



[4910-13-P]

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2016-9302; Directorate Identifier 2016-NM-037-AD; Amendment 39-18826; AD 2017-06-02]**

**RIN 2120-AA64**

**Airworthiness Directives; Fokker Services B.V. Airplanes**

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

**ACTION:** Final rule.

**SUMMARY:** We are adopting a new airworthiness directive (AD) for Fokker Services B.V. Model F28 Mark 0100 airplanes equipped with Rolls-Royce TAY 650-15 engines. This AD was prompted by reports of uncontained engine fan blade failures in Rolls-Royce TAY 650-15 engines. This AD requires installation of a caution placard in the flight compartment. We are issuing this AD to address 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 a certain publication 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 final rule, contact Fokker Services B.V., Technical Services Dept., P.O. Box 1357, 2130 EL Hoofddorp, the Netherlands; telephone: +31 (0)88-6280-350; fax: +31 (0)88-6280-111; email: technicalservices@fokker.com; Internet <http://www.myfokkerfleet.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. It is also available on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2016-9302.

#### **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-2016-9302; 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 street address for the Docket Office (telephone 800-647-5527) is Docket 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:** 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 425-227-1149.

## **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 Fokker Services B.V. Model F28 Mark 0100 airplanes equipped with Rolls-Royce TAY 650-15 engines. The NPRM published in the Federal Register on November 1, 2016 (81 FR 75759) (“the NPRM”). The NPRM was prompted by reports of uncontained engine fan blade failures in Rolls-Royce TAY 650-15 engines. The fan blade failures occurred due to cracking of the fan blades, which was initiated under conditions of fan blade flutter during engine ground operation. The NPRM proposed to require installation of a caution placard in the flight compartment. We are issuing this AD to prevent certain engine thrust settings during ground operation, which can cause the fan blades to flutter and fail, resulting in damage to the airplane and possible injury to personnel.

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union, has issued EASA Airworthiness Directive Airworthiness Directive 2013-0141, dated July 12, 2013 (referred to after this as the Mandatory Continuing Airworthiness Information, or “the MCAI”), to correct an unsafe condition for Fokker Services B.V. Model F28 Mark 0100 airplanes equipped with Rolls-Royce TAY 650-15 engines. The MCAI states:

In the past, two F28 [Mark] 0100 aeroplanes with TAY [650-15] engines were involved in incidents as a result of uncontained engine fan blade failures. The fan blade failures occurred due to cracking of the fan blades, which was initiated under conditions of fan blade flutter. This fan blade flutter can occur during stabilized reverse thrust

operation within a specific N1 RPM-range [revolutions per minute], known as Keep Out Zone (KOZ), which has been identified to be between 57% and 75% N1 RPM.

To address this potential unsafe condition [which can result in damage to the airplane and possible injury to personnel], [Civil Aviation Authority – The Netherlands] CAA-NL issued [Dutch] AD (BLA) nr. 2002-119 for the aeroplane, while Luftfahrt-Bundesamt (LBA) Germany issued [German] AD (LTA) 2002-090 (later revised) for the Rolls-Royce Tay [650-15] engines. More recently, LBA [German] AD 2002-090R1 was superseded by EASA AD 2013-0070.

During stabilized forward thrust operation of an engine with the aeroplane stationary on the ground (e.g. maintenance engine ground running), the same type of fan blade flutter can occur. To ensure maintenance personnel awareness of the engine speed KOZ when performing engine ground running (in forward or reverse thrust), a caution placard must be introduced in the flight compartment.

For the reasons described above, this [EASA] AD requires the installation of a caution placard in the flight compartment, between the Standby Engine Indicator (SEI) and the Multi-Functional Display Unit (MFDU).

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-2016-9302.

### **Comments**

We gave the public the opportunity to participate in developing this AD. We received no comments on the NPRM or on the determination of the cost to the public.

### **Conclusion**

We reviewed the relevant data and determined that air safety and the public interest require adopting this AD as proposed except for minor editorial changes. We have determined that these minor changes:

- 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.

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

We reviewed Fokker Service Bulletin SBF100-11-027, dated April 18, 2013. This service information describes procedures for the installation of a caution placard. 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 4 airplanes of U.S. registry.

We estimate the following costs to comply with this 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>
Installation of placard	1 work-hour × \$85 per hour = \$85	\$46	\$131	\$524

**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.

### **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):

**2017-06-02 Fokker Services B.V.:** Amendment 39-18826; Docket No. FAA-2016-9302; Directorate Identifier 2016-NM-037-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 Fokker Services B.V. Model F28 Mark 0100 airplanes, certificated in any category, all serial numbers if equipped with Rolls-Royce TAY 650-15 engines.

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

Air Transport Association (ATA) of America Code 11, Placards and Markings.

**(e) Reason**

This AD was prompted by reports of uncontained engine fan blade failures in Rolls-Royce TAY 650-15 engines. We are issuing this AD to prevent certain engine thrust settings during ground operation, which can cause the fan blades to flutter and fail, resulting in damage to the airplane and possible injury to personnel.

**(f) Compliance**

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

**(g) Installation of Caution Placard**

Within 6 months after the effective date of this AD, install a caution placard in the flight compartment, between the standby engine indicator (SEI) and the multi-functional display unit (MFDU), in accordance with the Accomplishment Instructions of Fokker Service Bulletin SBF100-11-027, dated April 18, 2013.

Note 1 to paragraph (g) of this AD: Additional information can be found in Fokker All Operators Message AOF100.177 #05, dated April 18, 2013.

**(h) Other FAA AD Provisions**

The following provisions also apply to this AD:

**(1) Alternative Methods of Compliance (AMOCs):** The Manager, International Branch, ANM-116, 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 425-227-1149. 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.

**(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 Fokker Services B.V.'s EASA Design Organization Approval (DOA). If approved by the DOA, the approval must include the DOA-authorized signature.

**(i) Related Information**

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) EASA AD 2013-0141, dated July 12, 2013, 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-2016-9302.

(2) For more information about this AD, 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 425-227-1149.

(3) Service information identified in this AD that is not incorporated by reference is available at the addresses specified in paragraphs (j)(3) and (j)(4) of this AD.

**(j) 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 this AD specifies otherwise.

(i) Fokker Service Bulletin SBF100-11-027, dated April 18, 2013.

(ii) Reserved.

(3) For service information identified in this AD, contact Fokker Services B.V., Technical Services Dept., P.O. Box 1357, 2130 EL Hoofddorp, the Netherlands; telephone: +31 (0)88-6280-350; fax: +31 (0)88-6280-111; email: [technicalservices@fokker.com](mailto:technicalservices@fokker.com); Internet <http://www.myfokkerfleet.com>.

(4) 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.

(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 Renton, Washington, on March 7, 2017.

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

[FR Doc. 2017-05161 Filed: 3/21/2017 8:45 am; Publication Date: 3/22/2017]