



## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

#### 14 CFR Part 39

[Docket No. FAA-2025-0480; Project Identifier AD-2024-00546-E]

RIN 2120-AA64

#### Airworthiness Directives; International Aero Engines LLC 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 all International Aero Engines, LLC (IAE LLC) Model PW1122G-JM, PW1124G-JM, PW1124G1-JM, PW1127G-JM, PW1127G1-JM, PW1127G1A-JM, PW1127G1B-JM, PW1127GA-JM, PW1129G-JM, PW1130G-JM, PW1133G-JM, PW1133GA-JM, PW1428G-JM, PW1428GA-JM, PW1428GH-JM, PW1431G-JM, PW1431GA-JM, and PW1431GH-JM engines. This proposed AD was prompted by a report of six fan blade fracture events due to bird strikes, three of which resulted in an engine under cowl fire or pool fire. This proposed AD would require removal of one loop cushion clamp from the hydraulic fuel pressure fuel oil cooler fuel tube assembly (CP09 tube assembly) and replacement of the thermal management system (TMS) clevis mounts with redesigned TMS clevis mounts. 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 [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**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 [regulations.gov](https://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.

*AD Docket:* You may examine the AD docket at [regulations.gov](https://www.regulations.gov) under Docket No. FAA-2025-0480; 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, any comments received, and other information. The street address for Docket Operations is listed above.

*Material Incorporated by Reference:*

- For Pratt & Whitney (PW) material identified in this proposed AD, contact International Aero Engines, LLC, 400 Main Street, East Hartford, CT 06118; phone: (860) 565-0140; email: [help24@pw.utc.com](mailto:help24@pw.utc.com); website: [connect.prattwhitney.com](https://connect.prattwhitney.com).

- You may view this material at the FAA, Airworthiness Products Section, Operational Safety Branch, 1200 District Avenue, Burlington, MA 01803. For information on the availability of this material at the FAA, call (817) 222-5110.

**FOR FURTHER INFORMATION CONTACT:** Carol Nguyen, Aviation Safety Engineer, FAA, 2200 South 216th Street, Des Moines, WA 98198; phone: (781) 238-7655; email: [carol.nguyen@faa.gov](mailto:carol.nguyen@faa.gov).

**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-2025-0480; Project Identifier AD-2024-00546-E” at the beginning of your comments. The most helpful comments reference a specific portion of the proposal, explain the reason for any recommended change, and include supporting data. The FAA will consider all comments received by the closing date and may revise this proposal because of those comments.

Except for Confidential Business Information (CBI) as described in the following paragraph, and other information as described in 14 CFR 11.35, the FAA will post all comments received, without change, to regulations.gov, including any personal information you provide. The agency will also post a report summarizing each substantive verbal contact received about this NPRM.

### **Confidential Business Information**

CBI is commercial or financial information that is both customarily and actually treated as private by its owner. Under the Freedom of Information Act (FOIA) (5 U.S.C. 552), CBI is exempt from public disclosure. If your comments responsive to this NPRM contain commercial or financial information that is customarily treated as private, that you actually treat as private, and that is relevant or responsive to this NPRM, it is important that you clearly designate the submitted comments as CBI. Please mark each page of your submission containing CBI as "PROPIN." The FAA will treat such marked submissions as confidential under the FOIA, and they will not be placed in the public docket of this NPRM. Submissions containing CBI should be sent to Carol Nguyen, Aviation Safety Engineer, FAA, 2200 South 216th Street, Des Moines, WA 98198. Any commentary that the FAA receives which is not specifically designated as CBI will be placed in the public docket for this rulemaking.

### **Background**

The FAA received a report that the IAE LLC PW1100G fleet experienced six fan blade fracture events due to bird strikes, three of which resulted in an engine under cowl fire or pool fire. The manufacturer determined that during the events that resulted in a fire, the loads from the fan-blade-out caused the fracture of clevis mount bolts that attach the TMS manifold to the engine. The clevis mount bolt fracture allowed movement in the TMS manifold, causing the CP09 tube assembly to flex and fracture. The under cowl fire and pool fire events resulted from the ignition of high-pressure fuel released from the fractured CP09 fuel line. Engine fan blade fracture that results in clevis mount bolt fracture, if not addressed, could result in engine fire and damage to the airplane.

## **FAA's Determination**

The FAA is issuing this NPRM after determining that the unsafe condition described previously is likely to exist or develop on other products of the same type design.

## **Material Incorporated by Reference under 1 CFR Part 51**

The FAA reviewed the following material:

- PW Alert Service Bulletin (ASB) PW1000G-C-72-00-0214-00A-930A-D, Issue No. 004, dated September 18, 2024, which specifies procedures for replacement of the TMS clevis mounts with redesigned TMS clevis mounts.

- PW ASB PW1000G-C-73-00-0053-00A-930A-D, Issue No. 005, dated September 18, 2024, which specifies procedures for removing one loop cushion clamp from the CP09 tube assembly.

This material 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.

## **Proposed AD Requirements in this NPRM**

This proposed AD would require accomplishing the actions specified in the service information already described.

## **Interim Action**

The FAA considers that this proposed AD would be an interim action. The manufacturer is currently developing a modification to address the unsafe condition identified in this AD. Once this modification is developed, FAA-approved, and available, the FAA might consider additional rulemaking.

## **Costs of Compliance**

The FAA estimates that this AD, if adopted as proposed, would affect 586 engines installed on airplanes of U.S. registry.

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

### Estimated costs

Action	Labor Cost	Parts Cost	Cost per product	Cost on U.S. operators
Remove one cushion clamp from the CP09 tube assembly	9 work-hours x \$85 per hour = \$765	\$0	\$765	\$448,290
Replace the TMS clevis mounts	107 work-hours x \$85 per hour = \$9,095	\$17,000	\$26,095	\$15,291,670

### 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

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) Would not affect intrastate aviation in Alaska, and
- (3) Would 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:

**International Aero Engines, LLC:** Docket No. FAA-2025-0480; Project Identifier AD-2024-00546-E.

#### **(a) Comments Due Date**

The FAA must receive comments on this airworthiness directive (AD) by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

#### **(b) Affected ADs**

None.

#### **(c) Applicability**

This AD applies to International Aero Engines, LLC Model PW1122G-JM, PW1124G-JM, PW1124G1-JM, PW1127G-JM, PW1127G1-JM, PW1127G1A-JM, PW1127G1B-JM, PW1127GA-JM, PW1129G-JM, PW1130G-JM, PW1133G-JM, PW1133GA-JM, PW1428G-JM, PW1428GA-JM, PW1428GH-JM, PW1431G-JM, PW1431GA-JM, and PW1431GH-JM engines.

#### **(d) Subject**

Joint Aircraft System Component (JASC) Code 1400, Miscellaneous Hardware.

#### **(e) Unsafe Condition**

This AD was prompted by a report of six fan blade fracture events due to bird strikes, three of which resulted in an engine under cowl fire or pool fire. The FAA is

issuing this AD to prevent an engine under cowl fire or pool fire. The unsafe condition, if not addressed, could result in engine fire and damage to the airplane.

**(f) Compliance**

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

**(g) Required Actions**

(1) Within 30 days after the effective date of this AD, remove one loop cushion clamp, part number ST1540-06, from the hydraulic fuel pressure fuel oil cooler fuel tube assembly (CP09 tube assembly) in accordance with the Accomplishment Instructions, For Engines Installed On Aircraft, paragraph C, or For Engines Not Installed On Aircraft, paragraph A, of Pratt & Whitney (PW) Alert Service Bulletin (ASB) PW1000G-C-73-00-0053-00A-930A-D, Issue No. 005, dated September 18, 2024.

(2) At the next engine shop visit after the effective date of this AD, replace the thermal management system (TMS) clevis mount with redesigned TMS clevis mounts in accordance with paragraphs AJ, AK, and AM through AO of the Accomplishment Instructions of PW ASB PW1000G-C-72-00-0214-00A-930A-D, Issue No. 004, dated September 18, 2024.

**(h) Terminating Action**

The actions specified in paragraph (g)(2) of this AD constitute terminating action for the requirements of paragraph (g)(1) of this AD. This terminating action may be accomplished instead of the actions specified in paragraph (g)(1) of this AD.

**(i) Credit for Previous Actions**

(1) This paragraph provides credit for the actions specified in paragraph (g)(1) of this AD, if done before the effective date of this AD using any of the material specified in paragraph (i)(1)(i) through (iv) of this AD inclusive.

(i) PW ASB PW1000G-C-73-00-0053-00A-930A-D, Issue No. 001, dated October 25, 2022.

(ii) PW ASB PW1000G-C-73-00-0053-00A-930A-D, Issue No. 002, dated November 07, 2022.

(iii) PW ASB PW1000G-C-73-00-0053-00A-930A-D, Issue No. 003, dated November 21, 2022.

(iv) PW ASB PW1000G-C-73-00-0053-00A-930A-D, Issue No. 004, dated March 15, 2024.

(2) This paragraph provides credit for the actions specified in paragraph (g)(2) of this AD, if done before the effective date of this AD using any of the material specified in paragraph (i)(2)(i) through (iii) of this AD inclusive.

(i) PW ASB PW1000G-C-72-00-0214-00A-930A-D, Issue No. 001, dated July 19, 2023.

(ii) PW ASB PW1000G-C-72-00-0214-00A-930A-D, Issue No. 002, dated March 15, 2024.

(iii) PW ASB PW1000G-C-72-00-0214-00A-930A-D, Issue No. 003, dated May 16, 2024.

**(j) Alternative Methods of Compliance (AMOCs)**

(1) The Manager, AIR-520 Continued Operational Safety 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 AIR-520 Continued Operational Safety Branch, send it to the attention of the person identified in paragraph (k) of this AD and email to:

AMOC@faa.gov.

(2) 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.

**(k) Additional Information**

For more information about this AD, contact Carol Nguyen, Aviation Safety Engineer, FAA, 2200 South 216th Street, Des Moines, WA 98198; phone: (781) 238-7655; email: carol.nguyen@faa.gov.

**(l) Material Incorporated by Reference**

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the material listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this material as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) Pratt & Whitney (PW) Alert Service Bulletin (ASB) PW1000G-C-72-00-0214-00A-930A-D, Issue No. 004, dated September 18, 2024.

(ii) PW ASB PW1000G-C-73-00-0053-00A-930A-D, Issue No. 005, dated September 18, 2024.

(3) For PW material identified in this AD, contact International Aero Engines, LLC, 400 Main Street, East Hartford, CT 06118; phone: (860) 565-0140; email: [help24@pw.utc.com](mailto:help24@pw.utc.com); website: [connect.prattwhitney.com](http://connect.prattwhitney.com).

(4) You may view this material at the FAA, Airworthiness Products Section, Operational Safety Branch, 1200 District Avenue, Burlington, MA 01803. 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-locations](http://www.archives.gov/federal-register/cfr/ibr-locations) or email [fr.inspection@nara.gov](mailto:fr.inspection@nara.gov).

Issued on March 24, 2025.

Peter A. White,  
Deputy Director, Integrated Certificate Management Division,  
Aircraft Certification Service.

[FR Doc. 2025-05329 Filed: 3/27/2025 8:45 am; Publication Date: 3/28/2025]