

bearing failure, and the discovery of possible fatigue failure of the speed probe boom electrical support assembly. The actions specified by the proposed AD are intended to prevent undetected fires originating within the HSGB from breaching the HSGB case, which could result in engine damage and increased difficulty in extinguishing a fire, and to prevent undetected LP compressor shaft location bearing failure, which could result in LP compressor and turbine shaft assembly failure, turbine overspeed, and possible uncontained engine failure.

DATES: Comments must be received by May 12, 2003.

ADDRESSES: Submit comments in triplicate to the Federal Aviation Administration (FAA), New England Region, Office of the Regional Counsel, Attention: Rules Docket No. 2000-NM-369-AD, 12 New England Executive Park, Burlington, MA 01803-5299. Comments may be inspected at this location, by appointment, between 8 a.m. and 4:30 p.m., Monday through Friday, except Federal holidays. Comments may also be sent via the Internet using the following address: "gane-adcomment@faa.gov". Comments sent via the Internet must contain the docket number in the subject line.

The service information referenced in the proposed rule may be obtained from Rolls-Royce plc, P.O. Box 31, Derby, England, DE248BJ; telephone: 011-44-1332-242-424; fax: 011-44-1332-245-418 and Lockheed Martin & Logistics Center, 120 Orion Street, Greenville, South Carolina 29605. This information may be examined, by appointment, at the FAA, New England Region, Office of the Regional Counsel, 12 New England Executive Park, Burlington, MA.

FOR FURTHER INFORMATION CONTACT:

James Lawrence, Aerospace Engineer, Engine Certification Office, FAA, Engine and Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803-5299; telephone: (781) 238-7176, fax: (781) 238-7199, and Robert A. Bosak, Aerospace Engineer, Atlanta Aircraft Certification Office, One Crown Center, Suite 475, 1895 Phoenix Blvd., Atlanta, GA 39348, telephone: (770) 703-6094, fax: (770) 703-6097.

SUPPLEMENTARY INFORMATION:

Comments Invited

Interested persons are invited to participate in the making of the 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-NM-369-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-NM-369-AD, 12 New England Executive Park, Burlington, MA 01803-5299.

Discussion

On August 15, 2001, the FAA issued airworthiness directive (AD) 2000-17-10 R1, Amendment 39-12378 (66 FR 44030 August 22, 2001), to require modifications of the engine turbine cooling air panel at the flight engineer/second officer's console, pilot's caution and warning light panel on the main instrument panel, and installation of an engine turbine air temperature monitoring system. That action was prompted by reports of an undetected fire breaching the HSGB case on certain Rolls-Royce engines installed on in-service airplanes due to lack of an internal fire detection system within the HSGB. That condition, if not corrected, could result in engine damage and increased difficulty in extinguishing a fire.

Since that AD was issued, it has been determined that Lockheed Martin L-1011-385 series airplanes with RB211-22B-02 series engines need to be added to the applicability. Also since that AD was issued, the Civil Aviation Authority (CAA), which is the airworthiness authority for the United Kingdom (U.K.), notified the FAA that other unsafe conditions may exist on Rolls-

Royce plc RB211-22B-02, RB211-524B-02, RB211-524B-B-02, RB211-524B3-02, RB211-524B4-02, and RB211-524B4-D-02 series turbofan engines which are installed in Lockheed Martin models L-1011-385-1, L-1011-385-1-14, L-1011-385-1-15, and L-1011-385-3 airplanes. The CAA has reported that recently an event occurred in which the continued operation of an engine with an undetected failure of the LP compressor shaft location bearing, resulted in failure of the LP compressor and turbine shaft assembly and severe secondary engine damage. The manufacturer states that the method used to detect pending failure of the LP compressor shaft location bearing is to monitor the LP vibration level on an indicator in the cockpit. This method has proved ineffective.

This proposal contains actions that would be required for these Rolls-Royce engines and the airplanes on which the engines are installed. Those actions must be done so that the installation of the engine turbine air temperature monitoring system and installation of the LP compressor shaft extreme axial movement detector system are complete. Without complete monitor and detector systems, engine damage and increased difficulty in extinguishing a fire could occur, and failures of the LP compressor shaft location bearing would continue undetected. These actions have been coordinated with the Atlanta Aircraft Certification Office and the Transport Airplane Directorate. All parties agree that a single AD addressing these unsafe conditions and the complete modifications to address these unsafe conditions should be issued from the Engine and Propeller Directorate.

Manufacturer's Service Information

Rolls-Royce plc has issued Mandatory Service Bulletins (MSB) RB.211-72-C863, dated February 15, 2002, applicable to RB211-22B-02 engines and MSB RB.211-72-C963, dated December 4, 2001, applicable to RB211-524B-02, RB211-524B-B-02, RB211-524B3-02, RB211-524B4-02, and RB211-524B4-D-02 engines, that specify installation of an LP compressor shaft extreme axial movement detector system. These MSB's require compliance with five other service bulletins (SB's) concurrently or before accomplishing the applicable MSB. This proposal would require compliance with the latest revisions of these SB's, as listed in this proposal. The SB's are as follows:

- RR SB RB.211-72-6149, Revision 9, dated November 24, 1999, which introduces a new design engine front