

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 2002-NE-16-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. 2002-NE-16-AD, 12 New England Executive Park, Burlington, MA 01803-5299.

#### Discussion

On November 8, 2002, the FAA issued AD 2002-23-08, Amendment 39-12952 (67 FR 71094, November 29, 2002), to require establishing new reduced LP turbine stage 2 disc cyclic limits, to require removing from service affected discs that already exceed the new reduced cyclic limit, and to remove other affected discs before exceeding their cyclic limits, using a drawdown schedule. The Civil Aviation Authority (CAA), which is the airworthiness authority for the United Kingdom (U.K.), had notified the FAA that an unsafe condition may exist on RR models RB211-535E4-37, RB211-535E4-B-37, and RB211-535E4-B-75 turbofan engines. The CAA advised that the manufacturer had performed a reassessment of the safe cyclic limits of LP turbine stage 2 discs, P/Ns UL11508, UL17141, UL18947, UL29029, and UL37352. The cyclic limits of these discs were reduced based on more recent thermal and stress data obtained from operational experience. This condition, if not corrected, could result in uncontained engine failure and possible loss of the airplane.

Since AD 2002-23-08 was issued, another reassessment of the thermal and stress data obtained through operational experience was made, and comments were received from operators on the current AD.

#### Comments

Interested persons have been afforded an opportunity to comment on final rule; request for comments AD 2002-23-08. Due consideration has been given to the comments received.

#### Request To Change Table 1 Life Limit

Two commenters request that the Flight Plan A life limit for item (1) December 31, 2001, listed in Table 1, be changed from 22,500 cycles-since-new (CSN) to the value of 23,200 CSN. The commenters state that the 22,500 CSN value does not agree with the corresponding table value in mandatory service bulletin (MSB) RB.211-72-D181, Revision 3, dated August 16, 2002.

The FAA agrees. We have changed item (1) of Table 1 of this proposed rule to 23,200 CSN.

#### Request To Change Effective Date of Disc Cyclic Life

Nine commenters request that the effective date of the disc cyclic life in Table 2 and Table 3 be changed from "On the effective date of this AD" to agree with the corresponding table value of "As of December 31, 2000" in MSB RB.211-72-D181, Revision 3, dated August 16, 2002.

The FAA agrees. We have changed the first columns of Table 2 and Table 3.

#### Request To Change Drawdown Schedule

Six commenters request the drawdown schedule in the AD be changed to coincide with the schedule in MSB RB.211-72-D181, Revision 3. The commenters have identified differences in various drawdown schedule cyclic limits between the AD and the MSB, and state the AD limits are more restrictive.

The FAA agrees. We have changed this proposed rule to coincide as much as possible with the drawdown schedule in the MSB.

#### Request for an Allowance for Flight Plan Intermix

One commenter states that the AD does not allow for Flight Plan A and Flight Plan B intermix count conditions and that this could result in a lower cyclic limit than required by the MSB.

The FAA agrees. We have incorporated the intermix note from the MSB into this proposed rule.

#### Request To Incorporate Four Tables from the MSB Versus the Three Tables in AD

One commenter states that the drawdown requirements and inspection were provided in four tables in MSB

RB.211-72-D181, Revision 3, and that the AD should adopt the same tabular format. The commenter believes this would reduce the potential for confusion among the operators, eliminate contradiction between the MSB and AD, and ensure the original safety issues will be addressed.

The FAA partially agrees. It is unclear which four tables the commenter is referring to since they are not numbered in the MSB. However, in an effort to clarify this information, we have added additional levels of detail to Table 2 and Table 3.

#### Manufacturer's Service Information

Rolls-Royce plc. issued MSB RB.211-72-D181, Revision 3, dated August 16, 2002, that specifies a drawdown schedule for removing from service affected LP turbine stage 2 discs, using new Time Limits Manual (TLM) cyclic limits. This MSB provides a scheduled reduction, by engine and flight plan, of LP turbine stage 2 disc lives until the full life-cycle reduction on December 31, 2005.

This MSB also provides instructions for performing a one-time on-wing eddy current inspection for cracks of affected LP turbine stage 2 discs to allow a disc to remain in service for an additional 3,000 cycles, if it does not exceed the new, lower TLM cyclic limit. The CAA has classified this service bulletin as mandatory and issued AD 006-05-2001 in order to assure the airworthiness of these Rolls-Royce plc. turbofan engines in the U.K.

#### Bilateral Agreement Information

This engine model is manufactured in the U.K. and is type certificated for operation in the United States under the provisions of section 21.29 of the Federal Aviation Regulations (14 CFR 21.29) and the applicable bilateral airworthiness agreement. Pursuant to this bilateral airworthiness agreement, the CAA has kept the FAA informed of the situation described above. The FAA has examined the findings of the CAA, reviewed all available information, and determined that AD action is necessary for products of this type design that are certificated for operation in the United States.

#### Proposed Requirements of This AD

Since an unsafe condition has been identified that is likely to exist or develop on other RR models RB211-535E4-37, RB211-535E4-B-37, and RB211-535E4-B-75 turbofan engines of the same type design, the proposed AD would require:

- Reducing the LP turbine stage 2 disc life-cyclic limits; AND