DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39


RIN 2120-AA64

Airworthiness Directives; Piaggio Aero Industries S.p.A. Airplanes

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

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: The FAA proposes to adopt a new airworthiness directive (AD) for Piaggio Aero Industries S.p.A. Model P-180 Airplanes. This proposed AD results from mandatory continuing airworthiness information (MCAI) originated by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as insufficient sealing of a steering select/bypass valve installed in the nose landing gear (NLG) manifold. The FAA is proposing this AD to require actions that address the unsafe condition on these products.

DATES: The FAA must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments by any of the following methods:

- Fax: (202) 493-2251.
- Hand Delivery: U.S. Department of Transportation, Docket Operations, M-30,
West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue, SE.,
Washington, DC 20590, between 9 a.m. and 5 p.m., Monday through Friday, except
Federal holidays.

For service information identified in this proposed AD, contact Piaggio Aero
Industries S.p.A, Airworthiness Office, Via Pionieri e Aviatori d'Italia snc, 16154
Genova, Italy; phone: +39 010 0998046; email: airworthiness@piaggioaerospace.it; and
Internet: http://www.piaggioaerospace.it/en/customer-support. You may review this
referenced service information at the FAA, Policy and Innovation Division, 901 Locust,
Kansas City, Missouri 64106. For information on the availability of this material at the
FAA, call (816) 329-4148.

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-2019-0412; 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 proposed AD, 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: Mike Kiesov, Aerospace Engineer,
FAA, Small Airplane Standards Branch, 901 Locust, Room 301, Kansas City, Missouri
64106; telephone: (816) 329-4144; fax: (816) 329-4090; email: mike.kiesov@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

The FAA invites you to send any written relevant data, views, or arguments about
this proposed AD. Send your comments to an address listed under the ADDRESSES
the beginning of your comments. The FAA specifically invites comments on the overall
regulatory, economic, environmental, and energy aspects of this proposed AD. The FAA
will consider all comments received by the closing date and may amend this proposed 
AD because of those comments.

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

Discussion

The European Aviation Safety Agency (EASA), which is the Technical Agent for 
the Member States of the European Community, has issued EASA AD No. 2017-0229, 
dated November 21, 2017 (referred to after this as “the MCAI”), to correct an unsafe 
condition for Piaggio Aero Industries S.p.A. Model P-180 airplanes. The MCAI states:

An occurrence was reported of finding insufficient sealing of a Steering 
Select / Bypass Valve installed on the nose landing gear (NLG) Steering 
Manifold of a P.180 aeroplane.

This condition, if not detected and corrected, could lead to uncommanded 
deflection of the NLG wheel, possibly resulting in reduced control of the 
aeroplane on the ground, with consequent damage to the aeroplane and 
injury to occupants.

To address this potential unsafe condition, PAI issued Service Bulletin 
(SB) 80-0325 to provide inspection and rectification instructions.

For the reason described above, this [EASA] AD requires a leak test of the 
NLG Steering Manifold and, depending on the finding(s), accomplishment 
of applicable corrective action(s). This [EASA] AD also requires 
amendment of the applicable Aircraft Flight Manual (AFM).

The MCAI further notes that airplanes with NLG steering manifold part number 
72608 installed are known to include manufacturing serial numbers 1001, 3001, 3003, 
3004, 3006, 3007, and 3008, and also include airplanes that have incorporated Piaggio 
Aerospace Service Bulletin No. 80-0425, Revision 0, dated March 30, 2017, and Piaggio 
Aerospace Service Bulletin No. 80-0454, Revision 0, March 6, 2017. You may examine

**Related Service Information under 1 CFR part 51**

Piaggio Aero Industries S.p.A. has issued Piaggio Aerospace Service Bulletin No. 80-0325, Revision 0, dated August 10, 2017 (SB 80-0325), and Piaggio Aerospace P.180 AVANTI II/EVO Temporary Change No. 89, dated August 30, 2017 (Temporary Change 89), to the airplane flight manual (AFM). SB 80-0325 describes procedures for doing a NLG steering manifold leakage test. Temporary Change 89 contains emergency operating procedures for the pilot to follow if the NLG steering system fails. 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**

The FAA reviewed Piaggio Aerospace Service Bulletin No. 80-0425, Revision 0, dated March 30, 2017 (SB 80-0425); Piaggio Aerospace Service Bulletin No. 80-0454, Revision 0, March 6, 2017 (SB 80-0454); and Temporary Change No. 89 Errata Corrige, dated December 20, 2017 (Temporary Change 89EC). SB 80-0425 and SB 80-0454 both contain procedures for replacing the main landing gear and the NLG steering system on the applicable airplanes. Temporary Change 89EC revises the cover page of Temporary Change 89 to clarify the applicability of the change.

**FAA’s Determination and Requirements of the Proposed AD**

This product has been approved by the aviation authority of another country, and is approved for operation in the United States. Pursuant to our bilateral agreement with this State of Design Authority, they have notified us of the unsafe condition described in the MCAI and service information referenced above. The FAA is proposing this AD because the FAA evaluated all information and determined the unsafe condition exists and is likely to exist or develop on other products of the same type design.
Costs of Compliance

The FAA estimates that this proposed AD will affect 130 products of U.S. registry. The FAA also estimates that it would take about 2.5 work-hours per product to comply with the basic requirements of this proposed AD. The average labor rate is $85 per work-hour.

Based on these figures, the FAA estimates the cost of the proposed AD on U.S. operators to be $27,625, or $212.50 per product.

If necessary, the FAA estimates that replacing a NLG steering manifold would take about 10 work-hours and require parts costing $50,058, for a cost of $50,908 per product. The FAA has no way of determining the number of products that may need these actions.

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 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 small airplanes, gliders, balloons, airships, domestic business jet transport airplanes, and associated appliances to the Director of the Policy and Innovation Division.

**Regulatory Findings**

The FAA determined that this proposed AD would not have federalism implications under Executive Order 13132. 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

The FAA must receive comments by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to Piaggio Aero Industries S.p.A. Model P-180 airplanes, certificated in any category.

(d) Subject

Air Transport Association of America (ATA) Code 32: Landing Gear.

(e) Reason

This AD was prompted by mandatory continuing airworthiness information (MCAI) originated by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as insufficient sealing of a steering select/bypass valve installed in the nose landing gear (NLG) manifold. The FAA is issuing this AD to detect and correct insufficient sealing of the steering select/bypass valve in the NLG steering manifold, which could lead to uncommanded NLG wheel turns with consequent lateral runway departure.
(f) Actions and Compliance

Unless already done, do the following actions in paragraphs (f)(1) through (3) of this AD.

(1) For airplanes with NLG steering manifold part number (P/N) 72608 installed:

(i) Within 50 hours time-in service after the effective date of this AD, do a steering manifold pressure leakage test and, if there is steering actuator movement during the test, replace the NLG steering manifold and repeat the test by following the Accomplishment Instructions, procedure steps (1) through (24), in Piaggio Aerospace Service Bulletin No. 80-0325, Revision 0, dated August 10, 2017.

(ii) If steering actuator movement occurs during procedure step (9) or procedure step (15) of the leakage test required in paragraph (f)(1)(i) of this AD, replacing the NLG steering manifold and repeating the steering manifold pressure leakage test is required before further flight.

(2) For all airplanes, after the effective date of this AD, do not install NLG steering manifold P/N 72608 on any airplane unless it has been inspected as specified in paragraph (f)(1) of this AD and no steering actuator movement occurred.

(3) For all airplanes, within 30 days after the effective date of this AD, revise the airplane flight manual (AFM) by replacing certain pages in the Emergency Procedures section of the AFM by following the Instructions in Piaggio Aerospace P.180 AVANTI II/EVO Temporary Change No. 89, dated August 30, 2017.

(g) Alternative Methods of Compliance

The Manager, Small Airplane Standards Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to ATTN: Mike Kiesov, Aerospace Engineer, FAA, Small Airplane Standards Branch, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329-4144; fax: (816) 329-4090; email: mike.kiesov@faa.gov. Before using any approved AMOC on any airplane to which the AMOC applies, notify your appropriate
principal inspector (PI) in the FAA Flight Standards District Office (FSDO), or lacking a PI, your local FSDO.

(h) Related Information

Refer to MCAI EASA AD 2017-0229, dated November 21, 2017; Piaggio Aerospace Service Bulletin No. 80-0425, Revision 0, dated March 30, 2017; and Piaggio Aerospace Service Bulletin No. 80-0454, Revision 0, March 6, 2017, for related information. You may examine the MCAI on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2019-0412. For service information related to this AD, contact Piaggio Aero Industries S.p.A, Airworthiness Office, Via Pionieri e Aviatori d’Italia snc, 16154 Genova, Italy; phone: +39 010 0998046; email: airworthiness@piaggioaerospace.it. You may review this referenced service information at the FAA, Policy and Innovation Division, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329-4148. Issued in Kansas City, Missouri, on May 23, 2019.

Melvin J. Johnson
Aircraft Certification Service
Deputy Director, Policy and Innovation Division, AIR-601