

Germany, recently notified the FAA that an unsafe condition may exist on RRD Dart 528-7E, 529-7H, -7E, -8E, -8H, -8X, -8Y, -8Z, 529D-7E, -7H, -8E, -8H, -8X, -8Y, -8Z, 531, 532-2L, -7, -7N, -7P, -7L, -7R, 535-2, -7R, 542-4, -4K, -10, -10J, -10K, 552-2, 552-7, and -7R turboprop engines. The LBA advises that some HP and IP turbine discs have had Sermetel coating (Omat 7/46) applied, in accordance with a local repair scheme, and also have dry film lubricant applied. This coating, when combined with the application of dry film lubricant, may have a detrimental effect on the discs leading to uncontained HP or IP turbine disc failure, which could result in damage to the airplane.

The dry film lubricant is graphite-based and in a typical corrosive environment, acts as an electrolyte when combined with Sermetel coating. This results in an accelerated form of corrosion pitting which could lead to initiation of cracks.

Relevant Service Information

RRD has issued Mandatory Service Bulletin No. Da72-540, dated December 23, 2002. This MSB describes procedures for determining if certain HP and IP turbine discs have Sermetel coating (Omat 7/46) combined with the application of a dry film lubricant and describes procedures for removing the coating and fully inspecting the discs once the coating is removed. The LBA classified this MSB as mandatory and issued airworthiness directive LTA 2003-015, dated February 6, 2003, in order to ensure the airworthiness of these RRD engines in Germany.

FAA's Determination and Requirements of the Proposed AD

These RRD Dart 528-7E, 529-7H, -7E, -8E, -8H, -8X, -8Y, -8Z, 529D-7E, -7H, -8E, -8H, -8X, -8Y, -8Z, 531, 532-2L, -7, -7N, -7P, -7L, -7R, 535-2, -7R, 542-4, -4K, -10, -10J, -10K, 552-2, 552-7, and -7R turboprop engines, manufactured in Germany, are 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 LBA has kept us informed of the situation described above. We have examined the LBA's findings, 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.

Therefore, we are proposing this AD, which would require removal of any Sermetel coating (Omat 7/46) from certain HP turbine discs (except for engines with RRD Service Bulletin No. Da72-533, Revision 3, dated October 2001, incorporated) and IP turbine discs, and full inspection of discs after coating removal.

Changes to 14 CFR Part 39—Effect on the Proposed AD

On July 10, 2002, we published a new version of 14 CFR part 39 (67 FR 47997, July 22, 2002), which governs the FAA's AD system. This regulation now includes material that relates to altered products, special flight permits, and alternative methods of compliance. This material previously was included in each individual AD. Since this material is included in 14 CFR part 39, we will not include it in future AD actions.

Costs of Compliance

There are approximately 1,400 RRD Dart 528-7E, 529-7H, -7E, -8E, -8H, -8X, -8Y, -8Z, 529D-7E, -7H, -8E, -8H, -8X, -8Y, -8Z, 531, 532-2L, -7, -7N, -7P, -7L, -7R, 535-2, -7R, 542-4, -4K, -10, -10J, -10K, 552-2, 552-7, and -7R turboprop engines of the affected design in the worldwide fleet. We estimate that 130 engines installed on airplanes of U.S. registry would be affected by this proposed AD. We also estimate that it would take approximately 12 work hours per engine to perform the proposed actions, and that the average labor rate is \$60 per work hour. Required parts are not anticipated. Based on these figures, the total cost of the proposed AD to U.S. operators is estimated to be \$93,600.

Regulatory Findings

We have 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 that the 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); 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.

We prepared a summary of the costs to comply with this proposal and placed it in the AD Docket. You may get a copy of this summary by sending a request to us at the address listed under **ADDRESSES**. Include "AD Docket No. 2003-NE-10-AD" in your request.

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 Federal Aviation Administration 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:

Rolls-Royce Deutschland Ltd & Co KG:
Docket No. 2003-NE-10-AD.

Comments Due Date

- (a) The FAA must receive comments on this airworthiness directive (AD) action by July 7, 2003.

Affected ADs

- (b) None.

Applicability

(c) This AD is applicable to Rolls-Royce Deutschland Ltd & Co KG (RRD) (formerly Rolls-Royce plc) Dart 528-7E, 529-7H, -7E, -8E, -8H, -8X, -8Y, -8Z, 529D-7E, -7H, -8E, -8H, -8X, -8Y, -8Z, 531, 532-2L, -7, -7N, -7P, -7L, -7R, 535-2, -7R, 542-4, -4K, -10, -10J, -10K, 552-2, 552-7, and -7R turboprop engines with an HP turbine disc or IP turbine disc that has an SN listed in Table 1 of this AD installed. These engines are installed on, but not limited to, BAE Systems (Operations) Limited, Model HS 748 Series 2A and 2B airplanes, Fokker Aircraft B.V., F.27 Friendship Mark 200, 400, 500, and 600 airplanes, Gulfstream Aerospace Corporation Model G-159 "Gulfstream I" airplanes, Maryland Air Industries, Inc. F-7F, F-27A, F-27G, F-27J, F-27M, FH-227B, FH-227C, FH-227 D, and FH-227 E airplanes, and Mitsubishi Heavy Industries, Ltd Model YS-11, YS-11A-200, YS-11A-300, YS-11A-500, and YS-11A-600 airplanes. Table 1 follows: