



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2016-9389; Directorate Identifier 2014-NM-153-AD]

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 all Fokker Services B.V. Model F28 Mark 0100 series airplanes. This proposed AD was prompted by an evaluation by the design approval holder (DAH) indicating that certain wing fuel tank access panels are subject to widespread fatigue damage (WFD). This proposed AD would require replacement of affected access panels and modification of the coamings of the associated access holes. 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 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.

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-2016-9389; 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: 425-227-1149.

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-2016-9389; Directorate Identifier 2014-NM-153-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

Fatigue damage can occur locally, in small areas or structural design details, or globally, in widespread areas. Multiple-site damage is widespread damage that occurs in a large structural element such as a single rivet line of a lap splice joining two large skin panels. Widespread damage can also occur in multiple elements such as adjacent frames or stringers. Multiple-site damage and multiple-element damage cracks are typically too

small initially to be reliably detected with normal inspection methods. Without intervention, these cracks will grow, and eventually compromise the structural integrity of the airplane. This condition is known as widespread fatigue damage. It is associated with general degradation of large areas of structure with similar structural details and stress levels. As an airplane ages, WFD will likely occur, and will certainly occur if the airplane is operated long enough without any intervention.

The FAA's WFD final rule (75 FR 69746, November 15, 2010) became effective on January 14, 2011. The WFD rule requires certain actions to prevent structural failure due to WFD throughout the operational life of certain existing transport category airplanes and all of these airplanes that will be certificated in the future. For existing and future airplanes subject to the WFD rule, the rule requires that DAHs establish a limit of validity (LOV) of the engineering data that support the structural maintenance program. Operators affected by the WFD rule may not fly an airplane beyond its LOV, unless an extended LOV is approved.

The WFD rule (75 FR 69746, November 15, 2010) does not require identifying and developing maintenance actions if the DAHs can show that such actions are not necessary to prevent WFD before the airplane reaches the LOV. Many LOVs, however, do depend on accomplishment of future maintenance actions. As stated in the WFD rule, any maintenance actions necessary to reach the LOV will be mandated by airworthiness directives through separate rulemaking actions.

In the context of WFD, this action is necessary to enable DAHs to propose LOVs that allow operators the longest operational lives for their airplanes, and still ensure that

WFD will not occur. This approach allows for an implementation strategy that provides flexibility to DAHs in determining the timing of service information development (with FAA approval), while providing operators with certainty regarding the LOV applicable to their airplanes.

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union, has issued EASA AD 2016-0125, dated June 21, 2016, which supersedes EASA AD 2014-0158, dated July 7, 2014 (referred to after this as the Mandatory Continuing Airworthiness Information, or “the MCAI”), to correct an unsafe condition for all Fokker Services B.V. Model F28 Mark 0100 series airplanes. The MCAI states:

Based on findings on test articles, fatigue-induced cracks may develop in the coamings of certain wing fuel tank access panels Part Number (P/N) D12395-403 and P/N D12450-403, installed on Fokker F28 Mark 0100 aeroplanes.

To ensure the continued structural integrity with respect to fatigue, repetitive inspections were included in the Airworthiness Limitations Section (ALS) of the Instructions for Continued Airworthiness. Fokker Services also developed precautionary measures to reduce stress loads in the affected areas by replacement of the affected access panels with new panels, P/N D19701-401 and P/N D19701-403, having thinner skin, and a modification by introducing internal patches to the coamings of the affected access holes.

These precautionary measures were introduced with Service Bulletins (SB) SBF100-57-027 and SBF100-57-028. As part of the Widespread Fatigue Damage re-evaluation, it was concluded that repetitive inspections through the ALS do not provide a sufficient level of protection against the fatigue-induced cracks.

This condition, if not corrected, would affect the structural integrity of the lower wing skins of both outer wings in the areas surrounding the affected fuel tank access panels.

For the reasons described above, this [EASA] AD requires replacement of the affected access panels and modification of the coamings of these access holes.

Post-modification inspection requirements depend on the actual number of flight cycles accumulated at the moment of modification. Related detailed information is provided in SBF100-57-027 and SBF100-57-028, as well as in Fokker Services ALS Report SE-623 Issue 12.

Fokker Services All Operators Message AOF100.178#05 provides additional information concerning the subject addressed by this [EASA] AD.

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-2016-9389.

Related Service Information under 1 CFR part 51

Fokker Services B.V. has issued the following service information:

- Fokker Service Bulletin SBF 100-57-027, Revision 2, dated December 11, 2013. This service information provides instructions to replace certain fuel tank access panels.

- Fokker Service Bulletin SBF 100-57-028, Revision 2, dated December, 11, 2013. This service information provides instructions to modify the coamings of certain fuel tank access holes.

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.

Differences between this Proposed AD and the MCAI or Service Information

In the “Required Action(s) and Compliance Times” section of the MCAI, paragraphs (3) and (4) specify to incorporate or comply with certain maintenance tasks (repetitive inspections). These actions are not included in this proposed AD. Since EASA AD 2014-0158, dated July 7, 2014, was issued, EASA issued AD 2016-0125, dated June 21, 2016, which includes a requirement to incorporate those maintenance tasks. We are considering further rulemaking to require the actions specified in EASA AD 2016-0125, dated June 21, 2016.

Costs of Compliance

We estimate that this proposed AD affects 15 airplanes of U.S. registry.

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

Estimated costs

| Action | Labor cost | Parts cost | Cost per product | Cost on U.S. operators |
|------------------------------|---|------------|------------------|------------------------|
| Replacement and Modification | 510 work-hours X \$85 per hour = \$43,350 per airplane | \$45,500 | \$88,350 | \$1,325,250 |

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):

Fokker Services B.V.: Docket No. FAA-2016-9389; Directorate Identifier 2014-NM-153-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 Fokker Services B.V. Model F28 Mark 0100 series airplanes, certificated in any category, all serial numbers.

(d) Subject

Air Transport Association (ATA) of America Code 57, Wings.

(e) Reason

This AD was prompted by an evaluation by the design approval holder (DAH) indicating that certain wing fuel tank access panels are subject to widespread fatigue damage (WFD). We are issuing this AD to prevent fatigue cracking in the wing structure, which could result in reduced structural integrity of the airplane.

(f) Compliance

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

(g) Modification and Replacement

Within 63,000 flight cycles since first flight of the airplane, or within 90 days after the effective date of this AD, whichever occurs later, accomplish the actions specified in paragraphs (g)(1) and (g)(2) of this AD, as applicable.

(1) For airplanes identified in Fokker Service Bulletin SBF100-57-028, Revision 2, dated December 11, 2013: Modify the coamings of the fuel tank access holes

at the access panel locations identified in, and in accordance with the Accomplishment Instructions of Fokker Service Bulletin SBF100-57-028, Revision 2, dated December 11, 2013.

(2) For airplanes identified in Fokker Service Bulletin SBF100-57-027, Revision 2, dated December 11, 2013: Replace access panels having part number D12395-403 and D12450-403 with new panels having part number D19701-401 and D19701-403, at the access panel locations identified in, and in accordance with the Accomplishment Instructions of Fokker Service Bulletin SBF100-57-027, Revision 2, dated December 11, 2013.

(h) Parts Installation Prohibition

(1) For airplanes that, on the effective date of this AD, have an access panel with part number D12395-403 or D12450-403 installed at any of the affected locations: After accomplishing the actions required by paragraphs (g)(1) and (g)(2) of this AD, as applicable, no person may install, on any airplane, access panels having part number D12395-403 or D12450-403 at any access panel location as identified in Fokker Service Bulletin SBF100-57-027, Revision 2, dated December 11, 2013.

(2) For airplanes that, on the effective date of this AD, do not have an access panel with part number D12395-403 or D12450-403 installed at any of the affected locations: As of the effective date of this AD, no person may install, on any airplane, access panels having part number D12395-403 or D12450-403 at any access panel location as identified in Fokker Service Bulletin SBF100-57-027, Revision 2, dated December 11, 2013.

(i) Credit for Previous Actions

(1) This paragraph provides credit for actions required by paragraph (g)(1) of this AD, if those actions were performed before the effective date of this AD using the service information specified in paragraph (i)(1)(i) or (i)(1)(ii) of this AD.

(i) Fokker Service Bulletin SBF100-57-028, dated May 2, 1994.

(ii) Fokker Service Bulletin SBF100-57-028, Revision 1, dated November 1, 1994.

(2) This paragraph provides credit for actions required by paragraph (g)(2) of this AD, if those actions were performed before the effective date of this AD using the service information specified in paragraph (i)(2)(i) or (i)(2)(ii) of this AD.

(i) Fokker Service Bulletin SBF100-57-027, dated September 13, 1993.

(ii) Fokker Service Bulletin SBF100-57-027, Revision 1, dated May 2, 1994.

(j) 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 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.

(k) Related Information

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) EASA AD 2014-0158, dated July 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-2016-9389.

(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 (0)88-6280-111; email: technicalservices@fokker.com; Internet: <http://www.myfokkerfleet.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 November 7, 2016.

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

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