

proposed rule by submitting such written data, views, or arguments, as they may desire. Communications should identify the Rules Docket number and be submitted in triplicate to the address specified above. All communications received on or before the closing date for comments, specified above, will be considered before taking action on the proposed rule. The proposals contained in this action may be changed in light of the comments received.

Comments are specifically invited on the overall regulatory, economic, environmental, and energy aspects of the proposed rule. All comments submitted will be available, both before and after the closing date for comments, in the Rules Docket for examination by interested persons. A report summarizing each FAA-public contact concerned with the substance of this proposal will be filed in the Rules Docket.

Commenters wishing the FAA to acknowledge receipt of their comments submitted in response to this action must submit a self-addressed, stamped postcard on which the following statement is made: "Comments to Docket Number 2000-NE-47-AD." The postcard will be date stamped and returned to the commenter.

Availability of NPRM's

Any person may obtain a copy of this NPRM by submitting a request to the FAA, New England Region, Office of the Regional Counsel, Attention: Rules Docket No. 2000-NE-47-AD, 12 New England Executive Park, Burlington, MA 01803-5299.

Discussion

On October 11, 2002, the FAA issued AD 2002-21-10, Amendment 39-12916 (67 FR 65484, October 25, 2002), that:

- Establishes a minimum rebuild standard for engines and requires operators to remove PW4000 engines with cutback stators from service,
- Limits the number of PW4000 engines with potentially reduced stability margin to no more than one engine on each airplane,
- Removes engines from service using engine stagger limit criteria,
- Returns engines to service after having exceeded HPC cyclic limits or after shop maintenance by either passing engine fuel spike stability tests or overhauling the HPC,
- Performs repetitive test cell engine fuel spike stability tests at certain cycle intervals,
- Establishes a rules based criterion to determine the engine category on Airbus airplanes,

- Establishes criteria to allow engine stagger without Testing-21 for engines over their respective limits,

- Establishes criteria which may require Testing-21 on engines that have complied with Boeing/McDonnell Douglas/Airbus Fan Thrust Deterioration Mode (FTDM) ADs,

- Reestablishes the HPT/HPC cyclic mismatch criteria, and

- Adds criteria to address engine installation changes, aircraft transfers, and thrust rating changes.

That action was prompted by investigation and evaluation of PW4000 series turbofan engines surge data, and continuing reports of surges in the PW4000 fleet. That condition, if not corrected, could result in engine takeoff power losses due to HPC surge.

Since that AD was issued, PW issued service bulletin PW4ENG 72-755, dated February 28, 2003, that introduces a new RCC rear HPC for engines installed on Boeing airplanes.

Although the RCC rear HPC has been certified to 14 CFR part 33 and 14 CFR part 25 on Boeing airplanes, it has not completed certification to 14 CFR part 25 on Airbus and McDonnell Douglas airplanes.

Manufacturer's Service Information

The FAA has reviewed and approved the technical contents of the following PW service information:

- Service Bulletin PW (SB) PW4ENG 72-755, dated February 28, 2003
- Internal Engineering Notice (IEN) 02KCW13, dated October 14, 2002
- IEN 02KCW13A, dated October 14, 2002
- IEN 02KCW13C, dated July 25, 2002
- IEN 02KCW13D, dated July 29, 2002
- IEN 02KCW13E, dated November 21, 2002
- IEN 02KCW13F, dated October 14, 2002
- IEN 02KCW13H, dated December 9, 2002
- SB PW4ENG72-714, Revision 1, dated November 8, 2001
- SB PW4ENG72-749, dated June 17, 2002
- IEN 96KC973D, dated October 12, 2001
- Temporary Revision (TR) TR 71-0018, dated November 14, 2001
- TR 71-0026, dated November 14, 2001
- TR 71-0035, dated November 14, 2001
- Cleaning, Inspection, and Repair (CIR) procedure CIR 51A357, Section 72-35-68, Inspection/Check-04, Indexes 8-11, dated September 15, 2001
- CIR 51A357, Section 72-35-68, Repair 16, dated June 15, 1996

- PW4000 PW engine manual (EM) 50A443, 71-00-00, TESTING-21, dated March 15, 2002
- PW4000 PW EM 50A822, 71-00-00, TESTING-21, dated March 15, 2002
- PW4000 PW EM 50A605, 71-00-00, TESTING-21, dated March 15, 2002

Additional Service Information

The FAA has reviewed and approved the technical contents of Chromalloy Florida Repair Procedures, 00 CFL-039-0, dated December 27, 2000 and 02 CFL-024-0, dated September 15, 2002.

FAA's Determination of an Unsafe Condition and Proposed Actions

Since an unsafe condition has been identified that is likely to exist or develop on other PW4000 series turbofan engines of this same type design, the proposed AD would supersede AD 2002-21-10 to require the same actions as that AD, adds on-wing Testing-21 to Boeing 747 and MD11 airplanes, and adds the requirement to install a new RCC rear HPC on engines installed in the Boeing fleet as follows:

- For engines installed on Boeing 767 airplanes, by May 31, 2006 and thereafter, ensure that at least one Configuration I engine is installed on the airplane. After May 31, 2006, the non-Configuration I engine installed on the airplane must have incorporated the Haynes material in the HPC inner case rear hook.
- For engines installed on Boeing 747 airplanes, by January 31, 2007 and thereafter, ensure that no more than one non-Configuration I engine is installed on the airplane. After January 31, 2007, the non-Configuration I engine installed on the airplane must have incorporated the Haynes material in the HPC inner case rear hook.

- Prior to June 30, 2009 or whenever the HPC module is disassembled to a level that separates the HPC rear case assembly at H flange from the HPC module, whichever occurs first, incorporate the RCC rear HPC. Engines incorporating the RCC rear HPC are Configuration I engines.

The actions are required to be done in accordance with the service information described previously and have been coordinated with the Transport Airplane Directorate.

Economic Analysis

There are approximately 2,300 engines of the affected design in the worldwide fleet. The FAA estimates that 550 engines installed on aircraft of U.S. registry would be affected by this proposed AD. The FAA also estimates that it would take approximately 183 work hours per engine to perform the