DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39
RIN 2120–AA64

Airworthiness Directives; Fokker Services B.V. Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to adopt a new airworthiness directive (AD) for Fokker Services B.V. Model F28 Mark 0100 series 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. 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. This proposed AD would require installation of a caution placard in the flight compartment. We are proposing 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.

DATES: We must receive comments on this proposed AD by December 16, 2016.

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.


• 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 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 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–2016–9302; 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 proposed AD, the regulatory evaluation, any comments received, and other information.

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–2016–9302; Directorate Identifier 2016–NM–037–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 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 series 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], CAA–NL issued AD (BLA) nr. 2002–119 for the aeroplane, while Luftfahrt-Bundesamt (LBA) Germany issued AD (LTA) 2002–090 [later revised] for the Rolls-Royce Tay [650–15] engines. More recently, LBA 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 are aware of the engine speed KOZ when performing engine ground running (in forward or reverse thrust), a caution placard must be installed 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).


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.

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 the same type design.
Costs of Compliance
We estimate that this proposed AD affects 4 airplanes of U.S. registry.

<table>
<thead>
<tr>
<th>Action</th>
<th>Labor cost</th>
<th>Parts cost</th>
<th>Cost per product</th>
<th>Cost on U.S. operators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Install Placard</td>
<td>$85 per hour = $85</td>
<td>$46</td>
<td>$131</td>
<td>$524</td>
</tr>
</tbody>
</table>

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):

(a) Comments Due Date
We must receive comments by December 16, 2016.

(b) Affected ADs
None.

(c) Applicability
This AD applies to Fokker Services B.V. Model F28 Mark 0100 series 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. 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. 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) Install 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.
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 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 Airworthiness Directive 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 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
DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39


RIN 2120–AA64

Airworthiness Directives; CFM International S.A. Turbofan Engines

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to adopt a new airworthiness directive (AD) for certain CFM International S.A. (CFM) CFM56–5B turbofan engines. This proposed AD was prompted by reports of the failure of the radial drive shaft (RDS) on CFM CFM56–5B engines. This proposed AD would require removal of the RDS assembly and the RDS outer housing and their replacement with parts eligible for installation. We are proposing this AD to prevent failure of the RDS, which could lead to failure of one or more engines, loss of thrust control, and damage to the airplane.

DATES: We must receive comments on this proposed AD by December 16, 2016.

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.

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 CFM International Inc., Aviation Operations Center, 1 Neumann Way, M/D Room 285, Cincinnati, OH 45125; phone: 877–432–3272; fax: 877–432–3329; email: aviation.fleetsupport@ge.com. You may view this service information at FAA, Engine & Propeller Directorate, 1200 District Avenue, Burlington, MA. For information on the availability of this material at the FAA, call 781–238–7125.

Exchanging 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–2016–9128; 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.


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–2016–9128; Directorate Identifier 2016–NE–19–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 have received 9 reports of failure of the RDS on CFM CFM56–5B engines. CFM has identified an affected population of RDSs suspected of generating unbalance levels that would lead to failure of the RDS bearing. This proposed AD would require removal of the RDS assembly and the RDS outer housing for the affected population. This condition, if not corrected, could result in failure of the RDS, which could lead to failure of one or more engines, loss of thrust control, and damage to the airplane.

Related Service Information Under 1 CFR Part 51

We reviewed CFM Service Bulletin (SB) CFM56–5B S/B 72–0934, dated August 1, 2016. The service information describes procedures for removal of the suspect RDS assembly and the RDS outer housing. 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 removal of the RDS assembly and the RDS outer housing and their replacement with parts eligible for installation.

Differences Between This Proposed AD and the Service Information

CFM SB CFM56–5B S/B 72–0934, dated August 1, 2016, separates the affected RDS population into three batches with different removal dates for each batch. This proposed AD requires removal of the affected RDS assembly and RDS outer housing within 6 months of the effective date after this AD.

Costs of Compliance

We estimate that this proposed AD affects eight engines installed on airplanes of U.S. registry.

We estimate the following costs to comply with this proposed AD: