraft that comply with Tiger Aircraft LLC Service Instruction SI 06-01, as in force from time to time.
- Requirement: 1. Inspect the aircraft in accordance with Gulfstream Aerospace Service Bulletin (SB) 165A, as in force from time to time.
- Note: The words “as in force from time to time” require compliance with the most recent version of the referenced document.*
- Compliance: 1. Conduct the inspection within 25 hours’ time in service after 26 November 1979, and thereafter at intervals not exceeding 100 hours’ time in service unless the aileron has been modified in accordance with Gulfstream Aerospace Service Kit No. 150, as in force from time to time. If the aileron has been so modified:
- (a) comply with the note (about the autopilot) on page 2 of SB 165A, as in force from time to time, and
 - (b) for AA5A, AA5B and AA5 model aircraft with 5202035-505 aileron torque tube assemblies, also comply with Gulfstream Aerospace Service Bulletin SB 168, as in force from time to time. Inspections must be conducted in accordance with SB 168 every 100 hours’ time in service for 5 consecutive inspections without defect.

This AD commences on 17 April 2020.

**True Flight Holdings (Gulfstream / Grumman / American General) AA-5 Series
Aeroplanes**

AD/AA-5/23 Amdt 4 (continued)

Background: The manufacturer of the aircraft received reports of aileron oscillation in flight and released Gulfstream American SB 165 which was then amended and released as Gulfstream Aerospace SB 165A, that allowed operators to follow an inspection procedure or modify the ailerons. Simultaneously the FAA released AD 79-22-04 Amdt. 39-3600. The modification requires trimming the trailing edge of each aileron. Ailerons with trimmed trailing edges create much greater control forces which exceed the capability of the autopilot and permanent disconnection of the autopilot is therefore required.

Later reports of looseness in the aileron torque tube joints of those aeroplanes modified with Gulfstream American SK-150, required Gulfstream Aerospace SB 168 to be released. In 2006, Tiger Aircraft released Service Instruction SI 06-01, an accepted FAA AD 79-22-04 alternate means of compliance. The 100 hourly inspections are eliminated by verifying the ailerons are correctly contoured. The service instructions contain details on fabricating a contour inspection template.

This amendment is issued to update a referenced document from Gulfstream American SB 165 to Gulfstream Aerospace SB 165A and to approve the accomplishment of SI 06-01 as terminating action for the 100 hourly repetitive inspections required by both FAA AD 79-22-04 and Gulfstream American SB 165A.

A handwritten signature in black ink, appearing to read 'van Dijk', with a large, sweeping flourish extending downwards and to the left.

Pieter van Dijk
Delegate of the Civil Aviation Safety Authority

3 April 2020