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DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2013-0975; Directorate Identifier 2013-NM-082-AD; Amendment 39-17813; AD 2014-06-09]

RIN 2120-AA64

Airworthiness Directives; ATR–GIE Avions de Transport Régional Airplanes

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

ACTION: Final rule.

SUMMARY: We are superseding Airworthiness Directive (AD) 2009-18-18 for certain ATR–GIE Avions de Transport Régional Model ATR42 and ATR72 airplanes. AD 2009-18-18 required repetitive inspections for damage and absence of repair of the cockpit forward side windows, and replacement if necessary. This new AD requires repetitive detailed inspections of the cockpit forward side window for damage and discrepancies; and replacement if necessary. Replacing both cockpit forward side windows with approved windows terminates the repetitive detailed inspections. This new AD also expands the applicability of AD 2009-18-18. The actions required by AD 2009-18-18 are not required by this AD. This AD was prompted by reports of a cockpit forward right-hand side blow out during flight. We are issuing this AD to detect and correct air/water leakage of the cockpit forward side window, which could lead to rapid cabin decompression, resulting in loss of control of the airplane.

DATES: This AD becomes effective May 8, 2014.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of May 8, 2014.

ADDRESSES: You may examine the AD docket on the Internet at <http://www.regulations.gov/#!docketDetail;D=FAA-2013-0975>; or in person at the Docket Management Facility, U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC.

For PPG Aerospace service information identified in this AD, contact PPG Aerospace, 12780 San Fernando Road, Sylmar, CA 91342; phone: 818-362-6711; fax: 818-362-0603; Internet: <http://corporateportal.ppg.com/na/aerospace>.

For ATR service information identified in this AD, contact ATR–GIE Avions de Transport Régional, 1, Allée Pierre Nadot, 31712 Blagnac Cedex, France; telephone +33 (0) 5 62 21 62 21; fax +33 (0) 5 62 21 67 18; email continued.airworthiness@atr.fr; Internet <http://www.aerochain.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 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:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to supersede AD 2009-18-18, Amendment 39-16014 (74 FR 46336, September 9, 2009). AD 2009-18-18 applied to certain ATR–GIE Avions de Transport Régional Model ATR42 and ATR72 airplanes. The NPRM published in the Federal Register on November 27, 2013 (78 FR 70892). The NPRM was prompted by reports of a cockpit forward right-hand side blow out during flight. The NPRM proposed to require repetitive detailed inspections of the cockpit forward side window for damage and discrepancies; and replacement if necessary. Replacing both cockpit forward side windows with approved windows would terminate the repetitive detailed inspections. The NPRM also proposed to expand the applicability of AD 2009-18-18. The actions required by AD 2009-18-18 are not required by the NPRM. We are issuing this AD to detect and correct air/water leakage of the cockpit forward side window, which could lead to rapid cabin decompression, resulting in loss of control of the airplane.

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Community, has issued EASA Airworthiness Directive 2013-0087, dated April 9, 2013 (referred to after this as the Mandatory Continuing Airworthiness Information, or "the MCAI"), to correct an unsafe condition for all ATR–GIE Avions de Transport Régional Model ATR42-200, -300, -320, and -500 airplanes; and Model ATR72-101, -201, -102, -202, -211, -212, and -212A airplanes; all manufacturer serial numbers. The MCAI states:

In 2009, a Left-Hand (LH) forward side glass window of an ATR 72-212 aeroplane blew out while performing a ground pressure test. The investigation results revealed some anomalies on the forward side window at the level of the z-bar on the windows external side and at the level of the inner retainer on the windows internal side. Such anomalies are considered as precursors of this kind of failure. Air or water leakages between the z-bar and the outer glass ply, or between the inner retainer and inner glass ply indicate the presence of deteriorating structural components in the window.

Neither ATR nor PPG Aerospace have authorized repairs on the window z-bar or z-bar sealant. Any attempted repairs on these forward side window z-bars and/or z-bar sealants could lead to a similar event as described above.

In-flight loss of a forward side window would cause rapid cabin decompression, possibly resulting in flight crew incapacitation and consequent reduced control, or loss of control of the aeroplane, and cause the risk of injury to persons on the ground. The loss of a forward side window while the aeroplane is on the ground, due to differential cabin pressure, could result in injury to aeroplane occupants or to persons outside the aeroplane.

To address this potential unsafe condition, EASA issued AD 2009-0159-E [dated July 20, 2009] (http://ad.easa.europa.eu/blob/easa_ad_2009_0159E_superseded.pdf/EAD_2009-0159-E_1) [which corresponds to FAA AD 2009-18-18, Amendment 39-116014 (74 FR 46336, September 9, 2009)] to require repetitive inspections of the affected LH and right-hand (RH) cockpit forward side glass windows and, in case discrepancies are found as defined in PPG Aerospace Service Bulletin (SB) NP-158862-001, the replacement of the window(s).

Since that [EASA] AD was issued, a cockpit forward RH-side window blew out during flight on an ATR72-212 aeroplane. Degradation of the window is considered to have been the cause for this failure.

* * * [T]his [EASA] AD * * * requires to accomplish the [detailed] inspections in accordance with the instructions of Revision 1 of PPG Aerospace SB NP-158862-001, which provides more information on examples of [damaged and] discrepant conditions.

This [EASA] AD also requires the removal from service of the affected Part Number (P/N) NP158862-1 and P/N NP158862-2 cockpit forward side windows, which constitutes terminating action for the repetitive inspections required by this AD.

The corrective action is replacing windows, if damage and discrepancies are found. Damage and discrepancies to detect during the inspection include z-bar existing sealant repair, z-bar deformation, separation or gap in the sealant bond between the retainer and inner glass ply, z-bar deformation and retainer gap at same location, or z-bar deformation and retainer gap in window corner. You may examine the MCAI in the AD docket on the Internet at <http://www.regulations.gov/#!documentDetail;D=FAA-2013-0975-0002>.

Comments

We gave the public the opportunity to participate in developing this AD. We received no comments on the NPRM (78 FR 70892, November 27, 2013) or on the determination of the cost to the public.

Conclusion

We reviewed the available data 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 (78 FR 70892, November 27, 2013) for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM (78 FR 70892, November 27, 2013).

Costs of Compliance

We estimate that this AD affects 43 airplanes of U.S. registry.

We estimate the following costs to comply with this AD:

Estimated Costs

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Detailed Inspection	1 work-hour × \$85 per hour = \$85 per inspection cycle	\$0	\$85 per inspection cycle	\$3,655 per inspection cycle.

We estimate the following costs to do any necessary replacements that would be required based on the results of the inspection. We have no way of determining the number of aircraft that might need this replacement.

On-Condition Costs

Action	Labor cost	Parts cost	Cost per product
Replacement	4 work-hours × \$85 per hour = \$340	\$18,546	\$18,886

Where the service information lists required parts costs that are covered under warranty, we have assumed that there will be no charge for these costs. As we do not control warranty coverage for affected parties, some parties may incur costs higher than estimated here.

Paperwork Reduction Act

A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB control number. The control number for the collection of information required by this AD is 2120-0056. The paperwork cost associated with this AD has been detailed in the Costs of Compliance section of this document and includes time for reviewing instructions, as well as completing and reviewing the collection of information. Therefore, all reporting associated with this AD is mandatory. Comments concerning the accuracy of this burden and suggestions for reducing the burden should be directed to the FAA at 800 Independence Ave., SW., Washington, DC 20591, ATTN: Information Collection Clearance Officer, AES-200.

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.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov/#!docketDetail;D=FAA-2013-0975>; 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 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.

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 removing Airworthiness Directive (AD) 2009-18-18, Amendment 39-16014 (74 FR 46336, September 9, 2009), and adding the following new AD:



2014-06-09 ATR–GIE Avions de Transport Régional: Amendment 39-17813. Docket No. FAA-2013-0975; Directorate Identifier 2013-NM-082-AD.

(a) Effective Date

This airworthiness directive (AD) becomes effective May 8, 2014.

(b) Affected ADs

This AD supersedes AD 2009-18-18, Amendment 39-16014 (74 FR 46336, September 9, 2009).

(c) Applicability

This AD applies to all ATR–GIE Avions de Transport Régional Model ATR42-200, -300, -320, and -500 airplanes; and Model ATR72-101, -201, -102, -202, -211, -212, and -212A airplanes; certificated in any category; all manufacturer serial numbers.

(d) Subject

Air Transport Association (ATA) of America Code 56, Windows.

(e) Reason

This AD was prompted by reports of a cockpit forward right-hand side blow out during flight. We are issuing this AD to detect and correct air/water leakage of the cockpit forward side window, which could lead to rapid cabin decompression, resulting in loss of control of the airplane.

(f) Compliance

You are responsible for having the actions required by this AD performed within the compliance times specified, unless the actions have already been done.

(g) Inspections

For airplanes that are equipped with any PPG Aerospace cockpit forward side glass window having part number (P/N) NP158862-1 or P/N NP158862-2: At the applicable time specified in paragraph (g)(1) or (g)(2) of this AD, do a detailed inspection of the cockpit forward side window to detect any damage and discrepancies (z-bar existing sealant repair, z-bar deformation, separation or gap in the sealant bond between the retainer and inner glass ply, z-bar deformation and retainer gap at same location, or z-bar deformation and retainer gap in window corner), in accordance with the Accomplishment Instructions of PPG Aerospace Component Service Bulletin NP-158862-001 Revision 1, dated January 10, 2013. Repeat the inspection thereafter at intervals not to exceed 550 flight hours or 750 flight cycles, whichever occurs first, except as required by paragraph (h) of this AD.

(1) For windows for which the total flight cycles can be established, inspect within 2,000 flight cycles since first installation of the cockpit forward side window, or within 10 days after the effective date of this AD, whichever occurs later.

(2) For windows for which the total flight cycles cannot be established, inspect before the accumulation of 2,000 total flight cycles on the airplane, or within 10 days after the effective date of this AD, whichever occurs later.

(h) Conditions for Reduced Interval

If any of the conditions specified in paragraphs (h)(1), (h)(2), and (h)(3) of this AD is found during any inspection required by paragraph (g) of this AD, reduce the interval of each subsequent inspection as required by paragraph (g) of this AD to 50 flight cycles or 7 days, whichever occurs later.

(1) Sealant separation between the z-bar and the outer glass ply, with depth less than 4 millimeter (mm) (0.160 inches (in)).

(2) Sealant separation between the inboard retainer and inner glass ply, with depth less than 7.5 mm (0.300 in) and cumulative length less than 300 mm (12.000 in).

(3) Window showing both sealant separation between the z-bar and the outer ply, and separation between inboard retainer and inner glass ply, common to the same hole location with a length less than 225 mm (8.860 in), and not covering the entire arc of a window corner.

(i) Replacement

If, during any inspection required by this AD, any damage or discrepant condition, as defined in PPG Aerospace Component Service Bulletin NP-158862-001 Revision 1, dated January 10, 2013 (z-bar existing sealant repair, z-bar deformation, separation or gap in the sealant bond between the retainer and inner glass ply, z-bar deformation and retainer gap at same location, or z-bar deformation and retainer gap in window corner), is found, except for the conditions specified in paragraph (h)(1), (h)(2), or (h)(3) of this AD, before further pressurized flight or within 10 days after the inspection, whichever occurs first, replace the affected window(s) using a method approved by the Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA; or the European Aviation Safety Agency (EASA) (or its delegated agent, or the Design Approval Holder (DAH) with EASA design organization approval). For a replacement method to be approved, the repair must specifically refer to this AD.

Note 1 to paragraph (i) of this AD: Guidance for unpressurized flight conditions and limitations can be found in ATR Master Minimum Equipment List (MMEL) item 21-30-1 and Dispatch Deviation Guide (DDG) item 21-30-1.(4).

Note 2 to paragraph (i) of this AD: Guidance for the replacement required by paragraph (i) of this AD can be found in ATR42/72 Job Instruction Card airplane maintenance manual (AMM) JIC 56-12-00 RAI 10000.

(j) Reporting Requirement

Submit a report of the findings of the inspection required by paragraph (g) of this AD to ATR techdesk, 1 ALLEE PIERRE NADOT, 31712 BLAGNAC CEDEX, France, phone: +33 (0)5 62 21 62 21; fax: +33 (0)5 62 21 67 18; email: techdesk@atr.fr; and PPG Aerospace, ATTN: Andrew Troller, P.O. Box 2200, Huntsville, AL 35811 USA, phone: 1-256-859-2500 ext. 2544; fax 1-256-859-8155; email: atroller@ppg.com; at the applicable time specified in paragraph (j)(1) or (j)(2) of this AD. The report must include the information specified in PPG Aerospace Service Bulletin NP-158862-001, Revision 1, dated January 10, 2013.

(1) If the inspection was done on or after the effective date of this AD: Submit the report within 30 days after the inspection.

(2) If the inspection was done before the effective date of this AD: Submit the report within 30 days after the effective date of this AD.

(k) Window Replacement Provisions

Replacing only the affected window, as required by paragraph (i) of this AD, with a cockpit forward side window having P/N NP158862-1 left-hand (LH) or P/N NP158862-2 right-hand (RH), as applicable, is not terminating action for the repetitive inspections required by this AD.

(l) Terminating Action

Within 72 months after the effective date of this AD, replace each PPG Aerospace P/N NP-158862-1 LH and P/N NP-158862-2 RH cockpit forward side window with an approved cockpit forward side window. Replacing both PPG Aerospace P/N NP158862-1 LH and P/N NP158862-2 RH cockpit forward side windows with approved windows is a terminating action for the repetitive inspections required by this AD. Replacement windows and procedures for their installation must be approved by the Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA; or the EASA (or its delegated agent, by the DAH with EASA design organization approval).

(m) Parts Installation Prohibition

As of 72 months after the effective date of this AD, no person may install any PPG Aerospace cockpit forward side window having P/N NP158862-1 LH or P/N NP158862-2 RH on any airplane.

(n) 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. The AMOC approval letter must specifically reference this AD.

(2) Airworthy Product: For any requirement in this AD to obtain corrective actions from a manufacturer, use these actions if they are FAA-approved. Corrective actions are considered FAA-approved if they were approved by the State of Design Authority (or its delegated agent, or the DAH with a State of Design Authority's design organization approval). For a repair method to be approved, the repair approval must specifically refer to this AD. You are required to ensure the product is airworthy before it is returned to service.

(3) Reporting Requirements: A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB Control Number. The OMB Control Number for this information collection is 2120-0056. Public reporting for this collection of information is estimated to be approximately 5 minutes per response, including the time for reviewing instructions,

completing and reviewing the collection of information. All responses to this collection of information are mandatory. Comments concerning the accuracy of this burden and suggestions for reducing the burden should be directed to the FAA at: 800 Independence Ave. SW., Washington, DC 20591, Attn: Information Collection Clearance Officer, AES-200.

(o) Related Information

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) EASA Airworthiness Directive 2013-0087, dated April 9, 2013, for related information. You may examine the MCAI in the AD docket on the Internet at <http://www.regulations.gov/#!documentDetail;D=FAA-2013-0975-0002>.

(2) For ATR service information identified in this AD that is not incorporated by reference in this AD, contact ATR-GIE Avions de Transport Régional, 1, Allée Pierre Nadot, 31712 Blagnac Cedex, France; telephone +33 (0) 5 62 21 62 21; fax +33 (0) 5 62 21 67 18; email continued.airworthiness@atr.fr; Internet <http://www.aerochain.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.

(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) PPG Aerospace Component Service Bulletin NP-158862-001 Revision 1, dated January 10, 2013.

(ii) Reserved.

(3) For service information identified in this AD, contact PPG Aerospace, 12780 San Fernando Road, Sylmar, CA 91342; phone: 818 362 6711; fax: 818 362 0603; Internet: <http://corporateportal.ppg.com/na/aerospace>.

(4) 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.

(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 Renton, Washington, on March 14, 2014.

Jeffrey E. Duven,
Manager, Transport Airplane Directorate,
Aircraft Certification Service.