



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2015-5318; Directorate Identifier 2015-CE-035-AD; Amendment 39-18437; AD 2016-06-06]

RIN 2120-AA64

Airworthiness Directives; Quest Aircraft Design, LLC Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for certain Quest Aircraft Design, LLC Model KODIAK 100 airplanes. This AD was prompted by a report of limited control yoke movement of the elevator control system due to cushion edging jammed in the elevator control anti-rotation guide slot. This AD requires repetitively inspecting the elevator control system cushion edging for proper condition; replacing the cushion edging; and at a specified time terminating the repetitive inspections by installing wear pads on the elevator bearing assemblies. We are issuing this AD to correct the unsafe condition on these products.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: For service information identified in this AD, contact Quest Aircraft Design, LLC, 1200 Turbine Drive, Sandpoint, Idaho 83864; telephone: (208) 263-1111; toll free: (866) 263-1112; email: CustomerService@QuestAircraft.com; Internet:

www.questaircraft.com. You may review copies of the referenced service information at the FAA, Small Airplane Directorate, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329-4148. It is also available on the Internet at <http://www.regulations.gov> by searching for Docket No. FAA-2015-5318.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2015-5318; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the regulatory evaluation, any comments received, and other information. The address for the Docket Office (telephone: 800-647-5527) is Document Management Facility, U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: David Herron, Aerospace Engineer, Seattle Aircraft Certification Office, FAA, 1601 Lind Avenue SW, Renton, Washington 98057; phone: (425) 917-6469; fax: (425) 917-6591; email: david.herron@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to certain Quest Aircraft Design, LLC Model KODIAK 100 airplanes. The NPRM published in the Federal Register on November 5, 2015 (80 FR 68477). The NPRM was prompted by a report of limited control yoke movement of the elevator control system due to cushion edging jammed in the elevator control anti-rotation guide slot. The NPRM proposed to require repetitively inspecting the elevator control system cushion edging for proper condition; replacing the cushion edging; and at

a specified time terminating the repetitive inspections by installing wear pads on the elevator bearing assemblies. We are issuing this AD to correct the unsafe condition on these products.

Comments

We gave the public the opportunity to participate in developing this AD. The following presents the comments received on the NPRM (80 FR 68477, November 5, 2015) and the FAA's response to each comment.

Request to Include Revised Service Bulletin

Quest Aircraft Design revised one of the related service bulletins and requested that Quest Aircraft Company KODIAK 100 Mandatory Service Bulletin SB14-07, Revision 01, dated November 23, 2015, be incorporated into the final rule AD action.

We agree. We revised this AD as requested.

Request to Reference Only the Field Service Instructions

Quest Aircraft Design stated that the instructions for doing the actions required in the AD are actually contained in the Field Service Instructions (FSIs) issued by Quest Aircraft and that there is no need to include reference to the related service bulletins since they are basically cover letters that point to the FSIs for the instructions. The commenter requested to have the related service bulletins removed from the AD to make the AD clearer to the reader and to eliminate any confusion.

We agree that the FSIs contain the instructions for completing the actions required in this AD; however, the service bulletins contain additional pertinent information, such as company contact information and FAA approval status that is not included in the associated FSI.

We do not agree that the service bulletins should be removed from the AD. We did not revise this AD as requested.

Conclusion

We reviewed the relevant data, considered the comments received, and determined that air safety and the public interest require adopting this AD with the changes described previously and minor editorial changes. We have determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM (80 FR 68477, November 5, 2015) for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM (80 FR 68477, November 5, 2015).

We also determined that these changes will not increase the economic burden on any operator or increase the scope of this AD.

Related Service Information under 1 CFR part 51

We reviewed Quest Aircraft Company KODIAK 100 Mandatory Service Bulletin SB14-07, Revision 01, dated November 23, 2015; Quest Aircraft KODIAK Mandatory Service Bulletin SB14-07, dated August 26, 2014; Quest Aircraft Company Field Service Instruction, Elevator Control System – Cushion Edging Inspection, Report No. FSI-105, Revision 00, not dated; Quest Aircraft KODIAK 100 Recommended Service Bulletin SB15-01, dated March 26, 2015; and Quest Aircraft Field Service Instruction, Yoke Anti-Rotation Guide Wear Pad Upgrade, Report No. FSI-108, Revision 00, not dated. The service information describes procedures for repetitively inspecting the cushion edging installed on the elevator control anti-rotation guide for proper condition, wear, and security, and replacing if necessary; and removing the cushion edging and installing wear pads on the pilot and co-pilot arms of the elevator bearing assemblies as a terminating action to the repetitive inspections of the cushion edging. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

Costs of Compliance

We estimate that this AD affects 60 airplanes of U.S. registry.

We estimate the following costs to comply with this AD:

Estimated costs

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Inspect the cushion edging on each side of the elevator control anti-rotation guide slot	.5 work-hour X \$85 per hour = \$42.50 per inspection	Not applicable	\$42.50 per inspection	\$2,550 per inspection
Required terminating action for repetitive inspections – replace cushion edging with wear pads	3 work-hours X \$85 per hour = \$255	\$200	\$455	\$27,300

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

On-condition costs

Action	Labor cost	Parts cost	Cost per product
Replace cushion edging	1 work-hour X \$85 per hour = \$85	\$20	\$105

According to the manufacturer, some of the costs of this AD may be covered under warranty, thereby reducing the cost impact on affected individuals. We do not control warranty coverage for affected individuals. As a result, we have included all costs in our cost estimate.

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

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 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.

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 airworthiness directive (AD):

2016-06-06 **Quest Aircraft Design, LLC**: Amendment 39-18437; Docket No. FAA-2015-5318; Directorate Identifier 2015-CE-035-AD.

(a) Effective Date

This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to Quest Aircraft Design, LLC Model KODIAK 100 airplanes, all serial numbers 100-0001 through 100-0149, that are certificated in any category.

(d) Subject

Joint Aircraft System Component (JASC)/Air Transport Association (ATA) of America Code 2730; Elevator Control System.

(e) Unsafe Condition

This AD was prompted by a report of limited control yoke movement due to cushion edging jammed in the elevator control anti-rotation guide slot. We are issuing this AD to prevent failure of the elevator control system, which could result in loss of control.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Inspect Cushion Edging

Before further flight [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER] (after the effective date of this AD) and repetitively thereafter at intervals not to exceed 50 hours time-in-service until the terminating action specified in paragraph (i) of this AD is done, inspect the cushion edging, part number (P/N) M22529/2-3R-25, located on each side of the elevator control anti-rotation guide slot, P/N 100-619-0008, for the pilot and co-pilot control yoke assemblies, following section 5.1 Cushion Edging Inspection of Quest Aircraft Company Field Service Instruction, Elevator Control System – Cushion Edging Inspection, Report No. FSI-105, Revision 00, not dated, as specified in Quest Aircraft KODIAK Mandatory Service Bulletin SB14-07, dated August 26, 2014; and Quest Aircraft Company KODIAK 100 Mandatory Service Bulletin SB14-07, Revision 01, dated November 23, 2015.

(h) Replace Cushion Edging

If damage or wear is found during any inspection required in paragraph (g) of this AD, before further flight, replace the cushion edging following section 5.3 of Quest Aircraft Company Field Service Instruction, Elevator Control System – Cushion Edging Inspection, Report No. FSI-105, Revision 00, not dated, as specified in Quest Aircraft

KODIAK Mandatory Service Bulletin SB14-07, dated August 26, 2014; and Quest Aircraft Company KODIAK 100 Mandatory Service Bulletin SB14-07, Revision 01, dated November 23, 2015.

(i) Install Wear Pads (Terminating Action for the Repetitive Inspections)

Within 1 year after [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER] (the effective date of this AD), remove the cushion edging, P/N M22529/2-3R-25, installed on the elevator control anti-rotation guide, and install wear pads, P/N 100-619-0037, on the elevator bearing assembly link arm following section 5. Instructions, including all subsections, of Quest Aircraft Field Service Instruction, Yoke Anti-Rotation Guide Wear Pad Upgrade, Report No. FSI-108, Revision 00, not dated, as specified in Quest Aircraft KODIAK 100 Recommended Service Bulletin SB15-01, dated March 26, 2015. Installing all four wear pads on the pilot and co-pilot arms of the elevator bearing assemblies terminates the repetitive inspections required in paragraph (g) of this AD.

(j) Alternative Methods of Compliance (AMOCs)

(1) 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. 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 manager of the ACO, send it to the attention of the person identified in paragraph (k) of this AD. Information may be emailed to: 9-ANM-Seattle-ACO-AMOC-Requests@faa.gov.

(2) 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.

(k) Related Information

For more information about this AD, contact David Herron, Aerospace Engineer, Seattle ACO, FAA, 1601 Lind Avenue SW, Renton, Washington 98057; phone: (425) 917-6469; fax: (425) 917-6591; email: david.herron@faa.gov.

(l) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) Quest Aircraft Company KODIAK 100 Mandatory Service Bulletin SB14-07, Revision 01, dated November 23, 2015.

(ii) Quest Aircraft KODIAK Mandatory Service Bulletin SB14-07, dated August 26, 2014.

(iii) Quest Aircraft Company Field Service Instruction, Elevator Control System – Cushion Edging Inspection, Report No. FSI-105, Revision 00, not dated.

(iv) Quest Aircraft KODIAK 100 Recommended Service Bulletin SB15-01, dated March 26, 2015.

(v) Quest Aircraft Field Service Instruction, Yoke Anti-Rotation Guide Wear Pad Upgrade, Report No. FSI-108, Revision 00, not dated.

(3) For Quest Aircraft Design, LLC service information identified in this AD, contact Quest Aircraft Design, LLC, 1200 Turbine Drive, Sandpoint, Idaho 83864; telephone: (208) 263-1111; toll free: (866) 263-1112; email: CustomerService@QuestAircraft.com; Internet: www.questaircraft.com.

(4) You may view this service information at FAA, Small Airplane Directorate, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call 816-329-4148. In addition, you can access this service information on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2015-5318.

(5) You may view this service information that is incorporated by reference 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/cfr/ibr-locations.html>.

Issued in Kansas City, Missouri, on March 10, 2016.

Pat Mullen,
Acting Manager, Small Airplane Directorate,
Aircraft Certification Service
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