

**DEPARTMENT OF
TRANSPORTATION**

Federal Aviation Administration

14 CFR Part 39 [60 FR 48628 No. 182; 09/20/95][SN]

**American General
Aircraft**

[AD 95-19-15](#)

Amendment 39-9377

Effective Nov. 17, 1995

ATA Code: 53, 57

Recurring: No

[Docket No. 94-CE-15-AD; Amendment 39-9377; AD 95-19-15]

Airworthiness Directives; American General Aircraft Corporation Models AA-5, AA-5A, AA-5B, and AG-5B Airplanes

Note: Although this AD is not recurring, the referenced Service Bulletin is recurring at 500 hour intervals, therefore, the AD is indexed as recurring.

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule.

SUMMARY: This amendment adopts a new airworthiness directive (AD) that applies to American General Aircraft Corporation (American General) Models AA-5, AA-5A, AA-5B, and AG-5B airplanes. This action requires inspecting the wing attach shoulder bolts for fretting, scoring, wear, or enlarged or elongated mounting holes (known as damage from hereon), and replacing any damaged parts and repairing any damaged areas; and inspecting the wing spar at the center spar clearance gap for excessive clearance, and shimming the spar if excessive clearance is found. The actions specified by this AD are intended to prevent wing attach shoulder bolt failure, which, if not detected and corrected, could lead to structural damage to the wing/fuselage to the point of failure.

DATES: Effective November 17, 1995.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of November 17, 1995.

ADDRESSES: Service information that applies to this AD may be obtained from Fletch Air, Inc., 9000 Randolph Street, Houston, Texas 77061; telephone (713) 649-8700 or (800) 329-4647; facsimile (713) 643-0070. This information may also be examined at the Federal Aviation Administration (FAA), Central Region, Office of the Assistant Chief Counsel, Room 1558, 601 E. 12th Street, Kansas City, Missouri 64106; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

FOR FURTHER INFORMATION CONTACT: Mr. Ozzie Lopez, Aerospace Engineer, FAA, Atlanta Aircraft Certification Office, Campus Building, 1701 Columbia Avenue, suite 2-160, College Park, Georgia 30337-2748; telephone (404) 305-7359; facsimile (404) 305-7348.

SUPPLEMENTARY INFORMATION: A proposal to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) to include an AD that would apply to certain American General Models AA-5, AA-5A, AA-5B, and AG-5B airplanes was published in the Federal Register on September 28, 1994 (59 FR 49359). The action proposed to require inspecting the wing attach shoulder bolts for fretting, scoring, wear, or enlarged or elongated mounting holes (known as damage from hereon), and replacing any damaged parts and repairing any damaged areas; inspecting the wing spar at the center spar clearance gap for excessive clearance, and shimming the spar if excessive clearance is found; and reporting to the FAA the results of the inspections. Accomplishment of the proposed inspections would be in accordance with **American General Critical Service Bulletin SB-185**, dated July 6, 1994. Accomplishment of the proposed possible repairs, replacements, and excessive clearance shimming would be in accordance with the applicable maintenance manual.

Interested persons have been afforded an opportunity to participate in the making of this amendment. Due consideration has been given to the comments received from one commenter.

The commenter states that the NPRM calls out an incorrect part number (901044-3 and 901044-2) for serial numbers AA-5-0001 through AA-5-0714 of the AA-5 series airplanes. The commenter suggests that the AD be changed to reflect wing attach bolt, part number 901044-1, for the referenced airplanes.

The FAA concurs and has incorporated reference to wing attach bolt, part number 901044-1, into the applicable portion of the AD.

The commenter also explains that serial numbers AA-5-0001 through AA-5-0714 of the AA-5 series airplanes have a 38-gallon gas tank capacity, which is smaller than the 52-gallon capacity of the rest of the fleet. The commenter recommends that this action not affect these airplanes because the bolts are subjected to different loads.

The FAA concurs that these earlier models of the AA-5 series airplanes contain smaller fuel tanks and that the airplanes incur different loads than the rest of the fleet. However, failure of these bolts is also attributable to excessive wing spar to center spar clearance. This excessive clearance could occur through failure to check and shim to the proper clearance after a major wing repair.

In fact, since issuing the NPRM, the FAA has received a report from Outlaw Aviation in Clarksville, Tennessee, that details nine airplanes (out of a total of 11 inspected) having excessive wing spar to center spar clearance. Each of these nine airplanes had wing replacement accomplished at American General. No changes to the AD have been made as a result of this comment; however, the FAA has removed the reporting requirement from the AD since the above-referenced report confirms the FAA's belief that the affected airplanes could have excessive wing spar to center spar clearance.

No comments were received on the FAA's determination of the cost to the public.

After careful review of all available information, the FAA has determined that air safety and the public interest require the adoption of the rule as proposed except for the incorporation of the wing attach bolt part number, the removal of the reporting requirement, and minor editorial corrections. The FAA has determined that this part number incorporation, reporting requirement removal, and the minor editorial corrections will not change the meaning of the AD and will not add any additional burden upon the public than was already proposed.

The FAA estimates that 3,700 airplanes in the U.S. registry will be affected by this AD, that it will take approximately 10 workhours per airplane to accomplish the required action, and that the average labor rate is approximately \$60 an hour. Based on these figures, the total cost impact of the AD on U.S. operators is estimated to be \$2,220,000 (\$600 per airplane x 3,700 airplanes). This figure is based on the assumption that no affected airplane owner/operator has accomplished the proposed inspection, and does not take into account the cost for replacing any damaged bolts. The FAA has no way of determining the number of bolts that may need to be replaced based on the results of the inspections.

The regulations adopted herein will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, in accordance with Executive Order 12612, it is determined that this final rule does not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.

For the reasons discussed above, I certify that this action

- (1) is not a “significant regulatory action” under Executive Order 12866;
- (2) is not a “significant rule” under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and
- (3) will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

A copy of the final evaluation prepared for this action is contained in the Rules Docket. A copy of it may be obtained by contacting the Rules Docket at the location provided under the caption ADDRESSES.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends part 39 of the Federal Aviation Regulations (14 CFR part 39) as follows:

PART 39--AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 USC 106(g), 40101, 40113, 44701.

Sec. 39.13 [Amended]

2. Section 39.13 is amended by adding a new airworthiness directive (AD) to read as

follows:

95-19-15 AMERICAN GENERAL AIRCRAFT CORPORATION: Amendment 39-9377; Docket No. 94-CE-15-AD.

Applicability: Models AA-5, AA-5A, AA-5B, and AG-5B airplanes (all serial numbers), certificated in any category.

Note 1: This AD applies to each airplane identified in the preceding applicability revision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (d) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required within the next 100 hours time-in-service (TIS) after the effective date of this AD, unless already accomplished.

To prevent wing attach shoulder bolt failure, which, if not detected and corrected, could lead to structural damage of the wing/fuselage to the point of failure, accomplish the following:

- (a) Inspect the wing attach shoulder bolts (4), part numbers as specified in paragraphs (a) (1) and (a)(2) below, for fretting, scoring, wear, or enlarged or elongated mounting holes (known as damage from hereon) in accordance with the procedures included in the INSPECTION section of **American General Critical Service Bulletin SB-185**, dated July 6, 1994. Prior to further flight, replace any damaged parts with new or serviceable parts and repair any damaged areas in accordance with the applicable maintenance manual.
 - (1) The wing attach shoulder bolt part number for serial numbers AA-5-0001 through AA-5-0714 of the AA-5 series airplanes is 901044-1.
 - (2) The wing attach shoulder bolt part numbers for all serial numbers of the AA-5 series airplanes, except for serial numbers AA-5-0001 through AA-5-0714, is either 901044-3 or 901044-2.
- (b) Inspect the wing spar at the center spar clearance gap for excessive clearance in accordance with the procedures included in the INSPECTION section of **American General Critical Service Bulletin SB-185**, dated July 6, 1994. If any gap exceeds .016-inch, prior to further flight, shim the spar to reduce the gap to a level not to exceed .008 inches in accordance with the instructions in the applicable maintenance manual.
- (c) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.
- (d) An alternative method of compliance or adjustment of the compliance time that provides

an equivalent level of safety may be approved by the Manager, Atlanta Aircraft Certification Office (ACO), Campus Building, 1701 Columbia Avenue, suite 2-160, College Park, Georgia 30337-2748. The request shall be forwarded through an appropriate FAA Maintenance Inspector, who may add comments and then send it to the Manager, Atlanta ACO.

Note 2: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Atlanta ACO.

- (e) The inspection required by this AD shall be done in accordance with **American General Critical Service Bulletin SB-185**, dated July 6, 1994. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Fletch Air, Inc., 9000 Randolph Street, Houston, Texas 77061. Copies may be inspected at the FAA, Central Region, Office of the Assistant Chief Counsel, room 1558, 601 E. 12th Street, Kansas City, Missouri, or at the Office of the Federal Register, 800 North Capitol Street NW., suite 700, Washington, DC.
- (f) This amendment (39-9377) becomes effective on November 17, 1995.

Issued in Kansas City, Missouri, on September 13, 1995.

Gerald W. Pierce, Acting Manager, Small Airplane Directorate, Aircraft Certification Service.

FOR FURTHER INFORMATION CONTACT: Mr. Ozzie Lopez, Aerospace Engineer, FAA, Atlanta Aircraft Certification Office, Campus Building, 1701 Columbia Avenue, suite 2-160, College Park, Georgia 30337-2748; telephone (404) 305-7359; facsimile (404) 305-7348.

Manufacturer's Service Information:

[American General Critical Service Bulletin SB-185](#) [\[SB-185A\]](#)

Copies of the service information referenced in this directive may be obtained upon request from Fletch Air, Inc., 9000 Randolph Street, Houston, Texas 77061.