DEPARTMENT OF TRANSPORTATION
Federal Aviation Administration

14 CFR Part 39


RIN 2120–AA64

Airworthiness Directives; Bombardier, Inc. Airplanes

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

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for certain Bombardier, Inc. Model CL–600–2C10 (Regional Jet Series 700, 701, & 702) airplanes, Model CL–600–2D15 (Regional Jet Series 705) airplanes, Model CL–600–2D24 (Regional Jet Series 900) airplanes, and Model CL–600–2E25 (Regional Jet Series 1000) airplanes. This AD was prompted by a determination that the protective polyurethane tapes applied to the upper surfaces of the aluminum and titanium floor structural members may overhang the profiles of the floor structural parts and may allow fire propagation below the floor structure. This AD requires an inspection of the polyurethane protective tapes installed on the floor structure for excess tape or incorrect tape installation, and corrective actions if necessary. We are issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective February 7, 2017.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of February 7, 2017.

ADDRESSES: For service information identified in this final rule, contact Bombardier, Inc., 400 Cote–Vertu Road West, Dorval, Quebec H4S 1Y9, Canada; Widebody Customer Response Center North America toll-free telephone 1–866–538–1247 or direct-dial telephone: 1–514–855–2999; fax: 514–855–7401; email: ac.yul@aero.bombardier.com; Internet: http://www.bombardier.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.

For service information identified in this final rule, contact BAE Systems (Operations) Limited, Customer Information Department, Prestwick International Airport, Ayrshire, KA9 2RW, Ayrshire, United Kingdom; telephone +44 1292 675207; fax +44 1292 675794; email RAPublications@baesystems.com; Internet http://www.baesystems.com/Businesses/RegionalAircraft/index.htm.

Issued in Renton, Washington, on December 6, 2016.

Dionne Palermo,
Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.


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 Bombardier, Inc. Model CL–600–2C10 (Regional Jet Series 700, 701, & 702) airplanes, Model CL–600–2D15 (Regional Jet Series 705) airplanes, Model CL–600–2D24 (Regional Jet Series 900) airplanes, and Model CL–600–2E25 (Regional Jet Series 1000) airplanes. The NPRM published in the Federal Register on July 28, 2016 (81 FR 49577) (“the NPRM”). The NPRM was prompted by a determination that the protective polyurethane tapes applied to the upper surfaces of the aluminum and titanium floor structural members may not be trimmed properly, and on some places may overhang the profiles of the floor structural parts. Subsequent tests revealed that the overhanging pieces of tapes that are not bonded to the structure do not meet the flammability requirements and may allow fire propagation below the floor structure. The NPRM proposed to require an inspection of the polyurethane protective tapes installed on the floor structure for excess tape or incorrect tape installation, and corrective actions as necessary. We are issuing this AD to detect and correct overhanging pieces of protective polyurethane tapes, which are not bonded to the structure and do not meet the flammability requirements; this condition may allow fire propagation below the floor structure.

Transport Canada Civil Aviation (TCCA), which is the aviation authority for Canada, has issued a Canadian AD CF–2016–14, dated May 18, 2016 (referred to after this as the Mandatory Continuing Airworthiness Information, or “the MCAI”), to correct an unsafe condition for certain Bombardier, Inc. Model CL–600–2C10 (Regional Jet Series 700, 701, & 702) airplanes, Model CL–600–2D15 (Regional Jet Series 705) airplanes, Model CL–600–2D24 (Regional Jet Series 900) airplanes, and Model CL–600–2E25 (Regional Jet Series 1000) airplanes. The MCAI states:

An inspection revealed that the protective polyurethane tapes applied to the upper surfaces of the aluminum and titanium floor structural members installed on CRJ 700/900/1000 aeroplanes may not be trimmed properly and on some places may overhang the profiles of the floor structural parts. Subsequent tests revealed that the overlapping pieces of tapes which are not bonded to the structure, do not meet the flammability requirements. If not corrected, this condition may allow fire propagation below the floor structure.

This [Canadian] AD was issued to mandate the [detailed] inspection and removal of any excessive pieces of overhanging tape [replacing incorrectly installed tape] found on the floor structure.

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–2016–8180.
Comments

We gave the public the opportunity to participate in developing this AD. The following presents the comment received on the NPRM and the FAA’s response.

Request To Revise Compliance Time

Endeavor Air requested that we revise the compliance time from 12,600 flight hours after the effective date of this AD to 16,000 flight hours after the effective date of this AD. Endeavor Air explained that it understands that the 12,600-flight-hour threshold was established to coincide with 12,000-flight-hour 2C check tasks, when removal of all the floor boards over the entire length of the airplane is scheduled, and not due to other calculations. Endeavor Air stated that Bombardier is in the process of escalating the intervals for a C-check (which includes removing the floor boards to expose the polyurethane tapes) from 12,000 flight hours to 16,000 flight hours. Endeavor Air explained that this increase will prevent an undue financial burden by allowing operators to accomplish this inspection during scheduled floor removal. Endeavor Air also stated that it has received written support from Bombardier for escalating this corrective action to 16,000 flight hours.

We do not agree with the commenter’s request to extend the compliance time. Escalation of the C-check interval has not been approved yet and is a separate issue from the safety concern being addressed in this AD. We have determined that the compliance time, as proposed, represents the maximum interval of time allowable for the affected airplanes to continue to safely operate before the inspection is done. However, according to the provisions of paragraph (i) of this AD, we might approve requests to adjust the compliance time if the request includes data that substantiates that the new compliance time would provide an acceptable level of safety. We have not changed this AD in this regard.

Conclusion

We reviewed the relevant data, considered the comment received, 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

Bombardier has issued Service Bulletin 670BA–53–055, dated December 3, 2015. The service information describes procedures for inspecting the polyurethane protective tapes for any excess tape or incorrect tape installation on the floor structure, and doing corrective actions, which include removing any excess tape and replacing any incorrectly installed tape. 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 569 airplanes of U.S. registry.

We estimate the following costs to comply with this AD:

<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>Inspection and repair</td>
<td>190 work-hours × $85 per hour = $16,150 ...</td>
<td>$0</td>
<td>$16,150</td>
<td>$9,189,350</td>
</tr>
</tbody>
</table>

Bombardier provided a single cost only. It did not separate out costs for inspection and corrective actions. Therefore, we have not specified separate on-condition repair costs.

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):


(a) Effective Date

This AD is effective February 7, 2017.
(b) Affected ADs
None.

(c) Applicability
This AD applies to the Bombardier, Inc. airplanes identified in paragraphs (c)(1), (c)(2), and (c)(3) of this AD, certificated in any category:
(1) Model CL–600–2C10 (Regional Jet Series 700, 701, & 702) airplanes, serial numbers 10002 through 10342 inclusive.
(2) Model CL–600–2D15 (Regional Jet Series 705) airplanes and Model CL–600–2D24 (Regional Jet Series 900) airplanes, serial numbers 15001 through 15347 inclusive.
(3) Model CL–600–2E25 (Regional Jet Series 1000) airplanes, serial numbers 19001 through 19040 inclusive.

(d) Subject
Air Transport Association (ATA) of America Code 53, Fuselage.

(e) Reason
This AD was prompted by a determination that the protective polyurethane tapes applied to the upper surfaces of the aluminum and titanium floor structural members may not be trimmed properly, and on some places may overhang the profiles of the floor structural parts. Subsequent tests revealed that the overhanging pieces of tapes that are not bonded to the structure do not meet the flammability requirements and may allow fire propagation below the floor structure. We are issuing this AD to detect and correct overhanging pieces of protective polyurethane tapes, which are not bonded to the structure and do not meet the flammability requirements; this condition may allow fire propagation below the floor structure.

(f) Compliance
Comply with this AD within the compliance times specified, unless already done.

(g) Inspection and Corrective Actions
Within 12,600 flight hours after the effective date of this AD: Do a detailed inspection for excess tape or incorrect tape installation of the polyurethane protective tapes installed between floor panels and floor structure between fuselage station (FS) 280.0 and FS969.00; and do all applicable corrective actions; in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 670BA–53–055, dated December 3, 2015, except as specified in paragraph (h) of this AD. Do all applicable corrective actions before further flight.

(h) Exception to Service Information
Where Bombardier Service Bulletin 670BA–53–055, dated December 3, 2015, specifies to contact Bombardier, Inc., “to get an approved disposition to complete this service bulletin,” before further flight, repair using a method approved by the Manager, New York Aircraft Certification Office (ACO), ANE–170, FAA; or Transport Canada Civil Aviation (TCCA); or Bombardier, Inc.’s TCCA Design Approval Organization (DAO).

(i) Other FAA AD Provisions
The following provisions also apply to this AD:
(1) Alternative Methods of Compliance (AMOCs): The Manager, New York ACO, ANE–170, 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 ACO, send it to ATTN: Program Manager, Continuing Operational Safety, FAA, New York ACO, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone: 516–228–7300; fax: 516–794–5531. 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, New York ACO, ANE–170, FAA; or TCCA; or Bombardier, Inc.’s TCCA DAO. If approved by the DAO, the approval must include the DAO-authorized signature.

(k) Material Incorporated by Reference
Refer to Mandatory Continuing Airworthiness Information (MCAI) Canadian AD CF–2016–14, dated May 18, 2016, 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–2016–8180.

(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.
(ii) Reserved.
(iii) For service information identified in this AD, contact Bombardier, Inc., 400 Cô­te–Vertu Road West, Dorval, Québec H4S 1Y9, Canada; Widebody Customer Response Center North America toll-free telephone 1–866–538–1227 or direct-dial telephone: 1–514–853–2999; fax: 514–853–7401; email: ac.yul@aero.bombardier.com; Internet: http://www.bombardier.com.
(iv) 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.
(v) 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 202–741–6036, or go to: http://www.archives.gov/federal-register/cfr/ibr-locations.html.