

2010-10-01 R1 GA 8 Airvan (Pty) Ltd.: Amendment 39-16425; Docket No. FAA-2010-0463; Directorate Identifier 2010-CE-021-AD.

Effective Date

(a) This airworthiness directive (AD) becomes effective October 7, 2010.

Affected ADs

(b) This AD revises AD 2010-10-01, Amendment 39-16280.

Applicability

(c) This AD applies to the following model and serial number airplanes, certificated in any category:

(i) Group 1 Airplanes (retains the actions and applicability from AD 2009-05-01): Model GA8 airplanes, serial numbers GA8-00-004 and up; and

(ii) Group 2 Airplanes: Model GA8-TC320 airplanes, all serial numbers.

Subject

(d) Air Transport Association of America (ATA) Code 55: Stabilizers.

Reason

(e) The mandatory continuing airworthiness information (MCAI) states:

Inspection of a high time aircraft has revealed cracks in the Horizontal Stabiliser rear spar splice plate and inboard main ribs around the area of the Horizontal Stabiliser rear pivot attachment. Additionally, failure of some attach bolts in service may be due to improper assembly.

This amendment is issued to include an applicability matrix (Table 1, page 2) in the compliance section of the service bulletin for improved clarity.

The previous amendment included reference to the GA8-TC 320 variant in the applicability section. Amendment 2 was issued because the requirement document now contains an inspection for cracking in horizontal stabilisers which have load transferring fittings installed.

Previous amendments of this AD listed the AD requirements in full. Due to the extensive use of diagrams and photographs, it is no longer appropriate or practical to write the requirements of the service bulletin out in full in this AD. All requirements, accomplishment instructions and illustrations are contained in the service bulletin.

The FAA is revising AD 2010-10-01 to allow the use of issue 6 or issue 5 of the service bulletin. An operator is in compliance if the operator chooses to only accomplish issue 5 of the SB. This proposed revision of the FAA's AD will make the FAA AD more consistent with the latest version of the MCAI.

Actions and Compliance

(f) For Group 1 Airplanes: Unless already done, do the following actions:

(1) Within the next 10 hours time-in-service (TIS) after March 2, 2009 (the effective date retained from AD 2009-05-01):

(i) For all aircraft not incorporating computer numeric control (CNC) machined elevator hinges, inspect and repair the left and right horizontal stabilizer rear pivot attachment installation following instruction "3. Rear Pivot Attachment Inspection," of Gippsland Aeronautics Mandatory Service Bulletin SB-GA8-2002-02, Issue 5, dated November 13, 2008; or Gippsland Aeronautics Mandatory Service Bulletin SB-GA8-2002-02, Issue 6, dated April 21, 2010; and

(ii) For all aircraft, inspect the left and right rear attach bolt mating surfaces for damage or an out of square condition and replace the left and right rear attach bolts following instruction "5. Rear Attach Bolt Replacement," of Gippsland Aeronautics Mandatory Service Bulletin SB-GA8-2002-02, Issue 5, dated November 13, 2008; or Gippsland Aeronautics Mandatory Service Bulletin SB- GA8-2002-02, Issue 6, dated April 21, 2010. Reworking the mating surfaces by spotfacing is no longer acceptable. If the mating surfaces are damaged, not square, or were previously reworked by spotfacing the surface, replace the parts as specified in Gippsland Aeronautics Mandatory Service Bulletin SB-GA8-2002-02, Issue 5, dated November 13, 2008; or Gippsland Aeronautics Mandatory Service Bulletin SB-GA8-2002-02, Issue 6, dated April 21, 2010.

(2) Within the next 10 hours TIS after March 2, 2009 (the effective date retained from AD 2009-05-01) and repetitively thereafter at intervals not to exceed 100 hours TIS or 12 months, whichever occurs first, for all aircraft:

(i) Inspect the horizontal stabilizer externally following instruction "2. External Inspection (Lower flange, Stabilizer rear spar)," of Gippsland Aeronautics Mandatory Service Bulletin SB-GA8- 2002-02, Issue 5, dated November 13, 2008; or Gippsland Aeronautics Mandatory Service Bulletin SB-GA8-2002-02, Issue 6, dated April 21, 2010; and

(ii) Inspect the horizontal stabilizer internally following instruction "4. Internal Inspection," of Gippsland Aeronautics Mandatory Service Bulletin SB-GA8-2002-02, Issue 5, dated November 13, 2008; or Gippsland Aeronautics Mandatory Service Bulletin SB- GA8-2002-02, Issue 6, dated April 21, 2010.

(3) If during the inspection required by paragraph (f)(2) of this AD any excessive local deflection or movement of the lower skin surrounding the lower pivot attachment, cracking, or working (loose) rivet is found, before further flight, obtain an FAA-approved repair scheme from the manufacturer and incorporate this repair scheme. Due to FAA policy, the repair scheme/modification for crack damage must include an immediate repair of the crack. The repair scheme cannot be by repetitive inspection only. The repair scheme/modification may incorporate repetitive inspections in addition to the repetitive inspections required in paragraph (f)(2) of this AD. Continued operational flight with un-repaired crack damage is not permitted.

(g) For Group 2 Airplanes: Unless already done, do the following actions:

(1) Within the next 10 hours TIS after May 10, 2010 (the effective date retained from AD 2010-10-01):

(i) For all aircraft not incorporating computer numeric control (CNC) machined elevator hinges, inspect and repair the left and right horizontal stabilizer rear pivot attachment installation following instruction "3. Rear Pivot Attachment Inspection," of Gippsland Aeronautics Mandatory Service Bulletin SB-GA8-2002-02, Issue 5, dated November 13, 2008; or Gippsland Aeronautics Mandatory Service Bulletin SB-GA8-2002-02, Issue 6, dated April 21, 2010; and,

(ii) For all aircraft, inspect the left and right rear attach bolt mating surfaces for damage or an out of square condition and replace the left and right rear attach bolts following instruction "5. Rear Attach Bolt Replacement," of Gippsland Aeronautics Mandatory Service Bulletin SB-GA8-2002-02, Issue 5, dated November 13, 2008; or Gippsland Aeronautics Mandatory Service Bulletin SB- GA8-2002-02, Issue 6, dated April 21, 2010. Reworking the mating surfaces by spotfacing is no longer acceptable. If the mating surfaces are damaged, not square, or were previously reworked by spotfacing the surface, before further flight, replace the parts as specified in Gippsland Aeronautics Mandatory Service Bulletin SB- GA8-2002-02, Issue 5, dated November 13, 2008; or Gippsland Aeronautics Mandatory Service Bulletin SB-GA8-2002-02, Issue 6, dated April 21, 2010.

(2) Within the next 10 hours TIS after May 10, 2010 (the effective date retained from AD 2010-10-01) and repetitively thereafter at intervals not to exceed 100 hours TIS or 12 months, whichever occurs first, for all aircraft:

(i) Inspect the horizontal stabilizer externally following instruction "2. External Inspection (Lower flange, Stabilizer rear spar)," of Gippsland Aeronautics Mandatory Service Bulletin SB-GA8- 2002-02, Issue 5, dated November 13, 2008; or Gippsland Aeronautics Mandatory Service Bulletin SB-GA8-2002-02, Issue 6, dated April 21, 2010; and

(ii) Inspect the horizontal stabilizer internally following instruction "4. Internal Inspection," of Gippsland Aeronautics Mandatory Service Bulletin SB-GA8-2002-02, Issue 5, dated November 13, 2008; or Gippsland Aeronautics Mandatory Service Bulletin SB- GA8-2002-02, Issue 6, dated April 21, 2010.

(3) If during the inspection required by paragraph (g)(2) of this AD any excessive local deflection or movement of the lower skin surrounding the lower pivot attachment, cracking, or working (loose) rivet is found, before further flight, obtain an FAA-approved repair scheme from the manufacturer and incorporate this repair scheme. Due to FAA policy, the repair scheme/modification for crack damage must include an immediate repair of the crack. The repair scheme cannot be by repetitive inspection only. The repair scheme/modification may incorporate repetitive inspections in addition to the repetitive inspections required in paragraph (g)(2) of this AD. Continued operational flight with un-repaired crack damage is not permitted.

FAA AD Differences

Note: This AD differs from the MCAI and/or service information as follows:

(1) "Requirement: 1. Daily Inspection (Stabilizer attach bolt)" of the service information requires a daily inspection of the stabilizer attach bolt. The daily inspection is not a requirement of this AD.

Instead of the daily inspection, we require you to perform, within 10 hours TIS, "Requirement 3. Rear Pivot Attachment Inspection" and "Requirement 5. Rear Attachment Bolt Replacement" of the service information. Compliance with requirement 3. and 5. is a terminating action for the daily inspection, and we are requiring these within 10 hours TIS after the effective date of AD 2009-05-01 for Group 1 airplanes and AD 2010- 10-01 for Group 2 airplanes.

(2) "Requirement: 2. External Inspection (Lower flange, Stabilizer rear spar)" of the service information does not specify any action if excessive local deflection or movement of lower skin, cracking, or working (loose) rivet is found. We require obtaining and incorporating an FAA-approved repair scheme from the manufacturer before further flight.

(3) The MCAI does not state if further flight with known cracks is allowed. FAA policy is to not allow further flight with known cracks in critical structure. We require that if any cracks are found when accomplishing the inspection required in paragraphs (f)(2) and (g)(2) of this AD, you must repair the cracks before further flight.

(4) The service information does not state that parts with spotfaced nut and bolt mating surfaces require replacement. However, the service information no longer allows reworking of the mating surfaces by spotfacing. We require that if any nut and bolt surfaces were previously reworked by spotfacing, you must replace the parts.

Other FAA AD Provisions

(g) The following provisions also apply to this AD:

(1) Alternative Methods of Compliance (AMOCs): The Manager, Standards Office, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to ATTN: Doug Rudolph, Aerospace Engineer, FAA, Small Airplane Directorate, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329-4059; fax: (816) 329-4090. Before using any approved AMOC on any airplane to which the AMOC applies, notify your appropriate principal inspector (PI) in the FAA Flight Standards District Office (FSDO), or lacking a PI, your local FSDO.

(2) Airworthy Product: For any requirement in this AD to obtain corrective actions from a manufacturer or other source, use these actions if they are FAA-approved. Corrective actions are considered FAA-approved if they are approved by the State of Design Authority (or their delegated agent). You are required to assure the product is airworthy before it is returned to service.

(3) Reporting Requirements: For any reporting requirement in this AD, under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 et seq.), the Office of Management and Budget (OMB) has approved the information collection requirements and has assigned OMB Control Number 2120-0056.

Related Information

(h) Refer to MCAI Civil Aviation Safety Authority AD No. AD/GA8/ 5, Amdt 4, dated May 11, 2010; Gippsland Aeronautics Mandatory Service Bulletin SB-GA8-2002-02, Issue 5, dated November 13, 2008; and Gippsland Aeronautics Mandatory Service Bulletin SB-GA8-2002-02, Issue 6, dated April 21, 2010, for related information.

Material Incorporated by Reference

(h) You must use Gippsland Aeronautics Mandatory Service Bulletin SB-GA8-2002-02, Issue 5, dated November 13, 2008; and Gippsland Aeronautics Mandatory Service Bulletin SB-GA8-2002-02, Issue 6, dated April 21, 2010, to do the actions required by this AD, unless the AD specifies otherwise.

(1) The Director of the Federal Register approved the incorporation by reference of Gippsland Aeronautics Mandatory Service Bulletin SB-GA8-2002-02, Issue 6, dated April 21, 2010, under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) On March 2, 2009 (74 FR 8159; February 24, 2009), the Director of the Federal Register previously approved the incorporation by reference of Gippsland Aeronautics Mandatory Service Bulletin SB-GA8-2002-02, Issue 5, dated November 13, 2008.

(3) For service information identified in this AD, contact Gippsland Aeronautics, Attn: Technical Services, P.O. Box 881, Morwell Victoria 3840, Australia; telephone: + 61 03 5172 1200; fax: +61 03 5172 1201; Internet: <http://www.gippsaero.com>.

(4) You may review copies of the service information incorporated by reference for this AD at the FAA, Central Region, Office of the Regional Counsel, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the Central Region, call (816) 329-3768.

(5) You may also review copies of the service information incorporated by reference for this AD at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call (202) 741-6030, or go to: http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.