DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39


RIN 2120–AA64

Airworthiness Directives; Various Transport Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: The FAA proposes to adopt a new airworthiness directive (AD) for various transport airplanes. This proposed AD was prompted by reports of smoke and fumes in the flight deck. This proposed AD would require modification of certain universal serial bus (USB) receptacles located in the flight deck. The FAA is proposing this AD to address the unsafe condition on these products.

DATES: The FAA must receive comments on this proposed AD by August 8, 2019.

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, 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 service information at the FAA, Transport Standards Branch, 2200 South 216th St., Des Moines, WA 98198; telephone and fax 206–231–3225.

SUPPLEMENTARY INFORMATION:

Comments Invited

The FAA invites 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–2019–0444; Product Identifier 2019–NM–028–AD” at the beginning of your comments. The FAA specifically invites comments on the overall regulatory, economic, environmental, and energy aspects of this NPRM. The FAA will consider all comments received by the closing date and may amend this NPRM because of those comments.

The FAA will post all comments received, without change, to http://www.regulations.gov, including any personal information you provide. The FAA will also post a report summarizing each substantive verbal contact the FAA receives about this NPRM.

Discussion

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union, has issued EASA AD 2018–0259R1, dated February 7, 2019 (referred to after this as the Mandatory Continuing Airworthiness Information, or “the MCAI”), to correct an unsafe condition for the following airplanes on which certain USB receptacles were installed using certain Fokker service information:

• Fokker Services B.V. Model F.27 Mark 0070 and Mark 0100 airplanes.
• Fokker Services B.V. Model F.28 Mark 0070 and Mark 0100 airplanes.
• Airbus SAS Model A318–111 airplanes.
• Airbus SAS Model A340–312 and –313 airplanes.
• ATR—GIE Avions de Transport Régional Model ATR42–500 airplanes.
• ATR—GIE Avions de Transport Régional Model ATR72–212 and –212A airplanes.
• The Boeing Company Model 737–300, –400, –500, –700, –800 and –900ER series airplanes.
• The Boeing Company Model 757–200 series airplanes.
• The Boeing Company Model 767–200 and –300 series airplanes.
• The Boeing Company Model 777–200LR series airplanes.
• Bombardier, Inc., Model CL–600–2C10 (Regional Jet Series 700, 701 & 702) airplanes.

The MCAI states:

Several occurrences on various aeroplanes have been reported of smoke and fumes in the cockpit, due to overheating of an Electronic Flight Bag (EFB) [universal serial bus] USB receptacle, which had been installed by [Fokker Services] FBA–320–0167 Revision 1 of EBA320–0167.

To address this unsafe condition, the USB manufacturer developed a modification (change to USB receptacle [part number] P/N LS03–05050–B), and Fokker Services published the applicable SB/EB to provide those modification instructions, installing current limiting and overheat protection.

The reason described above, EASA issued AD 2018–0259 to require modification of such affected part. That [EASA] AD also prohibited (re)installation of affected parts. Since that [EASA] AD was issued, FS issued Revision 2 of EBDHC8–0033 embodied (part of EASA STC [service bulletin] SB, or minor modification, either an Engineering Change Request (ECR) or Compliance Record Report (CRR), as applicable. Investigation results revealed that each of these events was caused by a short circuit in the EFB charging cable.

This condition, if not corrected, could lead to further events of smoke/fumes in the cockpit, possibly resulting in excessive flight crew workload and/or injury to flight deck occupants.

To address this unsafe condition, the USB manufacturer developed and issued a modification (change to USB receptacle [part number] P/N LS03–05050–B), and Fokker Services published the applicable SB/EB to provide those modification instructions, installing current limiting and overheat protection.

For the reason described above, EASA issued AD 2018–0259 to require modification of such affected part. That [EASA] AD also prohibited (re)installation of affected parts. Since that [EASA] AD was issued, FS issued Revision 2 of EBA320–0167 and Revision 1 of EBDHC8–0033, redefining the affected aeroplanes. It was determined that aeroplanes with EBA320–0151 embodied are not affected, as this involves a USB power supply from another manufacturer. It was also determined that aeroplanes with FS EBDHC8–0033 embodied (part of EASA STC 10046185) are not affected by the [EASA] AD, as that mod is a holder-only installation. This [EASA] AD is revised accordingly.

You may examine the MCAI in the AD docket on the internet at http://www.regulations.gov; or in person at Docket Operations, Room W12–140, 1200 New Jersey Avenue SE, Washington, DC 20590; or by searching for and locating Docket No. FAA–2019–0444.
Related Service Information Under 1 CFR Part 51

Fokker Services B.V. has issued the following service information, which describes procedures for modifying the electronic flight bag USB receptacles located in the flight deck, including current limiting and overheat protection. These documents are distinct since they apply to different airplane models:


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.

### ESTIMATED COSTS FOR REQUIRED ACTIONS

<table>
<thead>
<tr>
<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>3 work-hours × $85 per hour = $255</td>
<td>*$0</td>
<td>$255</td>
<td>$3,570</td>
</tr>
</tbody>
</table>

* The FAA has received no definitive data on the parts costs for the required actions.

According to the manufacturer, some or all of the costs of this proposed AD may be covered under warranty, thereby reducing the cost impact on affected individuals. The FAA does not control warranty coverage for affected individuals. As a result, the FAA has included all known costs in our cost estimate.

### 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.

The FAA is 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 proposed 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

We determined that this proposed AD would not have federalism implications under Executive Order 12866. 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. Will not affect intrastate aviation in Alaska; and
3. 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 August 8, 2019.

(b) Affected ADs
None.

(c) Applicability
This AD applies to the airplanes identified in figure 1 to paragraph (c) of this AD, certificated in any category, having an affected part (defined in paragraph (g) of this AD) installed as specified in the applicable service information identified in figure 1 to paragraph (c) of this AD.

BILLING CODE 4910–13–P
![Table showing affected airplanes and related service bulletins](image)

<table>
<thead>
<tr>
<th>Affected Airplanes, All Manufacturer Serial Numbers</th>
<th>Fokker Modification Service Bulletin (SB)/Engineering Bulletin (EB) Used to Install Affected Part</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fokker Services B.V. Model F.27 Mark 050 airplanes</td>
<td>SBF50-46-004</td>
</tr>
<tr>
<td>Fokker Services B.V. Model F28 Mark 3000 airplanes</td>
<td>SBF28-46-001</td>
</tr>
<tr>
<td>Fokker Services B.V. Model F28 Mark 0070 and Mark 0100 airplanes</td>
<td>SBF100-46-003</td>
</tr>
<tr>
<td>Airbus SAS Model A318-111 airplanes; Model A319-111, -112, -114, -115, and -132 airplanes; Model A320-211, -212, -214, -231, -232, and -251N airplanes; and Model A321-211, -231, -232, -251N, and -253N airplanes</td>
<td>EBA319-0025 or -0032, EBA320-0044, -0049, -0059, -0064, -0095, -0097, -0105, -0108, -0124, -0126, -0139, -0140, -0141, -0145, -0150, -0156, -0158, -0160, or -0164</td>
</tr>
<tr>
<td>Airbus SAS Model A330-202, -223, -243, -322, and -343 airplanes</td>
<td>EBA330-0004, -0005, or -0007</td>
</tr>
<tr>
<td>Airbus Model A340-312 and -313 airplanes</td>
<td>EBA340-0001 or -0004</td>
</tr>
<tr>
<td>ATR – GIE Avions de Transport Régional Model ATR42-500 airplanes; and Model ATR72-212 and -212A airplanes</td>
<td>EBAT72-0006, -0007, -0008, -0010, or -0011</td>
</tr>
<tr>
<td>The Boeing Company Model 737-300, -400, -500, -700, -800 and -900ER series airplanes</td>
<td>(EASA supplemental type certificate (STC) 10061825, which corresponds to FAA STC ST03939NY) EBB737-0008, -0021, -0022, -0023, -0025, -0031, -0032, -0041, -0044, -0046, -0052, -0058, -0070, -0071, -0088, -0094, -0096, -0098, -0099, -0108, -0113, -0123, -0124, -0133, -0140, -0143, -0147, -0148, -0149 or -0154</td>
</tr>
<tr>
<td>The Boeing Company Model 757-200 series airplanes</td>
<td>EBB757-0002, -0004, -0005, or -0010</td>
</tr>
<tr>
<td>The Boeing Company Model 767-200 and -300 series airplanes</td>
<td>EBB767-0003, -0004, -0006, -0008, -0009, -0010, -0011, -0014, -0015, or -0018</td>
</tr>
<tr>
<td>The Boeing Company Model 777-200LR series airplanes</td>
<td>EBB777-0005 or -0007</td>
</tr>
</tbody>
</table>
Affected Airplanes, All Manufacturer Serial Numbers

<table>
<thead>
<tr>
<th>BOMBARDIER, INC., MODEL CL-600-2B16 (601-3A, 601-3R, AND 604 VARIANTS) AIRPLANES, AND MODEL CL-600-2C10 (REGIONAL JET SERIES 700, 701 &amp; 702) AIRPLANES</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOMBARDIER, INC., MODEL DHC-8-202, -311, -315, AND -402 AIRPLANES</td>
</tr>
</tbody>
</table>

Fokker Modification Service Bulletin (SB)/Engineering Bulletin (EB) Used to Install Affected Part

<table>
<thead>
<tr>
<th>EBCL60-0005 OR -0008</th>
</tr>
</thead>
<tbody>
<tr>
<td>(EASA STC 10046185, WHICH CORRESPONDS TO FAA STC ST03700NY) EBDHC8-0019, 022, -0031, OR -0034</td>
</tr>
</tbody>
</table>

(d) Subject

Air Transport Association (ATA) of America Code 46, Information systems.

(e) Reason

This AD was prompted by reports of smoke and fumes in the flight deck. We are issuing this AD to address smoke and fumes in the flight deck, which could result in excessive flight crew workload and injury to flight deck occupants.

(f) Compliance

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

(g) Definition

For the purpose of this AD, an “affected part” is a universal serial bus (USB) receptacle manufactured by Lone Star Aviation, Corporation, having part number LS03–05050–A.

(h) Modification

Within 12 months after the effective date of this AD, modify each affected part in accordance with the Accomplishment Instructions of the applicable Fokker Services B.V. service information identified in paragraphs (h)(1) through (h)(13) of this AD.


(i) Parts Installation Prohibition

After modification of an airplane as required by paragraph (h) of this AD, no person may install an affected part on that airplane.

(j) Credit for Previous Actions

This paragraph provides credit for the actions specified in paragraph (h) of this AD, if those actions were performed before the effective date of this AD using the service information specified in paragraphs (j)(1) through (j)(7) of this AD.


(3) Fokker Services Engineering Bulletin EBB737–0156, Revision 1, dated August 30, 2018.


(k) 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 (l)(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.

(l) Related Information


(2) For more information about this AD, contact Dan Rodina, Aerospace Engineer, International Section, Transport Standards Branch, FAA, 2200 South 216th St., Des Moines, WA 98198; telephone and fax 206–231–3225.

(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

BILLING CODE 4910–13–C
Aircraft Certification Service.

Acting Director, System Oversight Division, Michael Kaszycki, 4, 2019.

For information on the availability of this material at the FAA, call 206–231–3195.

Issued in Des Moines, Washington, on June 4, 2019.

Michael Kaszycki, Acting Director, System Oversight Division, Aircraft Certification Service.

ADDRESSES:

DATES:

AGENCY:

ACTION:

Supplementary Information:

ADDRESSES:

Supplementary Information:

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39


RIN 2120–AA64

Airworthiness Directives; Pratt & Whitney Canada Corp. Turboprop Engines

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: The FAA proposes to adopt a new airworthiness directive (AD) for certain Pratt & Whitney Canada Corp. (P&WC) PW150A turboprop engines. This proposed AD was prompted by a determination by the manufacturer that certain PW150A engine high-pressure (HP) centrifugal impellers may exhibit a material microstructure anomaly that has a potential to adversely affect the low cycle fatigue characteristics of the part. This proposed AD would require replacement of the affected HP centrifugal impellers. The FAA is proposing this AD to address the unsafe condition on these products.

DATES: The FAA must receive comments on this proposed AD by August 8, 2019.

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 Pratt & Whitney Canada Corp., 1000 Marie-Victorin, Longueuil, Quebec, Canada, J4G 1A1; phone: 800–268–8000; fax: 450–647–2888; internet: http://www.pwc.ca. You may view this service information at the FAA, Engine and Propeller Standards Branch, 1200 District Avenue, Burlington, MA 01803. For information on the availability of this material at the FAA, call 781–238–7759.

Examine 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–2019–0395; 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 NPRM, the mandatory continuing airworthiness information (MCAI), the regulatory evaluation, any comments received, and other information. The street address for Docket Operations is listed above. Comments will be available in the AD docket shortly after receipt.

For Further Information Contact:

Barbara Caufield, Aerospace Engineer, ECO Branch, FAA, 1200 District Avenue, Burlington, MA 01803; phone: 781–238–7146; fax: 781–238–7199; email: barbara.caufield@faa.gov.

Related Service Information Under 1 CFR Part 51

The FAA reviewed P&WC Service Bulletin (SB) PW150–72–35331, Revision No. 1, dated May 3, 2016. The SB describes procedures for replacement of the affected HP centrifugal impeller. 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.

Discussion

Transport Canada Civil Aviation (TCCA), which is the aviation authority for Canada, has issued AD CF–2018–12, dated April 27, 2018 (referred to after this as “the MCAI”), to address the unsafe condition on these products. The MCAI states:

P&WC has determined that certain PW150A engine HP centrifugal impellers, part number (P/N) 3049127–01, may exhibit a material microstructure anomaly which has a potential to adversely affect the low cycle fatigue (LCF) characteristics of the part, resulting in a lower LCF life than currently published in the engine model’s Airworthiness Limitations. The identified discrepancy was related to specific parts having been exposed to inappropriate temperature levels during the manufacturing process.

To address the subject potential material microstructure problem, P&WC issued SB 35331 Initial Issue, dated March 16, 2016, and then subsequently Revision 1, dated March 3, 2016, to recommend replacement of specific impeller serial numbers prior to the parts reaching the determined thresholds. Subsequent to the release of the SB, P&WC voluntarily initiated a fleet campaign to achieve this objective.

The actions specified by this AD are to ensure that HP centrifugal impellers with this potential material anomaly condition are contained in order to prevent severe engine damage and possible aeroplane damage caused by an impeller failure.


The FAA proposes to adopt a new airworthiness directive (AD) for certain PW150A engine high-pressure (HP) centrifugal impellers. The FAA is proposing this AD to address the unsafe condition on these products.