# **DEPARTMENT OF TRANSPORTATION**

# Federal Aviation Administration

14 CFR Part 39 [70 FR 48857 No. 161; 08/22/05][SN]

Tiger Aircraft LLC <u>AD 95-19-15 R1</u> Amendment 39-14222 Effective Oct. 3, 2005 <u>Revises AD 95-19-15</u> ATA Code: 53, 57 Recurring: No

[Docket No. FAA-2005-20968; Directorate Identifier 94-CE-15-AD; Amendment 39-14222; AD 95-19-15 R1] RIN 2120-AA64

Airworthiness Directives; Tiger Aircraft LLC 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 (FAA), DOT.

# ACTION: Final rule.

**SUMMARY: The FAA is revising Airworthiness Directive (AD) 95-19-15** for all Tiger Aircraft LLC (Type Certificate A16EA formerly held by American General Aircraft Corporation and Grumman American Aviation Corporation) Models AA-5, AA-5A, AA-5B, and AG-5B airplanes. AD 95-19-15 currently requires you to inspect the wing attach shoulder bolts for fretting, scoring, wear, or enlarged or elongated mounting holes (known as damage from hereon); replace any damaged parts; repair any damaged areas; inspect the wing spar at the center spar clearance gap for excessive clearance; and shim the spar if excessive clearance is found. That AD was written to apply to all serial numbers of all models. A design change was made in this area beginning with serial number 10175 of the Model AG-5B airplanes. Therefore, the action should not apply to Model

AG-5B airplanes with a serial number of 10175 or higher. This AD retains all the actions of AD

95-19-15 for all airplanes originally affected, but cuts off the applicability for the Model AG-5B airplanes at serial number 10174. We are issuing this AD to continue 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.

DATES: This AD becomes effective on October 3, 2005.

As of October 3, 2005, the Director of the Federal Register approved the incorporation by reference of certain publications listed in the regulation.

**ADDRESSES:** To get the service information identified in this AD, contact Tiger Aircraft LLC,

226 Pilot Way, Martinsburg, WV 25401.

To view the AD docket, go to the Docket Management Facility; U.S. Department of Transportation, 400 Seventh Street, SW., Nassif Building, Room PL-401, Washington, DC 20590-001 or on the Internet at http://dms.dot.gov. The docket number is FAA-2005-20968; Directorate Identifier 94-CE-15-AD.

**FOR FURTHER INFORMATION CONTACT:** Richard Beckwith, Aerospace Engineer, New York Aircraft Certification Office (ACO), 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone: 516-794-5531; facsimile: 516-794-5531.

# SUPPLEMENTARY INFORMATION:

#### Discussion

*What events have caused this AD*? The FAA has received four reports (three in England and one in the United States) of wing attach shoulder bolt failure on Tiger Aircraft LLC (Type Certificate A16EA formerly held by American General Aircraft Corporation (AGAC) and Grumman American Aviation Corporation (GAAC)) Models AA-5, AA-5A, AA-5B, and AG-5B airplanes. Investigation reveals that excessive wing to center spar clearance could have contributed to the bolt failures; however, in each of the four instances, the bolts failed before reaching the service life of 7,250 hours time-in-service (TIS). The FAA has determined that, to assure the safety of these airplanes, the established service life of these bolts needed review. Our review of service life on Tiger Aircraft LLC (Type Certificate A16EA formerly held by AGAC and GAAC) Models AA-5, AA-5A, AA-5B, and AG-5B airplanes caused us to issue AD 95-19-15, Amendment 39-9377 (60 FR 48628, September 20, 1995). AD 95-19-15 currently requires the following on Tiger Aircraft LLC (Type Certificate A16EA formerly held by AGAC and GAAC) Models AA-5, AA-5A, AA-5B, and AG-5B airplanes, all serial numbers:

Inspect the wing attach shoulder bolts for fretting, scoring, wear, or enlarged or elongated mounting holes (known as damage from hereon), and replace any damaged parts and repairing any damaged areas;

Inspect the wing spar at the center spar clearance gap for excessive clearance; and Shim the spar if excessive clearance is found.

AD 95-19-15 was written to apply to all serial numbers of all models. A design change was made in this area beginning with serial number 10175 of the Model AG-5B airplanes. Therefore, FAA determined that the action should not apply to Model AG-5B airplanes with a serial number of 10175 or higher.

*Has FAA taken any action to this point?* We issued a proposal to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) to include an AD that would apply to all Tiger Aircraft LLC (Type Certificate A16EA formerly held by American General Aircraft Corporation and Grumman American Aviation Corporation) Models AA-5, AA-5A, AA-5B, and AG-5B airplanes. This proposal was published in the Federal Register as a notice of proposed rulemaking (NPRM) on May 19, 2005 (70 FR 28854). The NPRM proposed to retain all the actions of AD 95-19-15 for all airplanes originally affected, but proposed to cut

off the applicability for the Model AG-5B airplanes at serial number 10174.

#### Comments

*Was the public invited to comment?* We provided the public the opportunity to participate in developing this AD. The following presents the comments received on the proposal and FAA's response to each comment:

# Comment Issue No. 1: Type Certificate Data Sheet (TCDS) Number (No.) Is Referenced Incorrectly in the NPRM

*What is the commenter's concern?* A letter from Tiger Aircraft LLC notes that the TCDS No. A16EH in the NPRM is referenced incorrectly. The TCDS should be No. A16EA.

*What is FAA's response to the concern?* We concur. We will correct all reference in the final rule of the TCDS to No. A16EA.

#### Comment Issue No. 2: Manufacturer's Contact Information Is Incorrect in the NPRM

*What is the commenter's concern?* The commenter from Tiger Aircraft LLC requests that FAA change the contact information to that for Tiger Aircraft LLC. American General Aircraft Corporation is out of business.

*What is FAA's response to the concern?* The FAA concurs. We will change the contact information in the final rule to show Tiger Aircraft LLC.

# Conclusion

*What is FAA's final determination on this issue?* We have carefully reviewed the available data and determined that air safety and the public interest require adopting the AD as proposed except for the changes discussed above and minor editorial corrections. We have determined that these changes and minor corrections:

- Are consistent with the intent that was proposed in the NPRM for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM.

# Changes to 14 CFR Part 39--Effect on the AD

*How does the revision to 14 CFR part 39 affect this AD?* On July 10, 2002, the FAA published a new version of 14 CFR part 39 (67 FR 47997, July 22, 2002), which governs the FAA's AD system. This regulation now includes material that relates to altered products, special flight permits, and alternative methods of compliance. This material previously was included in each individual AD. Since this material is included in 14 CFR part 39, we will not include it in future AD actions.

# **Costs of Compliance**

*How many airplanes does this AD impact?* We estimate that this AD affects 3,700 airplanes in the U.S. registry.

*What is the cost impact of this AD on owners/operators of the affected airplanes?* We estimate the following costs to do this inspection:

Labor cost	Parts	Total cost	Total cost on
	cost	per airplane	U.S. operators
10 work hours × \$65 = \$650	Not included	\$650	3,700 × \$650 = \$2,405,000

We have no way of determining the number of airplanes that may need this replacement of any damaged bolts or repair as a result of the inspection.

# Authority for This Rulemaking

*What authority does FAA have for issuing this rulemaking action?* Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, Section 106 describes the authority of the FAA Administrator. Subtitle VII, Aviation Programs, describes in more detail the scope of the agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701, "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this AD.

# **Regulatory Findings**

*Will this AD impact various entities?* We have determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect 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.

*Will this AD involve a significant rule or regulatory action?* For the reasons discussed above, I certify that this AD:

- 1. Is not a "significant regulatory action" under Executive Order 12866;
- 2. Is not a "significant rule" under the 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.

We prepared a summary of the costs to comply with this AD (and other information as included in the Regulatory Evaluation) and placed it in the AD Docket. You may get a copy of this summary by sending a request to us at the address listed under ADDRESSES. Include "Docket No. FAA-2005-20968; Directorate Identifier 94-CE-15-AD" in your request.

# List of Subjects in 14 CFR Part 39

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

#### **Adoption of the Amendment**

Accordingly, under 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 U.S.C. 106(g), 40113, 44701.

Sec. 39.13 [Amended]

2. The FAA amends Sec. 39.13 by removing Airworthiness Directive (AD) 95-19-15, Amendment 39-9377 (60 FR 48628, September 20, 1995), and by adding a new AD to read as follows:

# **95-19-15 R1** Tiger Aircraft LLC: (Type Certificate A16EA formerly held by American General Aircraft Corporation and Grumman American Aviation Corporation):

Amendment 39-14222; Docket No. FAA-2005-20968; Directorate Identifier 94-CE-15-AD.

# When Does This AD Become Effective?

(a) This AD becomes effective on October 3, 2005.

# What Other ADs Are Affected By This Action?

(b) This AD revises AD 95-19-15, Amendment 39-9377.

# What Airplanes Are Affected by This AD?

This AD affects the following airplane models and serial numbers that are certificated in any category:

Model	Serial numbers	
AA-5	All Serial Numbers.	
AA-5A	All Serial Numbers.	
AA-5B	All Serial Numbers.	
AG-5B	99998, 10000 through 10174.	

# What Is the Unsafe Condition Presented in This AD?

(d) AD 95-19-15 currently requires you to inspect the wing attach shoulder bolts for fretting, scoring, wear, or enlarged or elongated mounting holes (known as damage from hereon); replace any damaged parts; repair any damaged areas; inspect the wing

spar at the center spar clearance gap for excessive clearance; and shim the spar if excessive clearance is found. That AD was written to apply to all serial numbers of all models. A design change was made in this area beginning with serial number 10175 of the Model AG-5B airplanes. Therefore, the action should not apply to Model AG-5B airplanes with a serial number of 10175 or higher. This AD retains all the actions of AD 95-19-15 for all airplanes originally affected, but cuts off the applicability for the Model AG-5B airplanes at serial number 10174. We are issuing this AD to continue 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.

# What Must I Do To Address This Problem?

(e) To address this problem, you must do the following, unless already done:

Actions	Compliance	Procedures
<ul> <li>(1) Inspect any inboard wing attach shoulder bolt for:</li> <li>(i) Fretting, scoring, or wear (removal of the cad plating) to the shoulder of the bolt</li> <li>(ii) A smooth machined area between the threads and the shoulder bevel of the shoulder bolt profile</li> </ul>	Within the next 100 hours aircraft time-in- service (TIS) after November 17, 1995 (the effective date of AD 95-19-15, unless already done	Follow American General Aircraft Corporation Service Bulletin No. SB-185-A, Revision A, dated January 10, 2005.
(2) Replace any inboard wing attach shoulder bolt with wear (removal of the cad plating from the shoulder of the bolt) or if the threads contact the shoulder of the bolt found during the inspections required in paragraph (e)(1) of this AD	Before further flight after the inspection required by paragraph (e)(1) of this AD	Follow American General Aircraft Corporation Service Bulletin No. SB-185-A, Revision A, dated January 10, 2005.
(3) Inspect the mounting holes in the wing spar and the center section spar for enlargementor elongation that exceeds the specified dimension	Within the next 100 hours aircraft time-in- service (TIS) after November 17, 1995 (the effective date of AD 95-19-15), unless already done	Follow American General Aircraft Corporation Service Bulletin No. SB-185-A, Revision A, dated January 10, 2005.
(4) Ream and bush any mounting hole that exceeds the specified dimension found during the inspection required by paragraph (e)(3) of this AD	Before further flight after the inspection required by paragraph (e)(3) of this AD	Follow American General Aircraft Corporation Service Bulletin No. SB-185-A, Revision A, dated January 10, 2005
(5) Inspect the wing spar at the center spar clearance gap for excessive clearance, and shim the spar if excessive clearance is found	Before further flight after the inspections required by paragraphs (e)(1) and (e)(3) of this AD	Follow American General Aircraft Corporation Service Bulletin No. SB-185-A, Revision A, dated January 10, 2005.

(6) Do not install any wing attach shoulder bolt that has wear resulting in removal of the cad plating from the shoulder of the bolt or if the threads contact the shoulder bevel of the shoulder bolt profile	As of October 3, 2005 (the effective date of this AD)	Not Applicable.
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# May I Request an Alternative Method of Compliance?

(f) You may request a different method of compliance or a different compliance time for this AD by following the procedures in 14 CFR 39.19. Unless FAA authorizes otherwise, send your request to your principal inspector. The principal inspector may add comments and will send your request to the Manager, New York Aircraft Certification Office (ACO), FAA. For information on any already approved alternative methods of compliance, contact Richard Beckwith, Aerospace Engineer, New York ACO, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone: 516-794-5531; facsimile: 516-794-5531.

# Does This AD Incorporate Any Material by Reference?

(g) You must do the actions required by this AD following the instructions in American General Aircraft Corporation Service Bulletin No. SB-185-A, Revision A, dated January 10, 2005. The Director of the Federal Register approved the incorporation by reference of this service bulletin in accordance with 5 U.S.C.552(a) and 1 CFR part 51. To get a copy of this service information, contact Tiger Aircraft LLC, 226 Pilot Way, Martinsburg, WV 25401. To review copies of this service information, go to the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, go to: http://www.archives.gov/federal\_register/ code\_of\_federal\_regulations/ibr\_locations.html or call (202) 741-6030. To view the AD docket, go to the Docket Management Facility; U.S. Department of Transportation, 400 Seventh Street, SW., Nassif Building, Room PL-401, Washington, DC 20590-001 or on the Internet at http://dms.dot.gov. The docket number is FAA-2005-20968; Directorate Identifier 94-CE-15-AD.

Issued in Kansas City, Missouri, on August 11, 2005.

Kim Smith, Acting Manager, Small Airplane Directorate, Aircraft Certification Service.

**FOR FURTHER INFORMATION CONTACT:** Richard Beckwith, Aerospace Engineer, New York Aircraft Certification Office (ACO), 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone: 516-794-5531; facsimile: 516-794-5531.

# Manufacturer's Service Information:

American General Aircraft Corporation Service Bulletin No. SB-185-A, Revision A

Copies of the service information identified in this directive are available upon request from

Tiger Aircraft LLC, 226 Pilot Way, Martinsburg, WV 25401.