§ 23.685 Control System Details

(a) Each detail of the Tamarack Active Control Surface (TACS) must be designed and installed to prevent jamming, chafing, and interference from cargo, passengers, loose objects, or the freezing of moisture.

(b) There must be means in the cockpit to prevent the entrance of foreign objects into places where they would jam any one connecting or transmitting element of the system.

(c) Each element of the load alleviation system must have design features, or must be distinctively and permanently marked, to minimize the possibility of incorrect assembly that could result in malfunctioning of the control system.

(b) The load alleviation system must be designed so that, when any one connecting or transmitting element in the primary flight control system fails, adequate longitudinal control for safe flight and landing is available.

(c) The load alleviation system must be irreversible unless the TACS is properly balanced and has no unsafe flutter characteristics. The system must have adequate rigidity and reliability in the portion of the system from the tab to the attachment of the irreversible unit to the airplane structure.

(d) It must be demonstrated that the airplane is safely controllable and that the pilot can perform all maneuvers and operations necessary to effect a safe landing following any probable powered system runway that reasonably might be expected in service, allowing for appropriate time delay after pilot recognition of the system runway. The demonstration must be conducted at critical airplane weights and center of gravity positions.

(C) In place of 14 CFR part 23, § 23.683 Operation tests requirement, comply with the following:

SC 23.683 Operation tests

(a) It must be shown by operation tests that, when the load alleviation system is active and operational and loaded as prescribed in paragraph (b) of this section, the system is free from—

(1) Jamming;

(2) Excessive friction; and

(3) Excessive deflection.

(b) The prescribed test loads are, for the entire system, loads corresponding to the limit airloads on the appropriate surface.

(D) In place of 14 CFR part 23, § 23.685 Control system details requirement, comply with the following:

SC 23.685 Control System Details

(a) Each detail of the Tamarack Active Control Surface (TACS) must be designed and installed to prevent jamming, chafing, and interference from cargo, passengers, loose objects, or the freezing of moisture.

(b) There must be means in the cockpit to prevent the entrance of foreign objects into places where they would jam any one connecting or transmitting element of the system.

(c) Each element of the load alleviation system must have design features, or must be distinctively and permanently marked, to minimize the possibility of incorrect assembly that could result in malfunctioning of the control system.
unsafe condition for the specified products. The MCAI states:

> During structural part assembly in Airbus production line, some nuts Part Number (P/N) ASNA2531–4 were found cracked. Investigations were performed to determine the batches of the affected nuts and had revealed that these nuts have been installed in production on the fuselage of aeroplanes listed in the applicability section of this [EASA] AD.

Static, fatigue and corrosion tests were performed, which demonstrated that no immediate maintenance action is necessary. However, a large number of these nuts are fitted on primary structural elements, which could have long-term consequences.

This condition, if not corrected, could impair the structural integrity of the affected aeroplanes.

For the reasons described above, this [EASA] AD requires [an inspection to determine if certain fuselage nuts are installed] a detailed inspection [for cracking] of the affected nuts, associated corrective actions, [general visual inspection for scratching of the hole if necessary] depending on findings, and replacement of the affected P/N ASNA2531–4 nuts with new ones, having the same P/N.

* * * * *

Required actions include related investigative and corrective actions if necessary. Related investigative actions include a general visual inspection for scratching of the hole. Corrective actions include replacing the fastener and installing a new fuselage nut. You may obtain further information by examining the MCAI in the AD docket.

**Comments**

We gave the public the opportunity to participate in developing this AD. We received no comments on the NPRM (77 FR 19567, April 2, 2012) or on the determination of the cost to the public.

**Conclusion**

We reviewed the available data and determined that air safety and the public interest require adopting the AD as proposed.

**Costs of Compliance**

We estimate that this AD will affect 152 products of U.S. registry. We also estimate that it will take about 15 work-hours per product to comply with the basic requirements of this AD. The average labor rate is $85 per work-hour. Based on these figures, we estimate the cost of this AD to the U.S. operators to be $193,800, or $1,275 per product. In addition, we estimate that any necessary follow-on actions would take about 10 work-hours and require parts costing $362, for a cost of $1,212 per product. We have no way of determining the number of products that may need these actions.

**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 rulemaking action.

**Regulatory Findings**

We 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);
3. Will not affect intrastate aviation in Alaska; and
4. 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 regulatory evaluation of the estimated costs to comply with this AD and placed it in the AD docket.

**Examining the AD Docket**

You may examine the AD docket on the Internet at http://www.regulations.gov; or in person at the Docket Operations office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains the NPRM (77 FR 19567, April 2, 2012), the regulatory evaluation, any comments received, and other information. The street address for the Docket Operations office (telephone (800) 647–5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

**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 FAA amends 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. The FAA amends §39.13 by adding the following new AD:


(a) Effective Date

This airworthiness directive (AD) becomes effective August 27, 2012.

(b) Affected ADs

None.

(c) Applicability


(d) Subject

Air Transport Association (ATA) of America Code 53: Fuselage.

(e) Reason

This AD was prompted by reports of fuselage nuts found cracked. We are issuing this AD to detect and correct fuselage nuts found cracked, which could result in reduced structural integrity of the airplane.

(f) Compliance

You are responsible for having the actions required by this AD performed within the compliance times specified, unless the actions have already been done.

(g) Inspection and Replacement

Within 72 months since first flight of the airplane or within 90 days after the effective date of this AD, whichever occurs later, do an inspection for nuts having part number (P/N) ASNA2531–4 located in the fuselage. If a nut having P/N ASNA2531–4 is found, before further flight, do a detailed inspection for cracking of the nut, and all applicable related investigative and corrective actions, in
accordance with the Accomplishment Instructions of Airbus Service Bulletin A320–53–1218, Revision 01, including Appendices 01 and 02, dated June 17, 2010. If any cracking is found, before further flight, repair in accordance with the Accomplishment Instructions of Airbus Service Bulletin A320–53–1218, Revision 01, including Appendices 01 and 02, dated June 17, 2010.

(h) Reporting

Submit a report of the findings of the inspection required by paragraph (g) of this AD to Airbus in accordance with Appendix 01 of Airbus Service Bulletin A320–53–1218, Revision 01, including Appendices 01 and 02, dated June 17, 2010, at the applicable time specified in paragraph (h)(1) or (h)(2) of this AD.

(1) If the inspection was done on or after the effective date of this AD: Submit the report within 90 days after the inspection.

(2) If the inspection was done before the effective date of this AD: Submit the report within 90 days after the effective date of this AD.

(i) Credit for Previous Actions

This paragraph provides credit for inspections and replacements required by paragraph (g) of this AD, if those actions were performed before the effective date of this AD using Airbus Service Bulletin A320–53–1218, including Appendices 01 and 02, dated February 8, 2010.

(j) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) Alternative Methods of Compliance (AMOCs): The Manager, International Branch, ANM–116, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the International Branch, send it to ATTN: Sanjay Ralhan, Aerospace Engineer, International Branch, ANM–116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, Washington 98057–3356; phone: 425–227–1405; fax: 425–227–1149. Information may be emailed to 9–ANM–116–AMOC–REQUESTS@faa.gov. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/ certificate holding district office. The AMOC approval letter must specifically reference this AD.

(2) Airworthiness 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: A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB Control Number. The OMB Control Number for this information collection is 2120–0056. Public reporting for this collection of information is estimated to be approximately 5 minutes per response, including the time for reviewing instructions, completing and reviewing the collection of information. All responses to this collection of information are mandatory. Comments concerning the accuracy of this burden and suggestions for reducing the burden should be directed to the FAA at: 800 Independence Ave. SW., Washington, DC 20591; Attn: Information Collection Clearance Officer, AES–200.

(k) Material Incorporated by Reference

Refer to MCAI European Aviation Safety Agency Airworthiness Directive 2011–0120R1, dated July 13, 2011; and Airbus Service Bulletin A320–53–1218, Revision 01, including Appendices 01 and 02, dated June 17, 2010; for related information.

(l) Related Information

The following provisions also apply to this AD:

(1) If the inspection was done on or after the effective date of this AD, submit the report within 90 days after the inspection.

(2) If the inspection was done before the effective date of this AD: Submit the report within 90 days after the effective date of this AD.

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