

# Proposed Rules

Federal Register

Vol. 76, No. 135

Thursday, July 14, 2011

This section of the FEDERAL REGISTER contains notices to the public of the proposed issuance of rules and regulations. The purpose of these notices is to give interested persons an opportunity to participate in the rule making prior to the adoption of the final rules.

## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

#### 14 CFR Part 39

[Docket No. FAA-2011-0733; Directorate Identifier 2010-NE-36-AD]

RIN 2120-AA64

#### Airworthiness Directives; Pratt & Whitney Division (PW) PW4000 Series Turbofan Engines

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** We propose to adopt a new airworthiness directive (AD) for certain PW4000 turbofan engines. This proposed AD was prompted by an updated low-cycle fatigue (LCF) life analysis performed by Pratt & Whitney. This proposed AD would require removing certain part number (P/N) high-pressure turbine (HPT) stage 1 and HPT stage 2 airseals and HPT stage 1 airseal rings before their published life limit, and establishes a new lower life limit for these parts. We are proposing this AD to correct the unsafe condition on these products.

**DATES:** We must receive comments on this proposed AD by August 29, 2011.

**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 <http://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.

#### Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov>; 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 proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (*phone:* 800-647-5527) is in the **ADDRESSES** section. Comments will be available in the AD docket shortly after receipt.

**FOR FURTHER INFORMATION CONTACT:** James Gray, Aerospace Engineer, Engine Certification Office, FAA, 12 New England Executive Park, Burlington, MA 01803; *phone:* 781-238-7742; *fax:* 781-238-7199; *e-mail:* [james.e.gray@faa.gov](mailto:james.e.gray@faa.gov).

#### SUPPLEMENTARY INFORMATION:

##### Comments Invited

We invite 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-2011-0733; Directorate Identifier 2010-NE-36-AD" at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD because of those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

##### Discussion

A PW2000 field event led Pratt & Whitney to re-evaluate the low-cycle fatigue (LCF) lives of its PW2000 engine, and similar engines models, including the PW4000 engine and its high-pressure turbine (HPT). Pratt and Whitney's updated analysis indicated that the current certified life limits for the PW4000 HPT stage 1 and stage 2 air seals and air seal rings should be reduced to prevent failure of those life limited parts. The current certified life limits, if not reduced, present an unacceptable level of risk of part failure.

This condition, if not corrected, could result in engine failure and damage to the airplane.

#### FAA's Determination

We are proposing this AD because we evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other products of the same type design.

#### Proposed AD Requirements

This proposed AD would require removing the HPT stage 1 airseal, P/N 50L879; the HPT stage 2 airseal, P/N 53L030; and the HPT airseal ring, P/N 50L664, prior to their published life limits, using a drawdown plan.

#### Costs of Compliance

We estimate that this proposed AD would affect 869 engines installed on airplanes of U.S. registry. We also estimate that, because the removals would be performed at piece-part level, no additional work-hours would be required. Prorated life for the HPT would be about \$46,835 per engine. Based on these figures, we estimate the total cost of the proposed AD to U.S. operators to be \$40,699,615.

#### 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 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) 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, 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):

**Pratt & Whitney Division:** Docket No. FAA–2011–0733; Directorate Identifier 2010–NE–36–AD.

**(a) Comments Due Date**

We must receive comments by August 29, 2011.

**(b) Affected ADs**

None.

**(c) Applicability**

This AD applies to the following Pratt & Whitney Division (PW) turbofan engines, with high-pressure turbine (HPT) stage 1 airseal, part number (P/N) 50L879; HPT stage 2 airseal, P/N 53L030; or HPT stage 1 airseal ring, P/N 50L664, installed:

**(1) PW4000–100” Engines**

PW4000–100” engine models PW4164, PW4164C, PW4164C/B, PW4168, and PW4168A.

**(2) PW4000–94” Engines**

(i) PW4000–94” engine models PW4060, PW4060A, PW4060C, PW4062, PW4062A,

PW4156A, PW4158, PW4160, PW4460, and PW4462 engines that have incorporated Pratt & Whitney Service Bulletins (SBs) PW4ENG 72–490, or PW4ENG 72–504, or PW4ENG 72–512, or PW4ENG 72–572, or PW4ENG 72–588, or PW4ENG 73–150, or Engineering Change Number EC92KK322G, H, I, J, and K, as indicated with a (–3), or (–3A), or (–3B) suffix on the engine data plate.

(ii) PW4000–94” engines models PW4050, PW4052, PW4056, PW4152, PW4156, and PW4650 engines that have incorporated Pratt & Whitney SBs PW4ENG 72–490, or PW4ENG 72–504, or PW4ENG 72–512, or PW4ENG 72–572, or PW4ENG 72–588, or PW4ENG 73–150, or Engineering Change Number EC92KK322G, H, I, J, and K, as indicated with a (–3), or (–3A), or (–3B) suffix on the engine data plate.

**(d) Unsafe Condition**

This AD was prompted by an updated low-cycle fatigue (LCF) life analysis performed by Pratt & Whitney. We are issuing this AD to correct the unsafe condition on these products.

**(e) Compliance**

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

**(f) Removing From Service, the Stage 1 HPT Airseal, P/N 50L879**

Remove the stage 1 HPT airseal, P/N 50L879, at the next piece-part exposure after the effective date of this AD, or before accumulating the number of cycles listed in Table 1 of this AD, whichever occurs later.

TABLE 1—REMOVAL OF STAGE 1 HPT AIRSEALS, P/N 50L879, BY CYCLES-SINCE-NEW

For engine model . . .	Remove stage 1 HPT Airseal by . . .
(1) Listed in paragraph (c)(1) of the Applicability Section of this AD .....	12,600 cycles-since-new (CSN).
(2) Listed in paragraph (c)(2)(i) of the Applicability Section of this AD .....	13,900 CSN.
(3) Listed in paragraph (c)(2)(ii) of the Applicability Section of this AD .....	18,900 CSN.

**(g) Removing From Service, the Stage 2 HPT Airseal, P/N 53L030**

Remove the stage 2 HPT airseal, P/N 53L030, at the next piece-part exposure after

the effective date of this AD, or before accumulating the number of cycles listed in Table 2 of this AD, whichever occurs later.

TABLE 2—REMOVAL OF STAGE 2 HPT AIRSEALS, P/N 53L030, BY CYCLES-SINCE-NEW

For engine model . . .	Remove stage 2 HPT Airseal by . . .
(1) Listed in paragraph (c)(1) of the Applicability Section of this AD .....	13,900 CSN.
(2) Listed in paragraph (c)(2)(i) of the Applicability Section of this AD .....	13,800 CSN.
(3) Listed in paragraph (c)(2)(ii) of the Applicability Section of this AD .....	15,900 CSN.

**(h) Removing From Service, the Stage 1 HPT Airseal Ring, P/N 50L664**

Remove the stage 1 HPT airseal ring, P/N 50L664, at the next piece-part exposure after

the effective date of this AD, or before accumulating the number of cycles listed in Table 3 of this AD, whichever occurs later.

TABLE 3—REMOVAL OF STAGE 1 HPT AIRSEAL RING, P/N 50L664, BY CYCLES-SINCE-NEW

For engine model . . .	Remove stage 1 HPT Airseal Ring by . . .
(1) Listed in paragraph (c)(2)(i) of the Applicability Section of this AD .....	14,800 CSN.
(2) Listed in paragraph (c)(2)(ii) of the Applicability Section of this AD .....	16,800 CSN.

**(i) Installation Prohibition**

After the effective date of this AD, do not install any stage 1 HPT airseal, P/N 50L879, stage 2 HPT airseal, P/N 53L030, or stage 1 HPT airseal ring, P/N 50L664, that is at piece-part exposure and exceeds the new life limit listed in Table 1, Table 2, or Table 3, respectively, of this AD.

**(j) Definitions**

For the purpose of this AD, piece-part exposure means that the part is completely disassembled and removed from the engine.

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

The Manager, Engine Certification Office, FAA, has the authority to approve AMOCs for this AD, if requested, using the procedures found in 14 CFR 39.19.

**(l) Related Information**

For more information about this AD, contact James Gray, Aerospace Engineer, Engine Certification Office, FAA, 12 New England Executive Park, Burlington, MA 01803; *phone:* 781-238-7742; *fax:* 781-238-7199; *e-mail:* james.e.gray@faa.gov.

Issued in Burlington, Massachusetts, on July 8, 2011.

**Peter A. White,**

*Acting Manager, Engine & Propeller Directorate, Aircraft Certification Service.*

[FR Doc. 2011-17648 Filed 7-13-11; 8:45 am]

**BILLING CODE 4910-13-P**

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

[Docket No. FAA-2011-0716; Directorate Identifier 2011-NM-013-AD]

**RIN 2120-AA64**

**Airworthiness Directives; Gulfstream Aerospace LP (Type Certificate Previously Held by Israel Aircraft Industries, Ltd.) Model Galaxy, Gulfstream G150, and Gulfstream 200 Airplanes**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** We propose to adopt a new airworthiness directive (AD) for the products listed above. 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:

A broken aileron servo actuator centering spring rod was discovered on a model G100 aircraft during a routine scheduled maintenance inspection. \* \* \* This latent failure of a centering spring rod, if not detected and corrected, in conjunction with the disconnection of the normal mechanical control system of the same servo actuator would lead to loss [of] control of the flight control surface [aileron or elevator]. This condition would reduce the control capability of the airplane and imposes a higher workload on the flight crew reducing their ability to cope with adverse operating conditions.

The proposed AD would require actions that are intended to address the unsafe condition described in the MCAI.

**DATES:** We must receive comments on this proposed AD by August 29, 2011.

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

- *Federal eRulemaking Portal:* Go to <http://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:* U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-40, 1200 New Jersey Avenue, SE., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this proposed AD, contact Gulfstream Aerospace Corporation, P.O. Box 2206, Mail Station D-25, Savannah, Georgia 31402-2206; telephone 800-810-4853; fax 912-965-3520; e-mail *pubs@gulfstream.com*; Internet [http://www.gulfstream.com/product\\_support/technical\\_pubs/pubs/index.htm](http://www.gulfstream.com/product_support/technical_pubs/pubs/index.htm). You may review copies of the referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington. For information on the availability of

this material at the FAA, call 425-227-1221.

**Examining the AD Docket**

You may examine the AD docket on the Internet at <http://www.regulations.gov>; or in person at the Docket Operations office 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 the Docket Operations office (telephone (800) 647-5527) is in the **ADDRESSES** section. Comments will be available in the AD docket shortly after receipt.

**FOR FURTHER INFORMATION CONTACT:**

Mike Borfitz, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue, SW., Renton, Washington 98057-3356; telephone (425) 227-2677; fax (425) 227-1149.

**SUPPLEMENTARY INFORMATION:**

**Comments Invited**

We invite you to send any written relevant data, views, or arguments about this proposed AD. Send your comments to an address listed under the **ADDRESSES** section. Include “Docket No. FAA-2011-0716; Directorate Identifier 2011-NM-013-AD” at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD based on those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

**Discussion**

The Civil Aviation Authority (CAA), which is the aviation authority for Israel, has issued Airworthiness Directives 27-10-11-03, dated December 6, 2010; and 27-10-12-29, dated January 4, 2011 (referred to after this as “the MCAI”); to correct an unsafe