



[4910-13-P]

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2016-9388; Directorate Identifier 2016-NM-145-AD]**

**RIN 2120-AA64**

**Airworthiness Directives; Learjet Inc. Airplanes**

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

**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** We propose to adopt a new airworthiness directive (AD) for certain Learjet Inc. Model 36A airplanes. This proposed AD was prompted by a report indicating that an aileron cable failed on an airplane during a tension check and a determination that Model 36A airplanes were not included in AD 2005-13-36, which addresses this issue for other Learjet Inc. airplanes. This proposed AD would require a one-time inspection of the center ball of the aileron control cables for a defective swage, and corrective actions if necessary. We are proposing this AD to prevent the unsafe condition on these products.

**DATES:** We must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.
- Fax: 202-493-2251.
- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this NPRM, contact Learjet, Inc., One Learjet Way, Wichita, KS 67209-2942; telephone 316-946-2000; fax 316-946-2220; email [ac.ict@aero.bombardier.com](mailto:ac.ict@aero.bombardier.com); Internet <http://www.bombardier.com>. You may view this referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

### **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-2016-9388; 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 proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (phone: 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

**FOR FURTHER INFORMATION CONTACT:** Donald Ristow, Aerospace Engineer, Systems and Propulsion Branch, ACE-116W, FAA, Wichita Aircraft Certification Office (ACO), 1801 Airport Road, Room 100, Dwight D. Eisenhower National Airport, Wichita, Kansas 67209; phone: 316-946-4120; fax: 316-946-4107; email: [donald.ristow@faa.gov](mailto:donald.ristow@faa.gov).

### **SUPPLEMENTARY INFORMATION:**

#### **Comments Invited**

We invite you to send any written relevant data, views, or arguments about this proposal. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA-2016-9388; Directorate Identifier 2016-NM-145-AD” at the

beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD because of those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

### **Discussion**

We received a report indicating that an aileron cable failed on a Learjet Inc. Model 35A (C-21A) airplane when the cable underwent a tension check while being installed. Further investigation showed that an over-sized ball was swaged onto the cable during manufacture. Swaging an over-sized ball onto a cable allows excess material into the swaging die, which causes the ball to over-swage and then sever the cable strands. This condition, if not corrected, could result in severe weakening of the aileron cable, and consequent reduced controllability of the airplane.

The subject area on Learjet Inc. Model 36A airplanes is identical to that on the affected Model 35A (C-21A) airplane. Therefore, Model 36A airplanes may be subject to the same unsafe condition.

We previously issued AD 2005-13-36, Amendment 39-14173 (70 FR 38578, July 5, 2005) (“AD 2005-13-36”), for Learjet Inc. Model 23, 24, 24A, 24B, 24B-A, 24C, 24D, 24D-A, 24E, 24F, 24F-A, 25, 25A, 25B, 25C, 25D, 25F, 28, 29, 31, 31A, 35, 35A (C-21A), and 36 airplanes. Model 36A airplanes were inadvertently omitted from the applicability of that AD. The applicability of AD 2005-13-36 referred to Bombardier Alert Service Bulletin A35/36-27-42, dated December 23, 2002, for Model 35, 35A

(C-21A), and 36 airplanes. However, Model 36A airplanes are also identified in that service information.

### **Related Service Information under 1 CFR part 51**

We reviewed Bombardier Alert Service Bulletin A35/36-27-42, dated December 23, 2002. The service information describes procedures for a one-time inspection of the center ball of the aileron control cables for a defective swage, and replacement of defective cables. 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.

### **FAA's Determination**

We are proposing this AD because we evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other products of the same type design.

### **Proposed AD Requirements**

This proposed AD would require accomplishing the actions specified in the service information described previously, except as described in "Differences between this Proposed AD and the Service Information."

### **Differences between this Proposed AD and the Service Information**

Bombardier Alert Service Bulletin A35/36-27-42, dated December 23, 2002, recommends that operators accomplish the actions within 10 flight hours after receipt. This proposed AD would require that operators accomplish the actions within 100 flight hours, or 90 days after the effective date of the AD, whichever occurs first. We find that the proposed compliance time addresses the unsafe condition soon enough to maintain an adequate level of safety for the affected fleet. In developing an appropriate compliance time for this proposed AD we considered the degree of urgency associated with

addressing the unsafe condition, and the maximum interval of time allowable for all affected airplanes to continue to operate without compromising safety.

**Costs of Compliance**

We estimate that this proposed AD affects 21 airplanes of U.S. registry. We estimate the following costs to comply with this proposed AD:

**Estimated costs**

<b>Action</b>	<b>Labor cost</b>	<b>Parts cost</b>	<b>Cost per product</b>	<b>Cost on U.S. operators</b>
Inspection	1 work-hour X \$85 per hour = \$85	\$0	\$85	\$1,785

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

**On-condition costs**

<b>Action</b>	<b>Labor cost</b>	<b>Parts cost</b>	<b>Cost per product</b>
Cable Replacement	<sup>1</sup> Up to 48 work-hours X \$85 per hour = up to \$4,080	<sup>1</sup> Up to \$2,020	<sup>1</sup> Up to \$6,100

<sup>1</sup>These costs assume replacement of all 5 cables.

According to the manufacturer, some of the costs of this proposed 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**

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would 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 this proposed regulation:

- (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.

### **List of Subjects in 14 CFR Part 39**

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

## **The Proposed Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 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):

**Learjet Inc.:** Docket No. FAA-2016-9388; Directorate Identifier 2016-NM-145-AD.

#### **(a) Comments Due Date**

We must receive comments by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

#### **(b) Affected ADs**

None.

#### **(c) Applicability**

This AD applies to Learjet Inc. Model 36A airplanes, certificated in any category, as identified in Bombardier Alert Service Bulletin A35/36-27-42, dated December 23, 2002.

#### **(d) Subject**

Air Transport Association (ATA) of America Code 27, Flight controls.

#### **(e) Unsafe Condition**

This AD was prompted by a report indicating that an aileron cable failed on an airplane during a tension check. We are issuing this AD to prevent severe weakening of the aileron cable, and consequent reduced controllability of the airplane.

**(f) Compliance**

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

**(g) Inspection**

Within 100 flight hours or 90 days after the effective date of this AD, whichever occurs first, do a detailed inspection of the center ball of the aileron control cables for a defective swage, and before further flight, replace any damaged or defective cable with a new cable, in accordance with the Accomplishment Instructions of Bombardier Alert Service Bulletin A35/36-27-42, dated December 23, 2002. For the purposes of this AD, a detailed inspection is: An intensive examination of a specific item, installation, or assembly to detect damage, failure, or irregularity. Available lighting is normally supplemented with a direct source of good lighting at an intensity deemed appropriate. Inspection aids such as mirrors, magnifying lenses, etc., may be necessary. Surface cleaning and elaborate procedures may be required.

**(h) Parts Installation Limitation**

As of the effective date of this AD, no person may install on any airplane an aileron control cable unless it has been inspected in accordance with paragraph (g) of this AD.

**(i) No Reporting or Parts Return Requirement**

Although Bombardier Alert Service Bulletin A35/36-27-42, dated December 23, 2002, has procedures for submitting a report showing compliance and for returning any discrepant parts to the manufacturer, this AD does not include those requirements.

**(j) Alternative Methods of Compliance (AMOCs)**

(1) The Manager, Wichita 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)(1) of this AD.

(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**

(1) For more information about this AD, contact Donald Ristow, Aerospace Engineer, Systems and Propulsion Branch, ACE-116W, FAA, Wichita ACO, 1801 Airport Road, Room 100, Dwight D. Eisenhower National Airport, Wichita, Kansas 67209; phone: 316-946-4120; fax: 316-946-4107; email: donald.ristow@faa.gov.

(2) For service information identified in this AD, contact Learjet, Inc., One Learjet Way, Wichita, KS 67209-2942; telephone 316-946-2000; fax 316-946-2220; email ac.ict@aero.bombardier.com; Internet <http://www.bombardier.com>. You may view this referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

Issued in Renton, Washington, on November 7, 2016.

Michael Kaszycki,  
Acting Manager,  
Transport Airplane Directorate,  
Aircraft Certification Service.

[FR Doc. 2016-27532 Filed: 11/17/2016 8:45 am; Publication Date: 11/18/2016]