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DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA–2023–1819; Project Identifier MCAI–2023–00052–A; Amendment 39–22630; AD 2023–25–03]

RIN 2120–AA64

Airworthiness Directives; Piaggio Aviation S.p.A. Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for certain Piaggio Aviation S.p.A. (Piaggio) Model P–180 airplanes. This AD is prompted by a report of corrosion on the various aluminum alloy reinforcements in the horizontal stabilizer (HS) central box caused by a humid environment inside the box from water ingress and/or condensation. This AD requires a one-time detailed inspection of the HS central box for corrosion; an assessment of the corrosion level; and depending on the determination, repetitive detailed inspections of the HS central box for corrosion and the internal composite structure for surface cracks, distortion, and damage; and repair or replacement of the HS assembly. Repair or replacement of the HS assembly is terminating action for the repetitive inspections. The FAA is issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective February 2, 2024.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of February 2, 2024.

ADDRESSES: *AD Docket:* You may examine the AD docket at *regulations.gov* under Docket No.FAA–2023–1819; 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 mandatory continuing airworthiness information (MCAI), any comments received, and other information. The address for Docket Operations 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.

Material Incorporated by Reference:

- For service information identified in this final rule, contact Piaggio Aviation S.p.A., P180 Customer Support, via Pionieri e Aviatori d'Italia, snc—16154 Genoa, Italy; phone: +39 331 679 74 93; email: *technicalsupport@piaggioaerospace.it.*
- You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 901 Locust, Kansas City, MO 64106. For information on the availability of this material at the FAA, call (817) 222–5110. It is also available at regulations.gov under Docket No. FAA–2023–1819.

FOR FURTHER INFORMATION CONTACT: Sungmo Cho, Aviation Safety Engineer, FAA, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; phone: (781) 238–7241; email: *sungmo.d.cho@faa.gov*.

SUPPLEMENTARY INFORMATION:

Background

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to certain serial-numbered Piaggio Model P–180 airplanes. The NPRM published in the **Federal Register** on September 7, 2023 (88 FR 61482). The NPRM was prompted by AD 2023–0007, dated January 13, 2023 (also referred to as the MCAI), issued by the European Union Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union. The MCAI states that an occurrence of corrosion was found inside the HS central box of a Piaggio Model P–180 airplane during scheduled maintenance. A subsequent investigation and inspection of 16 other Piaggio Model P–180 airplanes of various configurations and ages revealed that corrosion of differing levels of severity was found on various aluminum alloy reinforcements in the HS central box of all the inspected airplanes. The MCAI also states that this corrosion was caused by the formation of a humid environment inside the HS central box, from water ingress and/or condensation. Further investigation revealed that airplanes left in prolonged inactivity or parked outside are more prone to develop corrosion damage.

To address the unsafe condition, the MCAI requires a one-time detailed inspection of the HS central box for corrosion, contacting Piaggio for a determination of the corrosion level, and depending on that determination, repetitive detailed inspections of the HS central box for corrosion and the internal composite structure for surface cracks, distortion, and damage; and depending on the results, repair or replacement of the HS assembly. The MCAI states that repair or replacement of the HS assembly is terminating action for the repetitive inspections.

In the NPRM, the FAA proposed to require a one-time detailed inspection of the HS central box for corrosion; an assessment of the corrosion level; and depending on the determination, repetitive detailed inspections of the HS central box for corrosion and the internal composite structure for surface cracks, distortion, and damage; and repair or replacement of the HS assembly. Repair or replacement of the HS assembly is terminating action for the repetitive inspections.

The FAA is issuing this AD to address corrosion on the various aluminum alloy reinforcements in the HS central box. The unsafe condition, if not addressed, could result in reduced structural integrity of the HS, and loss of control of the airplane.

You may examine the MCAI in the AD docket at *regulations.gov* under Docket No. FAA–2023–1819.

Discussion of Final Airworthiness Directive

Comments

The FAA received a comment from one individual commenter. The commenter supported the NPRM and requested a change. The following presents the comment received on the NPRM and the FAA's response to the comment.

Request To Revise Costs of Compliance Section of the NPRM

An individual commenter requested that the FAA contact Piaggio for the exact price per unit of replacement

parts. The commenter explained that this would provide operators with a more accurate estimate of the NPRM's economic effect and allow operators to be financially prepared.

The FAA disagrees with the commenter's request because the estimated cost for a replacement HS assembly provided in this final rule is based on a cost estimate from Piaggio. Accordingly, the FAA considers the cost estimates provided in this final rule to be sufficient and the FAA has not changed this AD regarding this issue.

Conclusion

These products have been approved by the aviation authority of another country and are approved for operation in the United States. Pursuant to the FAA's bilateral agreement with this State of Design Authority, it has notified the FAA of the unsafe condition described in the MCAI referenced above. The FAA reviewed the relevant data, considered the comment received, and determined that air safety requires adopting this AD as proposed.

Accordingly, the FAA is issuing this AD to address the unsafe condition on these products. This AD is adopted as proposed in the NPRM.

Related Service Information Under 1 CFR Part 51

The FAA reviewed Piaggio Aerospace Service Bulletin 80–0489, Revision 2, dated November 30, 2022 (Piaggio SB 80–0489, Revision 2). This service information specifies procedures for a one-time detailed inspection of the HS central box for corrosion, a report of the inspection results to Piaggio for a determination of the corrosion level, repetitive inspections of the HS central box as needed, and applicable corrective actions. The corrective actions include installation of a serviceable HS assembly, which is terminating action for the repetitive inspections.

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 **ADDRESSES**.

Differences Between This AD and the MCAI

The MCAI requires contacting the manufacturer for a determination of the corrosion level if any corrosion is found during the initial inspection of the HS central box, and if it is determined that level 2 or 3 corrosion is present, having the manufacturer provide the threshold and intervals for doing repetitive inspections of the HS central box. This AD requires contacting either the FAA, EASA, or Piaggio's EASA Design Organization Approval (DOA). If approved by the DOA, the approval must include the DOA-authorized signature.

Although Piaggio SB 80–0489, Revision 2, specifies to record the image of the location of corroded areas, this AD does not require that action.

Costs of Compliance

The FAA estimates that this AD affects 102 airplanes of U.S. registry.

The FAA estimates the following costs to comply with this AD:

ESTIMATED COSTS

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Initial inspection of HS central box for corrosion	6 work-hours × $85 per hour = $510	$0	$510	$52,020

ON-CONDITION COSTS

Action	Labor cost	Parts cost	Cost per product
Repetitive inspections of HS central box for corrosion.	6 work-hours × $85 per hour = $510, per inspection cycle.	$0	$510, per inspection cycle.
Repetitive inspections for surface cracks, distortion, and damage.	6 work-hours × $85 per hour = $510	0	$510, per inspection cycle.
Replace HS assembly	10 work-hours × $85 per hour = $850	150,000	$150,850.

The repair of the HS assembly that may be required as a result of any inspection could vary significantly from airplane to airplane. The FAA has no data to determine the costs to accomplish the repair or the number of airplanes that may require the repair.

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.

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) 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 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:

2023–25–03 Piaggio Aviation S.p.A.: Amendment 39–22630; Docket No. FAA–2023–1819; Project Identifier MCAI–2023–00052–A.

(a) Effective Date

This airworthiness directive (AD) is effective February 2, 2024.

(b) Affected ADs

None.

(c) Applicability

This AD applies to Piaggio Aviation S.p.A. Model P–180 airplanes, serial numbers 1002, 1004 through 1234 inclusive, 3001 through 3012 inclusive, and 3016, certificated in any category.

(d) Subject

Joint Aircraft System Component (JASC) Code 5510, Horizontal Stabilizer Structure.

(e) Unsafe Condition

This AD was prompted by a report of corrosion on the various aluminum alloy reinforcements in the horizontal stabilizer (HS) central box caused by a humid environment inside the box from water ingress and/or condensation. The FAA is issuing this AD to address this condition. The unsafe condition, if not addressed, could result in reduced structural integrity of the HS and loss of control of the airplane.

(f) Compliance

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

(g) Required Actions

(1) Within the applicable compliance time specified in Table 1 to paragraph (g)(1) of this AD, do a detailed inspection of the HS central box for corrosion, in accordance with step (8), of Part A, of the Accomplishment Instructions in Piaggio Aerospace Service Bulletin 80–0489, Revision 2, dated November 30, 2022 (Piaggio SB 80–0489, Revision 2), except you are not required to record any images.

TABLE 1 TO PARAGRAPH (g)(1)—HS CENTRAL BOX ONE TIME INSPECTION

P–180 serial number	Compliance time (hours time-in-service (TIS) or calendar time, whichever occurs first after the effective date of this AD)
1002; and 1034 through 3016 inclusive.	Within 220 hours TIS or 13 months.
1004 through 1033 inclusive.	Within 320 hours TIS or 13 months.

(2) If, during the inspection required by paragraph (g)(1) of this AD, any corrosion is detected, before next flight, contact either the Manager, International Validation Branch, FAA; European Union Aviation Safety Agency (EASA); or Piaggio's EASA Design Organization Approval (DOA), for an assessment of the corrosion level (level 1, 2, or 3).

Note 1 to paragraph (g)(2): Appendix 1, Inspection Results Form, in Piaggio SB 80–0489, Revision 2, may be used when contacting the FAA, EASA, or Piaggio's EASA DOA.

(3) If level 1 corrosion is found during the inspection required by paragraph (g)(1) of this AD, no further action is required by this AD.

(4) If level 2 corrosion is found during the inspection required by paragraph (g)(1) of this AD, do the action in either paragraph (g)(4)(i) or (ii) of this AD.

(i) Before further flight replace the HS assembly or repair the HS assembly in accordance with instructions from either the Manager, International Validation Branch, FAA; EASA; or Piaggio's EASA DOA. If approved by the DOA, the approval must include the DOA-authorized signature.

(ii) Within 400 hours TIS or 12 months, whichever occurs first after the inspection required by paragraph (g)(1) of this AD, and thereafter at intervals not to exceed 400 hours TIS or 12 months, whichever occurs first after the most recent inspection, repeat the inspection required by paragraph (g)(1) of this AD. In addition, inspect the internal composite structure of the HS central box for surface cracks, distortion, and damage. After each repetitive inspection, before further flight, assess the inspection findings as required by paragraph (g)(2) of this AD. If it is determined that the level 2 corrosion has worsened since the last inspection; or if any surface cracks, distortion, or damage is found during any inspection; before further flight, replace the HS assembly or repair the HS assembly in accordance with instructions from either the Manager, International Validation Branch, FAA; EASA; or Piaggio's EASA DOA. If approved by the DOA, the approval must include the DOA-authorized signature. These inspections must be repeated at intervals not to exceed 400 hours TIS or 12 months, whichever occurs first after the most recent inspection, until a maximum of 660 hours TIS or 13 months, whichever occurs first after the inspection required by paragraph (g)(1) of this AD has been reached, at which time the HS assembly must be repaired or replaced.

(5) If level 3 corrosion is found during the inspection required by paragraph (g)(1) of this AD, do the actions required by paragraph (g)(5)(i) or (ii) of this AD.

(i) Before further flight, after the inspection required by paragraph (g)(1) of this AD, replace the HS assembly or repair the HS assembly in accordance with instructions from either the Manager, International Validation Branch, FAA; EASA; or Piaggio's EASA DOA. If approved by the DOA, the approval must include the DOA-authorized signature.

(ii) Within 200 hours TIS or 6 months, whichever occurs first after the inspection required by paragraph (g)(1) of this AD, and thereafter at intervals not to exceed 200 hours TIS or 6 months, whichever occurs first after the most recent inspection, repeat the inspection required by paragraph (g)(1) of this AD. In addition, inspect the internal composite structure of the HS central box for surface cracks, distortion, and damage. After each repetitive inspection, before further flight, assess the inspection findings as required by paragraph (g)(2) of this AD. If it is determined that the level 3 corrosion has worsened since the last inspection; or if any surface cracks, distortion, or damage is found; before further flight, replace the HS assembly or repair the HS assembly in accordance with instructions from either the Manager, International Validation Branch, FAA; EASA; or Piaggio's EASA DOA. If approved by the DOA, the approval must include the DOA-authorized signature. These inspections must be repeated at intervals not to exceed 200 hours TIS or 6 months, whichever occurs first after the most recent inspection, until a maximum of 660 hours TIS or 13 months, whichever occurs first after the inspection required by paragraph (g)(1) of this AD, at which time the HS assembly must be repaired or replaced.

(6) Repair or replacement of the HS assembly is terminating action for the repetitive inspections required by paragraphs (g)(4)(ii) and (g)(5)(ii) of this AD.

(h) Credit for Previous Actions

You may take credit for the actions required by paragraphs (g)(1) through (5) of this AD if you performed those actions before the effective date of this AD using Piaggio Aerospace Service Bulletin 80–0489, Revision 1, dated May 13, 2022.

(i) Alternative Methods of Compliance (AMOCs)

The Manager, International Validation 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 manager of the International Validation Branch, mail it

to the address identified in paragraph (j)(2) of this AD or email to: *9-AVS-AIR-730-AMOC@faa.gov.* If mailing information, also submit information by email. 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.

(j) Additional Information

(1) Refer to EASA AD 2023–0007, dated January 13, 2023, for related information. This EASA AD may be found in the AD docket at regulations.gov under Docket No. FAA–2023–1819.

(2) For more information about this AD, contact Sungmo Cho, Aviation Safety Engineer, FAA, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; phone: (781) 238–7241; email: *sungmo.d.cho@faa.gov*.

(3) Service information identified in this AD that is not incorporated by reference is available at the addresses specified in paragraphs (k)(3) and (4) of this AD.

(k) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference 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 the AD specifies otherwise.

(i) Piaggio Aerospace Service Bulletin 80–0489, Revision 2, dated November 30, 2022.

(ii) [Reserved]

(3) For service information identified in this AD, contact Piaggio Aviation S.p.A., P180 Customer Support, via Pionieri e Aviatori d'Italia, snc—16154 Genoa, Italy; phone: +39 331 679 74 93; email: *technicalsupport@piaggioaerospace.it*.

(4) You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 901 Locust, Kansas City, MO 64106. For information on the availability of this material at the FAA, call (817) 222–5110.

(5) You may view this material at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, visit *www.archives.gov/federal-register/cfr/ibr-locationsoremailfr.inspection@nara.gov*.

Issued on December 8, 2023.

Victor Wicklund,

Deputy Director, Compliance & Airworthiness Division, Aircraft Certification Service.

[FR Doc. 2023–28769 Filed 12–28–23; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA–2023–1894; Project Identifier MCAI–2022–00334–R; Amendment 39–22635; AD 2023–25–08]

RIN 2120–AA64

Airworthiness Directives; Leonardo S.p.a. Helicopters

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for all Leonardo S.p.a. Model A109E, A109S, AW109SP, A119, and AW119 MKII helicopters. This AD was prompted by multiple reports of excessive axial play on the ball bearing of the lower half of the main rotor (MR) rotating scissor assembly. This AD requires one-time scissor coupling and axial play inspections and repetitive quantitative axial play inspections and, depending on the results, additional inspections and replacing certain parts. This AD also requires reporting information and prohibits installing certain parts unless certain inspections have been accomplished. These requirements are specified in a European Union Aviation Safety Agency (EASA) AD, which is incorporated by reference. The FAA is issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective February 2, 2024.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of February 2, 2024.

ADDRESSES:

AD Docket: You may examine the AD docket at *regulations.gov* under Docket No. FAA–2023–1894; 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 mandatory continuing airworthiness information, any comments received, and other information. The address for Docket Operations 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.

Material Incorporated by Reference:

- For EASA material identified in this final rule, contact EASA, Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; telephone +49 221 8999 000; email *ADs@easa.europa.eu; internet easa.europa.eu*. You may find the EASA material on the EASA website at *ad.easa.europa.eu*.
- You may view this service information at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy., Room 6N–321, Fort Worth, TX 76177. For information on the availability of this material at the FAA, call (817) 222–5110. It is also available in the AD docket at *regulations.gov* under Docket No. FAA–2023–1894.

Other Related Service Information: For Leonardo Helicopters service information identified in this final rule, contact Leonardo S.p.A Helicopters, Emanuele Bufano, Head of Airworthiness, Viale G. Agusta 520, 21017 C. Costa di Samarate (Va) Italy; telephone (+39) 0331–225074; fax (+39) 0031–229046; or at *customerportal.leonardocompany.com/en-US*. You may also view this service information at the FAA contact information under *Material Incorporated by Reference* above.

FOR FURTHER INFORMATION CONTACT: Jared Hyman, Aviation Safety Engineer, FAA, 1600 Stewart Ave., Suite 410, Westbury, NY 11590; telephone (781) 238–7799; email *9-AVS-AIR-BACO-COS@faa.gov*.

SUPPLEMENTARY INFORMATION:

Background

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to all Leonardo S.p.a. Model A109E, A109S, AW109SP, A119, and AW119 MKII helicopters. The NPRM published in the **Federal Register** on October 3, 2023 (88 FR 67999). The NPRM was prompted by EASA AD 2022–0037, dated March 7, 2022; corrected March 15, 2022 (EASA AD 2022–0037), issued by EASA, which is the Technical Agent for the Member States of the European Union. EASA AD 2022–0037 states that there have been multiple reports of excessive axial play on the ball bearing of the lower half of the MR rotating scissor assembly. In some cases, this resulted in dislodgement of the ball bearing from its seat.

In the NPRM, the FAA proposed to require one-time MR rotating scissor coupling and axial play inspections and