

DEPARTMENT OF TRANSPORTATION**Federal Aviation Administration****14 CFR Part 39**

[Docket No. 99-NM-176-AD]

RIN 2120-AA64

Airworthiness Directives; Raytheon Model BAe.125 Series 1000A and 1000B, and Model Hawker 1000 Series Airplanes**AGENCY:** Federal Aviation Administration, DOT.**ACTION:** Notice of proposed rulemaking (NPRM).

SUMMARY: This document proposes the adoption of a new airworthiness directive (AD) that is applicable to all Raytheon Model BAe.125 Series 1000A and 1000B, and Model Hawker 1000 series airplanes. This proposal would require inspection of P1 pitot pipes for chafing or damage, and various follow-on actions. This proposal is prompted by reports of P1 pitot pipes chafing against adjacent flight control cables. The actions specified by the proposed AD are intended to prevent a hole in the P1 pitot pipes, which would lead to erroneous input to the instrumentation and warning systems associated with the pilot's instruments.

DATES: Comments must be received by November 1, 1999.

ADDRESSES: Submit comments in triplicate to the Federal Aviation Administration (FAA), Transport Airplane Directorate, ANM-114, Attention: Rules Docket No. 99-NM-176-AD, 1601 Lind Avenue, SW., Renton, Washington 98055-4056. Comments may be inspected at this location between 9:00 a.m. and 3:00 p.m., Monday through Friday, except Federal holidays.

The service information referenced in the proposed rule may be obtained from Raytheon Aircraft Company, 9709 East Central, Wichita, Kansas 67206. This information may be examined at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the FAA, Small Airplane Directorate, Wichita Aircraft Certification Office, 1801 Airport Road, Room 100, Mid-Continent Airport, Wichita, Kansas.

FOR FURTHER INFORMATION CONTACT: Paul C. DeVore, Aerospace Engineer, Systems and Propulsion Branch, ACE-116W, FAA, Small Airplane Directorate, Wichita Aircraft Certification Office, 1801 Airport Road, Room 100, Mid-Continent Airport, Wichita, Kansas

67209; telephone (316) 946-4142; fax (316) 946-4407.

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 shall 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 notice 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 notice must submit a self-addressed, stamped postcard on which the following statement is made: "Comments to Docket Number 99-NM-176-AD." The postcard will be date stamped and returned to the commenter.

Availability of NPRMs

Any person may obtain a copy of this NPRM by submitting a request to the FAA, Transport Airplane Directorate, ANM-114, Attention: Rules Docket No. 99-NM-176-AD, 1601 Lind Avenue, SW., Renton, Washington 98055-4056.

Discussion

The FAA has received reports indicating that the P1 pitot pipes have been found chafing against adjacent flight control cables on Raytheon Model BAe.125 Series 1000A and 1000B, and Model Hawker 1000 series airplanes. Such chafing has been attributed to installation with inadequate clearance during manufacture. This condition, if not corrected, could wear a hole through the P1 pitot pipes, which would result in erroneous input to the instrumentation and warning systems associated with the pilot's instruments.

Explanation of Relevant Service Information

The FAA has reviewed and approved Raytheon Service Bulletin SB.34-3028,

dated January 1998, which describes procedures for inspection of P1 pitot pipes for chafing or damage, and various follow-on actions. If no chafing or damage is detected, follow-on actions consist of ensuring that a minimum clearance of 0.25 inch exists between the flight control cables and the adjacent P1 pitot pipes, and repositioning the P1 pitot pipes as necessary to achieve this clearance. If any chafing or damage is detected, follow-on actions include replacing discrepant parts with new parts; ensuring that a minimum clearance of 0.25 inch exists between the flight control cables and the adjacent P1 pitot pipes; inspecting the flight control cables in the area of wear for damage; and testing the P1 pitot system to ensure proper function.

Accomplishment of the actions specified in the service bulletin is intended to adequately address the identified unsafe condition.

Explanation of Requirements of Proposed Rule

Since an unsafe condition has been identified that is likely to exist or develop on other products of this same type design, the proposed AD would require inspection of P1 pitot pipes for chafing or damage, and replacement of discrepant parts with new parts; and checking the installation to ensure a minimum clearance of 0.25 inch exists between the flight control cables and the adjacent pipe, and corrective actions, if necessary. If evidence of chafing is found, the proposed AD also would require a test of the P1 pitot system to ensure proper function, and inspection of the adjacent flight control cables for any sign of damage. The actions would be required to be accomplished in accordance with the service bulletin described previously, except as discussed below.

If the test of the P1 pitot system fails, or if any damage to the flight control cables is found, this proposed AD would require corrective actions in accordance with the Aircraft Maintenance Manual.

Differences Between Proposed Rule and Service Bulletin

Operators should note that, although the service bulletin recommends accomplishing the inspection of P1 pitot pipes for damage, and follow-on actions, if necessary, during the next scheduled hourly airframe inspection, the FAA has determined that a compliance time of 150 flight hours after the effective date of this AD for initiating the required actions is warranted, in that it represents an appropriate interval of time allowable for affected airplanes to

continue to operate without compromising safety. In developing an appropriate compliance time for this AD, the FAA considered not only the manufacturer's recommendation, but the degree of urgency associated with addressing the subject unsafe condition, the average utilization of the affected fleet, and the time necessary to perform the inspection (one hour). The FAA finds that a compliance time of 150 flight hours after the effective date of this AD would also closely correspond to the time of the next scheduled hourly airframe inspection.

Cost Impact

There are approximately 52 airplanes of the affected design in the worldwide fleet. The FAA estimates that 39 airplanes of U.S. registry would be affected by this proposed AD, that it would take approximately 1 work hour per airplane to accomplish the proposed inspection, and that the average labor rate is \$60 per work hour. Based on these figures, the cost impact of the proposed AD on U.S. operators is estimated to be \$2,340, or \$60 per airplane.

The cost impact figure discussed above is based on assumptions that no operator has yet accomplished any of the proposed requirements of this AD action, and that no operator would accomplish those actions in the future if this AD were not adopted.

Regulatory Impact

The regulations proposed herein would not have substantial direct effects 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. Therefore, in accordance with Executive Order 12612, it is determined that this proposal would not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.

For the reasons discussed above, I certify that 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); and (3) if promulgated, 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. A copy of the draft regulatory evaluation prepared for this action is contained in the Rules Docket. A copy of it may be obtained by contacting the Rules Docket at the location provided under the caption ADDRESSES.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Safety.

The Proposed Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration proposes to amend part 39 of the Federal Aviation Regulations (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. Section 39.13 is amended by adding the following new airworthiness directive:

Raytheon Aircraft Company: Docket 99–NM–176–AD.

Applicability: All Model BAe.125 Series 1000A and 1000B, and Model Hawker 1000 series airplanes; certificated in any category.

Note 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (b) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent a hole in the P1 pitot pipes, which would lead to erroneous input to the instrumentation and warning systems associated with the pilot's instruments, accomplish the following:

Inspections and Corrective Actions

(a) Within 150 flight hours after the effective date of this AD, perform a one-time general visual inspection to detect chafing or damage of the P1 pitot pipes, in accordance

with Raytheon Service Bulletin SB.34–3028, dated January 1998.

Note 2: For the purposes of this AD, a general visual inspection is defined as: "A visual examination of an interior or exterior area, installation, or assembly to detect obvious damage, failure, or irregularity. This level of inspection is made under normally available lighting conditions such as daylight, hangar lighting, flashlight, or drop-light, and may require removal or opening of access panels or doors. Stands, ladders, or platforms may be required to gain proximity to the area being checked."

(1) If no chafing or damage is found, prior to further flight, ensure a clearance of 0.25 inch or more exists between the P1 pitot pipes and flight control cables. If clearance is less than 0.25 inch, prior to further flight, reposition the P1 pitot pipes to achieve 0.25-inch clearance, in accordance with the service bulletin.

(2) If a pitot pipe is found to be chafed or damaged, prior to further flight, accomplish the requirements of paragraphs (a)(2)(i), (a)(2)(ii), and (a)(2)(iii) of this AD.

(i) Replace the discrepant pitot pipe with a new pipe, and ensure that a clearance of 0.25 inch or more exists between the flight control cables and the new pitot pipe, in accordance with the service bulletin. If clearance is less than 0.25 inch, reposition the P1 pitot pipes to achieve 0.25-inch clearance, in accordance with the service bulletin.

(ii) Perform a general visual inspection for damage of the flight control cables adjacent to the area of chafing or damage of the P1 pitot pipes, in accordance with the service bulletin. If damage is found, replace the damaged flight control cables with new cables in accordance with Chapter 20–10–31 of the Aircraft Maintenance Manual.

(iii) Perform a test of the P1 pitot system to ensure proper function, in accordance with the service bulletin. If the P1 pitot system fails the test, perform the corrective actions specified in Chapter 34–11–00 of the Aircraft Maintenance Manual.

Alternative Methods of Compliance

(b) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Wichita Aircraft Certification Office (ACO), FAA, Small Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Wichita ACO.

Note 3: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Wichita ACO.

Special Flight Permits

(c) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Issued in Renton, Washington, on September 8, 1999.

D.L. Riggin,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 99-23996 Filed 9-14-99; 8:45 am]

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DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 98-ANE-76-AD]

RIN 2120-AA64

Airworthiness Directives; International Aero Engines AG V2500-A1 Series Turbofan Engines

AGENCY: Federal Aviation Administration, DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: This document proposes the superseding of two existing airworthiness directives (ADs), applicable to International Aero Engines AG (IAE) V2500-A1 series turbofan engines, one of which, AD 98-20-18, currently requires removal from service of affected high pressure turbine (HPT) disks, identified by part number and serial number in the applicability paragraph of that AD, and replacement with a serviceable part. The other current AD, 99-05-05, requires initial and repetitive inspections of certain HPT stage 1 and stage 2 disks utilizing an improved ultrasonic method when the disks are exposed during a normal shop visit, and is a subsurface anomaly is found, removal from service and replacement with a serviceable part. This action would require the initial inspection required by AD 99-05-05 to be completed at the next shop visit regardless of the planned maintenance or the reason for shop removal. The repetitive inspection interval would also be redefined to eliminate the cyclic limit and thus be less restrictive. This proposal is prompted by results from further investigation subsequent to the publication of AD 98-20-18 that have revealed that the HPT disks affected by that AD are part of the population addressed by AD 99-05-05. These HPT disks can be safely reintroduced into service after completing the initial inspection requirements mandated by this proposed AD. This proposal is also prompted by further analysis which indicates a reduction in risk if the initial inspection required by AD 99-05-05 is completed sooner and that the subsequent required inspections can be

redefined to eliminate the cyclic limit creating less burden on operators.

The actions specified by the proposed AD are intended to prevent HPT disk fracture, which could result in an uncontained engine failure and damage to the airplane.

DATES: Comments must be received by October 15, 1999.

ADDRESSES: Submit comments in triplicate to the Federal Aviation Administration (FAA), New England Region, Office of the Regional Counsel, Attention: Rules Docket No. 98-ANE-76-AD, 12 New England Executive Park, Burlington, MA 01803-5299. Comments may also be sent via the Internet using the following address: "9-ane-adcomment@faa.gov." Comments sent via the Internet must contain the docket number in the subject line. Comments may be inspected at this location between 8:00 a.m. and 4:30 p.m., Monday through Friday, except Federal holidays.

The service information referenced in the proposed rule may be obtained from Rolls-Royce Commercial Aero Engine Limited, P.O. Box 31, Derby, England, DE2488J, Attention: Publication Services ICL-TP; telephone +44-1-33-22-4653, fax +44-1-33-22-46302. This information may be examined at the FAA, New England Region, Office of the Regional Counsel, 12 New England Executive Park, Burlington, MA.

FOR FURTHER INFORMATION CONTACT: Diane Cook, Aerospace Engineer, Engine Certification Office, FAA, Engine and Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803-5299; telephone (781) 238-7133, fax (781) 238-7199.

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 notice 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 notice must submit a self-addressed, stamped postcard on which the following statement is made: "Comments to Docket Number 98-ANE-76-AD." The postcard will be date stamped and returned to the commenter.

Availability of NPRMs

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. 98-ANE-76-AD, 12 New England Executive Park, Burlington, MA 01803-5299.

Discussion

On November 4, 1998, the Federal Aviation Administration (FAA) issued airworthiness directive (AD) 98-20-18, Amendment 39-10871 (63 FR 63398, November 13, 1998), applicable to International Aero Engines AG (IAE) V2500-A1 series turbofan engines, to require removal from service of affected high pressure turbine (HPT) disks, identified by part number (P/N) and serial number (S/N) in the applicability paragraph of that AD, and replacement with a serviceable part. That action was prompted by a report of an uncontained HPT disk failure. That condition, if not corrected, could result in an HPT disk fracture, an uncontained engine failure, and damage to the airplane.

On February 19, 1999, the FA issued AD 99-05-05, Amendment 39-11053 (64 FR 9910, March 1, 1999), applicable to IAE V2500-A1 series turbofan engines, to require initial and repetitive inspections of certain HPT stage 1 and stage 2 disks utilizing an improved ultrasonic method when the disks are exposed during a normal shop visit, and if a subsurface anomaly is found, removal from service and replacement with a serviceable part. That action was prompted by the results of a stage 1 HPT disk fracture investigation which has identified a population of HPT stage 1 and 2 disks that may have subsurface anomalies formed as a result of the processes used to manufacture the part. That condition, if not corrected, could result in HPT disk fracture, which could result in an uncontained engine failure and damage to the airplane.

Since the issuance of AD 98-20-18, further investigation have revealed that the HPT disks affected by that AD are part of the population addressed by AD