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DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA–2018–0956; Product Identifier 2018–NM–041–AD; Amendment 39–19568; AD 2019–03–16]

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 all Fokker Services B.V. Model F.27 Mark 100, 200, 300, 400, 500, 600, and 700 airplanes. This AD was prompted by a report of a main landing gear (MLG) collapse due to a broken drag stay; an investigation revealed that the drag stay failure was due to fatigue cracks, introduced by incorrect machining of the affected drag stay tube during production. This AD requires an inspection of the drag stay unit to determine the signal indication, and related investigative and corrective actions if necessary. We are issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective April 8, 2019.

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of April 8, 2019.

ADDRESSES: For Fokker 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.* For Dowty Aerospace Landing Gear service information identified in this final rule, contact Safran Landing Systems, One Carbon Way, Walton, KY 41094; telephone (859) 525–8583; fax (859) 485–8827. You may view this service information at the FAA, Transport Standards Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206–231–3195. It is also available on the internet at *http://www.regulations.gov* by searching for and locating Docket No. FAA–2018–0956.

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–2018–0956; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, the regulatory evaluation, any comments received, and other information. The address for Docket Operations (phone: 800–647–5527) is 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 Section, Transport Standards Branch, FAA, 2200 South 216th St., Des Moines, WA 98198; telephone and fax 206–231–3226.

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 all Fokker Services B.V. Model F.27 Mark 100, 200, 300, 400, 500, 600, and 700 airplanes. The NPRM published in the **Federal Register** on November 8, 2018 (83 FR 55825). The NPRM was prompted by a report of an MLG collapse due to a broken drag stay; an investigation revealed that the drag stay failure was due to fatigue cracks, introduced by incorrect machining of the affected drag stay tube during production. The NPRM proposed to require an inspection of the drag stay unit to determine the signal indication, and related investigative and corrective actions if necessary.

We are issuing this AD to address fatigue cracking, which could lead to MLG collapse and result in damage to the airplane during landing and consequent injury to passengers.

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union, has issued EASA AD 2018–0015, dated January 25, 2018 (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 F.27 Mark 100, 200, 300, 400, 500, 600, and 700 airplanes. The MCAI states:

> In 1993, an occurrence was reported concerning an MLG collapse due to a broken drag stay on a Fokker F27 Mark 500 RFV (rough field version/configuration). The investigation revealed that the drag stay failure was due to fatigue cracks, introduced by incorrect machining (not smooth, with a notch) of the affected drag stay tube bore during production.
>
> This condition, if not detected and corrected, could lead to MLG collapse, possibly resulting in damage to the aeroplane during landing and consequent injury to occupants.
>
> To address this unsafe condition, DALG [Dowty Aerospace Landing Gear] issued SB [service bulletin] 32–169B and SB 32–82W (both later revised), and Fokker Services issued SB F27/32–167, to provide inspection instructions. Consequently, the Civil Aviation Authority of the Netherlands (CAA–NL) issued AD (BLA) 93–169 (later revised) [which corresponded to FAA AD 97–04–08, Amendment 39–9932 (62 FR 7924, February 21, 1997), and applies to certain Fokker Model F27 Mark 050, 100, 200, 300, 400, 600, and 700 airplanes], requiring a one-time ultrasonic inspection to identify the type of drag stay tube installed (with stepped or straight bore) on each affected drag stay unit, inspection of the affected drag stay tubes for the presence of cracks, and, depending on findings, re-identification.
>
> After CAA–NL AD (BLA) 93–169/2 was issued, another occurrence was reported on an F27 Mark 500 RFV. Investigation results determined that the drag stay tube of the second occurrence had not been inspected as required by CAA–NL AD (BLA) 93–169, due to misinterpretation of the instructions of Fokker SB F27/32–167. Prompted by these findings, Fokker Services issued SB F27–32–171, providing additional inspection instructions, and CAA–NL issued AD NL–2005–003 (EASA approval 2005–3869) [which corresponds to FAA AD 2006–25–06, Amendment 39–14847 (71 FR 71475, December 11, 2006) and applies to Fokker Services B.V. Model F.27 Mark 500 airplanes] to require repetitive inspections of the affected drag stay tubes to detect cracks and,

depending on findings, rework or replacement.

Since those SBs and [CAA–NL] ADs were issued, the applicable CMM [component maintenance manual] were changed, although with incorrect P/N information, as a result of which an affected drag stay tube with a non-conforming bore radius may inadvertently have been installed on an aeroplane. Prompted by these findings, the applicable CMM were corrected and re-issued, and SLS issued Service Letter (SL) F27–W–8 to inform the operators, and Fokker Services introduced the relevant corrections in the F27 Mark 100 through Mark 700 Illustrated Parts Catalogue (IPC) in September 2017.

Installation of an affected drag stay tube with a non-conforming bore radius, on an MLG drag stay unit that has been re-identified, *i.e.* not subject to the repetitive inspections as required by CAA–NL AD NL–2005–003, would reintroduce the unsafe condition as originally addressed by the SBs and ADs referred to above. To address this potential unsafe condition, Fokker Services issued SBF27–32–173 to provide instructions to inspect, remove/discard or re-identify the affected drag stay tubes.

For the reasons described above, this [EASA] AD requires a one-time inspection of the affected drag stay units to determine whether an affected drag stay tube is installed, repetitive inspections of those that have an affected drag stay tube installed, and, depending on findings, accomplishment of applicable corrective action(s) [which includes replacement of the drag stay tube].

With the issuance of this [EASA] AD and [EASA] AD 2018–0016 [dated January 25, 2018], the requirements of CAA–NL AD (BLA) 93–169/2 dated 29 April 1994 are no longer necessary and that AD is also cancelled.

EASA AD 2018–0016, dated January 25, 2018, applies to Model F.27 Mark 500 airplanes and has been added to the Required Airworthiness Action List.

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–2018–0956.

Comments

We gave the public the opportunity to participate in developing this final rule. 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 final rule 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 addressing 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

Fokker Services B.V. has issued Service Bulletin SBF27–32–173, dated November 30, 2017. This service information describes procedures for an inspection of the drag stay unit to determine the signal indication, and related investigative and corrective actions if necessary. 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.

Other Related Service Information

Dowty Aerospace Landing Gear issued Service Bulletin 32–82W, Revision 2, dated July 29, 1994; and Service Bulletin 32–169B, Revision 2, dated July 29, 1994. This service information describes procedures for reworking the drag stay tube. These documents are distinct since they apply to different airplane models.

This service information can be obtained from SAFRAN Landing Systems by the means identified in the **ADDRESSES** section.

Costs of Compliance

We estimate that this AD affects 1 airplane of U.S. registry. We estimate the following costs to comply with this AD:

ESTIMATED COSTS

Labor cost	Parts cost	Cost per product	Cost on U.S. operators
2 work-hours × $85 per hour = $170	$0	$170	$170

We have received no definitive data that would enable us to provide cost estimates for the on-condition actions specified in this AD.

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.

This AD is issued in accordance with authority delegated by the Executive Director, Aircraft Certification Service, as authorized by FAA Order 8000.51C. In accordance with that order, issuance of ADs is normally a function of the Compliance and Airworthiness Division, but during this transition period, the Executive Director has delegated the authority to issue ADs applicable to transport category airplanes and associated appliances to the Director of the System Oversight Division.

Regulatory Findings

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):

2019–03–16 Fokker Services B.V. **Airplanes:** Docket No. FAA–2018–0956; Product Identifier 2018–NM–041–AD.

(a) Effective Date

This AD is effective April 8, 2019.

(b) Affected ADs

This AD affects AD 2006–25–06, Amendment 39–14847 (71 FR 71475, December 11, 2006) (''AD 2006–25–06'') and AD 97–04–08, Amendment 39–9932 (62 FR 7924, February 21, 1997) (''AD 97–04–08'').

(c) Applicability

This AD applies to all Fokker Services B.V. Model F.27 Mark 100, 200, 300, 400, 500, 600, and 700 airplanes, certificated in any category.

(d) Subject

Air Transport Association (ATA) of America Code 32, Main landing gear.

(e) Reason

This AD was prompted by a report of a main landing gear (MLG) collapse due to a broken drag stay; an investigation revealed that the drag stay failure was due to fatigue cracks, introduced by incorrect machining of the affected drag stay tube during production. We are issuing this AD to address fatigue cracking, which could lead to MLG collapse and result in damage to the airplane during landing and consequent injury to passengers.

(f) Compliance

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

(g) Definitions

(1) For purposes of this AD, an affected drag stay unit is SAFRAN Landing Systems (previously Messier-Dowty, Dowty Aerospace) MLG drag stay unit, part number (P/N) 200261001, P/N 200261002, P/N 200261003, P/N 200261004, P/N 200485001, P/N 200485002, P/N 200485003, P/N 200485004, P/N 200684001, P/N 200684002, P/N 200684003, or P/N 200684004.

(2) For purposes of this AD, an affected drag stay tube is a SAFRAN Landing Systems (previously Messier-Dowty, Dowty Aerospace) MLG drag stay tube, P/N 200259300, which has a change in section (stepped bore).

(h) Configuration Verification of the Drag Stay Units

Within 12 months after the effective date of this AD, do an ultrasonic inspection of each affected drag stay unit to determine the configuration of the drag stay tube, in accordance with step F. of the Accomplishment Instructions of Fokker Service Bulletin SBF27–32–173, dated November 30, 2017.

(i) Re-Identification of an Affected Drag Stay Unit

(1) If, during the inspection required by paragraph (h) of this AD, an affected drag stay unit is found to have a straight bore drag stay tube, P/N 200485300, installed: Before further flight, re-identify that affected drag stay unit in accordance with step I.(2), I.(3), or I.(4), as applicable, of the Accomplishment Instructions of Fokker Service Bulletin SBF27–32–173, dated November 30, 2017.

(2) If, during the inspection required by paragraph (h) of this AD, an affected drag stay unit is found to have an affected drag stay tube, P/N 200259300, installed with a correct radius: Before further flight, re-identify the affected drag stay unit in accordance with step J.(1), J.(2), or J.(3), as applicable, of the Accomplishment Instructions of Fokker Service Bulletin SBF27–32–173, dated November 30, 2017.

(3) If, during the inspection required by paragraph (h) of this AD, an affected drag stay unit is found to have an affected drag stay tube, P/N 200259300, installed with an incorrect radius: Before further flight, re-identify the affected drag stay unit in accordance with step K.(1), K.(2), or K.(3), as applicable, of the Accomplishment Instructions of Fokker Service Bulletin SBF27–32–173, dated November 30, 2017.

(j) Inspection and Corrective Action for Certain Drag Stay Unit Part Numbers

For affected drag stay units having P/N 200261002, P/N 200261003, P/N 200485002, P/N 200485003, P/N 200684002, or P/N 200684003: Within 12 months after the effective date of this AD, do an ultrasonic inspection of the affected drag stay tube for any cracking, in accordance with step G. of the Accomplishment Instructions of Fokker Service Bulletin SBF27–32–173, dated November 30, 2017.

(1) If, during the ultrasonic inspection, a crack indication is found, before further flight, replace the affected drag stay tube with a serviceable part, in accordance with step H. of the Accomplishment Instructions of Fokker Service Bulletin SBF27–32–173, dated November 30, 2017.

(2) For affected drag stay units having P/N 200261002, P/N 200485002, or P/N 200684002 (drag stay units with incorrect bore radius drag stay tubes): If, during the ultrasonic inspection, no indication of cracking is found, within 1,500 flight cycles after that inspection, and, thereafter, at intervals not to exceed 1,500 flight cycles until the next scheduled MLG overhaul, repeat the ultrasonic inspection of the affected drag stay tube in accordance with step G. of the Accomplishment Instructions of Fokker Service Bulletin SBF27–32–173, dated November 30, 2017.

(k) Parts Installation Limitation

As of the effective date of this AD, no person may install, on any airplane, a drag stay unit (which includes installation of a replacement MLG), unless it has been determined that no affected drag stay tube is installed; or the installed affected drag stay tube has been reworked during the MLG overhaul in accordance with the instructions of Appendix B of Dowty Aerospace Landing Gear Service Bulletin 32–82W, Revision 2, dated July 29, 1994 (for Model F.27 Mark 500 airplanes), or Dowty Aerospace Landing Gear Service Bulletin 32–169B, Revision 2, dated July 29, 1994 (for Model F.27 Mark 100, 200, 300, 400, 600, and 700 airplanes), as applicable; or has passed an inspection (confirmed correct bore radius) in accordance with the Accomplishment Instructions of Fokker Service Bulletin SBF27–32–173, dated November 30, 2017. For the purpose of this AD, removal of an MLG or an affected drag stay unit from an airplane and re-installing that MLG or drag stay unit on the same airplane is not ''installation.''

(l) Terminating Action for Other ADs

Accomplishing the actions required by this AD terminates all requirements of AD 2006–25–06 and AD 97–04–08.

(m) Credit for Previous Actions

This paragraph provides credit for the applicable actions specified in paragraph (k) of this AD, if those actions were performed before the effective date of this AD using Dowty Aerospace Landing Gear Service Bulletin 32–82W, Revision 1, dated September 10, 1993, or Dowty Aerospace Landing Gear Service Bulletin 32–169B, Revision 1, dated September 10, 1993.

(n) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) *Alternative Methods of Compliance (AMOCs):* The Manager, International Section, Transport Standards Branch, 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 Section, send it to the attention of the person identified in paragraph (o)(2) of this AD. 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 Section, Transport Standards Branch, 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.

(o) Related Information

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) EASA AD 2018–0015, dated January 25, 2018, 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–2018–0956.

(2) For more information about this AD, contact Tom Rodriguez, Aerospace Engineer, International Section, Transport Standards Branch, FAA, 2200 South 216th St., Des Moines, WA 98198; telephone and fax 206–231–3226.

(3) Dowty Aerospace Landing Gear service information identified in this AD, and not incorporated by reference, is available from Safran Landing Systems, One Carbon Way, Walton, KY 41094; telephone (859) 525–8583; fax (859) 485–8827.

(p) 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 SBF27–32–173, dated November 30, 2017.

(ii) [Reserved]

(3) For Fokker 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.*

(4) You may view this service information at the FAA, Transport Standards Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206–231–3195.

(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 Des Moines, Washington, on February 14, 2019.

Michael Kaszycki,

Acting Director, System Oversight Division, Aircraft Certification Service.

[FR Doc. 2019–03267 Filed 3–1–19; 8:45 am]

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DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA–2018–0959; Product Identifier 2018–NM–123–AD; Amendment 39–19576; AD 2019–03–24]

RIN 2120–AA64

Airworthiness Directives; The Boeing Company Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for certain The Boeing Company Model 737–400 series airplanes. This AD was prompted by reports of cracking in the splice plate on the lower sill of the overwing emergency exit doors. This AD requires repetitive inspections for such cracking and applicable on-condition actions. We are issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective April 8, 2019.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of April 8, 2019.

ADDRESSES: For service information identified in this final rule, contact Boeing Commercial Airplanes, Attention: Contractual & Data Services (C&DS), 2600 Westminster Blvd., MC 110–SK57, Seal Beach, CA 90740–5600; telephone 562–797–1717; internet *https://www.myboeingfleet.com.* You may view this service information at the FAA, Transport Standards Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206–231–3195. It is also available on the internet at *http://www.regulations.gov* by searching for and locating Docket No. FAA–2018–0959.

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–2018–0959; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, the regulatory evaluation, any comments received, and other information. The address for Docket Operations (phone: 800–647–5527) is 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: James Guo, Aerospace Engineer, Airframe Section, FAA, Los Angeles ACO Branch, 3960 Paramount Boulevard, Lakewood, CA 90712–4137; phone: 562–627–5357; fax: 562–627–5210; email: *james.guo@faa.gov.*

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 certain The Boeing Company Model 737–400 series airplanes. The NPRM published in the **Federal Register** on November 8, 2018 (83 FR 55828). The NPRM was prompted by reports of cracking in the splice plate on the lower sill of the overwing emergency exit doors. The NPRM proposed to require repetitive inspections for such cracking and applicable on-condition actions. We are issuing this AD to address cracking in the splice plate, which, if not addressed, could result in the inability of a principal structural element to sustain limit loads and possible rapid decompression of the fuselage.

Comments

We gave the public the opportunity to participate in developing this final rule. We have considered the comments received. Boeing indicated no objection to the NPRM. Commenters Zack Jones and Josep Clapes stated their support for the NPRM.

Conclusion

We reviewed the relevant data, considered the comments received, and determined that air safety and the public interest require adopting this final rule 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 addressing 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 Boeing Alert Requirements Bulletin 737–53A1380 RB, dated July 18, 2018. This service information describes procedures for repetitive high frequency eddy current inspections for cracking in the splice plate on the lower sill of the overwing emergency exit doors and applicable on-condition actions. This service information is reasonably available