

# 2009-25-02

## TWIN COMMANDER AIRCRAFT LLC

Amendment 39-16119

Docket No. FAA-2009-0778; Directorate Identifier 2009-CE-040-AD

### PREAMBLE

#### Effective Date

(a) This AD becomes effective on January 8, 2010.

#### Affected ADs

(b) None.

#### Applicability

(c) This AD applies to the following airplane models and serial numbers that are certificated in any category:

Models	Serial Nos. (S/Ns)
690	All S/Ns
690A	All S/Ns except 11195 and 11279.
690B	All S/Ns except 11361, 11383, 11527, and 11536.

#### Unsafe Condition

(d) This AD results from reports that corrosion was found between the mating surfaces of the wing upper skin surface and the engine mount beam support straps. We are issuing this AD to detect and correct corrosion on the engine mount beam support straps and upper wing skins, which could result in failure of the engine mount beam support straps. This failure could lead to loss of the engine and possible loss of control of the airplane.

#### Compliance

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

Actions	Compliance	Procedures
(1) Inspect between the surface of the left-hand (LH) and right-hand (RH) upper wing skins and the engine mount beam support straps for any signs of corrosion and determine the extent of any corrosion found.	Within the next 150 hours time-in-service after January 8, 2010 (the effective date of this AD) or within the next 12 months after January 8, 2010 (the effective date of this AD), whichever occurs first.	Follow Twin Commander Aircraft LLC Alert Service Bulletin No. 237, dated May 13, 2005, pages 1 through 14.
(2) Install modification access	Before further flight after the	Follow the Accomplishment

holes in the LH and RH lower wing skins.	inspection required in paragraph (e)(1) of this AD.	Instructions, steps 1 through 4 and 6 through 9, of Twin Commander Aircraft Corporation Custom Kit No. 150, dated July 8, 1994, as specified in Twin Commander Aircraft LLC Alert Service Bulletin No. 237, dated May 13, 2005.
(3) If corrosion damage is found during the inspection required in paragraph (e)(1) of this AD, perform necessary modification.	Before further flight after the inspection required in paragraph (e)(1) of this AD.	Follow Twin Commander Aircraft LLC Alert Service Bulletin No. 237, dated May 13, 2005, Part II, Options A, B, or C, on pages 15 through 29 and 31.
(4) If corrosion damage is not found during the inspection required in paragraph (e)(1) of this AD, do the upper steel strap replacements.	Before further flight after the inspection required in paragraph (e)(1) of this AD.	Follow Twin Commander Aircraft LLC Alert Service Bulletin No. 237, dated May 13, 2005, Part II, Option D, on pages 30 and 31.
(5) Install additional wing fasteners on the LH and RH wing.	Before further flight after the inspection required in paragraph (e)(1) of the AD.	Follow Gulfstream American Corporation Service Bulletin No. 182, dated March 2, 1981.

#### NOTE

**Although not required by this AD, we highly recommend compliance with Twin Commander Aircraft Corporation Service Bulletin No. 217, Revision No. 1, dated May 26, 1993, Engine Nacelle Firewall Reinforcement; and Twin Commander Aircraft LLC Alert Service Bulletin No. 239, dated February 13, 2006, Outboard Flap-Inboard Hinge Inspection & Reinforcement.**

#### Alternative Methods of Compliance (AMOCs)

(f) The Manager, Seattle Aircraft Certification Office (ACO), 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: Vince Massey, Aerospace Engineer, FAA, Seattle ACO, 1601 Lind Avenue, SW, Renton, Washington 98057-3356; telephone: (425) 917-6475; fax: (425) 917-6590; email: vince.massey@faa.gov. 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.

#### Material Incorporated by Reference

(g) You must use Twin Commander Aircraft LLC Alert Service Bulletin No. 237, dated May 13, 2005; Twin Commander Aircraft Corporation Custom Kit No. 150, dated July 8, 1994; and Gulfstream American Corporation Service Bulletin No. 182, dated March 2, 1981, 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 this service information under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) For service information identified in this AD, contact Twin Commander Aircraft LLC, 18933-59th Avenue, NE., Arlington, WA 98223, telephone: (360) 435-9797; fax: (360) 435-1112; Internet:  
<http://www.twincommander.com>.

(3) 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.

(4) 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](http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html).

**FOR FURTHER INFORMATION CONTACT:** Vince Massey, Aerospace Engineer, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98057-3356; telephone: (425) 917-6475; fax: (425) 917-6590; e-mail: vince.massey@faa.gov.

Issued in Kansas City, Missouri, on November 20, 2009.

**Margaret Kline**, *Acting Manager, Small Airplane Directorate, Aircraft Certification Service.*

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[Rules and Regulations]  
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## **DEPARTMENT OF TRANSPORTATION**

### **Federal Aviation Administration**

#### **14 CFR Part 39**

**[Docket No. FAA-2009-0778; Directorate Identifier 2009-CE-040-AD; Amendment 39-16119; AD 2009-25-02]**

**RIN 2120-AA64**

#### **Airworthiness Directives; Twin Commander Aircraft LLC Models 690, 690A, and 690B Airplanes**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Final rule.

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**SUMMARY:** We are adopting a new airworthiness directive (AD) for certain Twin Commander Aircraft LLC Models 690, 690A, and 690B airplanes. This AD requires you to inspect between the surface of the left-hand (LH) and right-hand (RH) upper wing skins and the engine mount beam support straps for any signs of corrosion, replace the upper steel straps with parts of improved design, and modify both wings. This AD results from reports that corrosion was found between the mating surfaces of the wing upper skin surface and the engine mount beam support straps. We are issuing this AD to detect and correct corrosion on the engine mount beam support straps and the upper wing skins, which could result in failure of the engine mount beam support straps. This failure could lead to loss of the engine and possible loss of control of the airplane.

**DATES:** This AD becomes effective on January 8, 2010.

On January 8, 2010, the Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD.

**ADDRESSES:** To get the service information identified in this AD, contact Twin Commander Aircraft LLC, 18933-59th Avenue, NE., Suite 115, Arlington, WA 98223, telephone: (360) 435-9797; fax: (360) 435-1112; Internet: <http://www.twincommander.com>.

To view the AD docket, go to U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue, SE., Washington, DC 20590, or on the Internet at <http://www.regulations.gov>. The docket number is FAA-2009-0778; Directorate Identifier 2009-CE-040-AD.

**FOR FURTHER INFORMATION CONTACT:** Vince Massey, Aerospace Engineer, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98057-3356; telephone: (425) 917-6475; fax: (425) 917-6590; e-mail: vince.massey@faa.gov.

## **SUPPLEMENTARY INFORMATION:**

### **Discussion**

On August 21, 2009, 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 certain Twin Commander Aircraft LLC Models 690, 690A, and 690B airplanes. This proposal was published in the Federal Register as a notice of proposed rulemaking (NPRM) on August 28, 2009 (74 FR 44308). The NPRM proposed to require you to inspect between the surface of the LH and RH upper wing skins and the engine mount beam support straps for any signs of corrosion, replace the upper steel straps with parts of improved design, and modify both wings.

### **Comments**

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: Extend Compliance Time**

Michael Curtis Pidek, William I. Smith, and Tom Bayer all state that with 275 airplanes affected by this AD and only 15 service centers available to do the actions required in this AD, there is not enough time to comply with the AD.

All three commenters request an extension of the compliance time to allow enough time for the service centers to schedule the work without grounding airplanes until the work can be done.

We do not agree with the commenters. Over 65 airplanes are already in compliance with this AD. We have consulted with Twin Commander Aircraft LLC and they have covered this issue with the service centers. The service centers know how much work is required since they have already done the work on over 65 of the affected airplanes. The service centers plan on using multiple teams to work on several airplanes at the same time. They have confirmed they can perform the actions required in this AD in the compliance time as proposed.

Part of the alternative method of compliance (AMOC) provisions of 14 CFR 39.19 is an extension of the compliance time provided a level of safety acceptable to the FAA is met. The FAA will review any AMOCs of this nature on a case-by-case basis. If we determine the proposal presents an acceptable level of safety, we will approve it as an AMOC to the AD.

We are not changing the final rule AD action based on these comments.

### **Conclusion**

We have carefully reviewed the available data and determined that air safety and the public interest require adopting the AD as proposed except for minor editorial corrections. We have determined that these 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.

### **Costs of Compliance**

We estimate that this AD will affect 275 airplanes in the U.S. registry.

We estimate the following costs to do the inspection:

<b>Labor Cost</b>	<b>Parts Cost</b>	<b>Total Cost Per Airplane</b>	<b>Total Cost on U.S. Operators</b>
80 work-hours X \$80 per hour = \$6,400	Not applicable	\$6,400	\$1,760,000

We estimate the following costs to do any necessary repairs/replacements that will be required based on the results of the inspection. We have no way of determining the number of airplanes that may need this repair/replacement:

**Short Modification – Option A\***

<b>Labor Cost</b>	<b>Parts Cost</b>	<b>Total Cost Per Airplane Per Side</b>
250 work-hours X \$80 per hour = \$20,000 per side	\$9,170 per kit per side	\$29,170

**Middle Modification – Option B\***

<b>Labor Cost</b>	<b>Parts Cost</b>	<b>Total Cost Per Airplane Per Side</b>
280 work-hours X \$80 per hour = \$22,400 per side	\$9,170 per kit per side	\$31,570

**Long Modification – Option C\***

<b>Labor Cost</b>	<b>Parts Cost</b>	<b>Total Cost Per Airplane Per Side</b>
320 work-hours X \$80 per hour = \$25,600 per side	\$9,170 per kit per side	\$34,770

Note: \* Depending on airplane configuration, airplanes with rectangular plates will need the Plate and Hardware Kit (SB237-4) at \$2,090 per side. Labor to install this kit is included in Options A, B, and C.

**Strap Only Replacement – Option D**

<b>Labor Cost</b>	<b>Parts Cost</b>	<b>Total Cost Per Airplane Per Side</b>
75 work-hours X \$80 per hour = \$6,000 per side	\$6,190 per strap per side	\$12,190

We estimate the following costs to do the installation of access holes:

<b>Labor Cost</b>	<b>Parts Cost</b>	<b>Total Cost Per Airplane</b>	<b>Total Cost on U.S. Operators</b>
30 work-hours X \$80 per hour = \$2,400	\$1,293	\$3,693	\$1,015,575

We estimate the following costs to do the wing fastener modification:

<b>Labor Cost</b>	<b>Parts Cost</b>	<b>Total Cost Per Airplane</b>	<b>Total Cost on U.S. Operators</b>
8.5 work-hours X \$80 per hour = \$680	\$250	\$930	\$255,750

### **Authority for This Rulemaking**

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**

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.

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-2009-0778; Directorate Identifier 2009-CE-040-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.

**§ 39.13 [Amended]**

2. FAA amends § 39.13 by adding a new AD to read as follows: