



[4910-13-P]

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2016-5594; Directorate Identifier 2014-NM-169-AD]**

**RIN 2120-AA64**

**Airworthiness Directives; Dassault Aviation Airplanes**

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

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

**SUMMARY:** We propose to adopt a new airworthiness directive (AD) for all Dassault Aviation Model FALCON 900EX and FALCON 2000EX airplanes. This proposed AD was prompted by a review that identified a nonconformity between the torque value applied to the screw-nuts of aileron servo actuators, and the torque value specified by the type design. This proposed AD would require replacing certain aileron servo actuators with serviceable servo actuators. We are proposing this AD to prevent desynchronization between two servo actuator barrels, which could lead to reduced control of the airplane during roll maneuvers at low altitude.

**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 Dassault Falcon Jet, P.O. Box 2000, South Hackensack, NJ 07606; telephone 201-440-6700; Internet <http://www.dassaultfalcon.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-2016-5594; 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 Operations office (telephone 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

**FOR FURTHER INFORMATION CONTACT:** Tom Rodriguez, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone 425-227-1137; fax 425-227-1139.

**SUPPLEMENTARY INFORMATION:**

**Comments Invited**

We invite you to send any written relevant data, views, or arguments about this proposed AD. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA-2016-5594; Directorate Identifier 2014-NM-169-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 based on 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**

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union, has issued EASA Airworthiness Directive 2014-0184, dated August 7, 2014 (referred to after this as the Mandatory Continuing Airworthiness Information, or “the MCAI”), to correct an unsafe condition for all

Dassault Aviation Model FALCON 900EX and FALCON 2000EX airplanes. The MCAI states:

A quality review of recently delivered aeroplanes identified a non-conformity concerning the torque value applied to screw-nuts of aileron servo actuators, which was inconsistent with the value specified by the type design.

The subsequent investigation demonstrated that the washer which is bent on nut and rod ensures the affected selector synchronisation between two servo actuator barrels for a minimum of 2,000 flight hours (FH). After this period, a possible de-synchronization of the affected selector assembly may occur.

This condition, if not corrected, could lead to reduced control of the aeroplane during roll manoeuvres at low altitude.

To address this potential unsafe condition, Dassault Aviation issued Service Bulletin (SB) F900EX-476 Revision 1 and SB F2000EX-350 to provide replacement instructions for the affected aileron servo actuators, as applicable to aeroplane type.

For the reasons described above, this [EASA] AD requires replacement of affected aileron servo actuators with serviceable parts. This [EASA] AD also identifies that the affected aileron servo actuators can be re-qualified as serviceable parts only after a refurbishment accomplished by an approved maintenance organization.

You may examine the MCAI in the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2016-5594.

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

We reviewed Dassault Service Bulletins F900EX-476, Revision 1, dated June 25, 2014; and F2000EX-350, dated April 9, 2014. This service information describes procedures for removing the aileron servo actuator. 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 and Requirements of this Proposed AD**

This product has been approved by the aviation authority of another country, and is approved for operation in the United States. Pursuant to our bilateral agreement with the State of Design Authority, we have been notified of the unsafe condition described in the MCAI and service information referenced above. We are proposing this AD because we evaluated all pertinent information and determined an unsafe condition exists and is likely to exist or develop on other products of these same type designs.

### **Costs of Compliance**

We estimate that this proposed AD affects 284 airplanes of U.S. registry.

We also estimate that it would take about 14 work-hours per product to comply with the basic requirements of this proposed AD. The average labor rate is \$85 per work-hour. Required parts would cost about \$43,460 per product. Based on these figures, we estimate the cost of this proposed AD on U.S. operators to be \$12,680,600, or \$44,650 per product.

### **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):

**Dassault Aviation:** Docket No. FAA-2016-5594; Directorate Identifier 2014-NM-169-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 all Dassault Aviation Model FALCON 900EX and FALCON 2000EX airplanes, certificated in any category.

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

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

**(e) Reason**

This AD was prompted by a review that identified a nonconformity between the torque value applied to the screw-nuts of aileron servo actuators, and the torque value specified by the type design. We are issuing this AD to prevent desynchronization between two servo actuator barrels, which could lead to reduced control of the airplane during roll maneuvers at low altitude.

**(f) Compliance**

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

**(g) Replacement of Aileron Servo Actuator**

At the later of the applicable time specified in paragraphs (g)(1) and (g)(2) of this AD: Replace each affected aileron servo actuator, as identified in figure 1 to paragraph (g) of this AD (for Model FALCON 900EX airplanes) or figure 2 to paragraph (g) of this AD (for Model FALCON 2000EX airplanes), with a serviceable part in accordance with the Accomplishment Instructions of Dassault Service Bulletin F900EX-476, Revision 1, dated June 25, 2014; or Dassault Service Bulletin F2000EX-350, dated April 9, 2014; except where Dassault Service Bulletin F900EX-476, Revision 1, dated June 25, 2014; or F2000EX-350, dated April 9, 2014; specify to “remove” the applicable aileron servo actuator, this AD requires replacement of the applicable aileron servo actuator. A serviceable part is one that is specified in the “New P/N” column in the table of paragraph 3., “Material Information,” of Dassault Service Bulletin F900EX-476, Revision 1, dated June 25, 2014; or Dassault Service Bulletin F2000EX-350, dated April 9, 2014.

(1) For airplanes on which the aileron servo actuator was not replaced during maintenance: At the later of the times specified in paragraphs (g)(1)(i) and (g)(1)(ii) of this AD.

(i) Within 25 months or 1,640 flight hours, whichever occurs first, since the date of issuance of the original airworthiness certificate or date of issuance for the original export certificate of airworthiness.

(ii) Within 30 days after the effective date of this AD.

(2) For airplanes on which the aileron servo actuator was replaced during maintenance: At the later of the times specified in paragraphs (g)(2)(i) and (g)(2)(ii) of this AD.

(i) Within 1,640 flight hours after replacement of the aileron servo actuator during maintenance.

(ii) Within 30 days after the effective date of this AD.

Note 1 to paragraph (g) of this AD: The affected aileron servo actuators are known to be installed on the following airplanes: Prior to airplane delivery, on Model FALCON 900EX airplanes having serial number (S/N) 265 through 270 inclusive, S/N 272 and S/N 273, and on Model FALCON 2000EX airplanes having S/N 243, S/N 246 through 258 inclusive, S/N 260 through 263 inclusive, S/N 702 through 710 inclusive and S/N 714; and after airplane delivery, during a maintenance operation on Model FALCON 900EX airplane having S/N 177.

Figure 1 to paragraph (g) of this AD – *Affected Actuators on Model FALCON*

*900EX Airplanes*

<b>Model FALCON 900EX Airplane having S/N -</b>	<b>With Actuator Part Number (P/N) -</b>	<b>And Actuator S/N -</b>
177	103117-06	5003
265	103117-06	5002
266	103117-05	5000
	103117-06	5007
267	103117-05	5001
268	103117-05	5004
269	103117-05	5005
	103117-06	5011
270	103117-06	5012
	103117-13	5017
272	103117-05	5010
	103117-14	5016
273	103117-13	5014
	103117-14	5020

Figure 2 to paragraph (g) of this AD – *Affected Actuators on Model FALCON*

*2000EX Airplanes*

<b>Model FALCON 2000EX Airplane Having S/N -</b>	<b>With Actuator P/N -</b>	<b>And Actuator S/N -</b>
243	103151-08	5002
246	103151-07	5000
	103151-08	5003
247	103151-07	5001
	103151-08	5006
248	103151-07	5004
	103151-08	5007
249	103151-07	5005
	103151-08	5012
250	103151-07	5008
	103151-08	5013
251	103151-07	5009
	103151-08	5014
252	103151-07	5011
	103151-08	5016
253	103151-07	5010
	103151-08	5015
254	103151-08	5017
	103151-07	5018
255	103151-07	5019
	103151-08	5022
256	103151-07	5021
	103151-08	5023
257	103151-08	5024
	103151-07	5026
258	103151-07	5027
	103151-08	5033
260	103151-08	5032
	103151-07	5035
261	103151-08	5037
	103151-07	5041
262	103151-08	5039
	103151-07	5047
263	103151-08	5044
	103151-09	5064
702	103151-07	5029

703	103151-07	5034
	103151-08	5042
704	103151-08	5036
	103151-07	5040
705	103151-08	5038
	103151-07	5046
706	103151-08	5043
	103151-07	5048
707	103151-07	5054
	103151-08	5057
708	103151-08	5045
	103151-07	5050
709	103151-08	5074
710	103151-07	5051
	103151-08	5053
714	103151-09	5065
	103151-10	5067

#### **(h) Parts Installation Limitation**

As of the effective date of this AD, no aileron servo actuator having a P/N and S/N listed in figure 1 to paragraph (g) of this AD or figure 2 to paragraph (g) of this AD is allowed to be installed on any airplane, unless the mark “D1” is included on the actuator repair placard.

Note 2 to paragraph (h) of this AD: The mark “D1” on an aileron servo actuator repair placard indicates that the affected part has been refurbished by an approved maintenance organization and is qualified as a serviceable part.

#### **(i) Other FAA AD Provisions**

The following provisions also apply to this AD:

**(1) Alternative Methods of Compliance (AMOCs):** The Manager, ANM-116, International Branch, Transport Airplane Directorate, 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: Tom Rodriguez, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone 425-227-1137; fax 425-227-1139. 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) Contacting the Manufacturer:** For any requirement in this AD to obtain corrective actions from a manufacturer, the action must be accomplished using a method approved by the Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA; or the European Aviation Safety Agency (EASA); or Dassault Aviation's EASA Design Organization Approval (DOA). If approved by the DOA, the approval must include the DOA-authorized signature.

**(j) Related Information**

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) EASA Airworthiness Directive 2014-0184, dated August 7, 2014, for related information. This MCAI may be found in the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2016-5594.

(2) For service information identified in this AD, contact Dassault Falcon Jet, P.O. Box 2000, South Hackensack, NJ 07606; telephone 201-440-6700; Internet <http://www.dassaultfalcon.com>. You may view this 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 April 8, 2016.

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

[FR Doc. 2016-09003 Filed: 4/19/2016 8:45 am; Publication Date: 4/20/2016]