

[4910-13-U]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39 [64 FR 67708 12/03/99]

[Docket No. 98-ANE-76-AD Amendment 39-11446; AD 99-25-03]

RIN 2120-AA64

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

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule.

SUMMARY: This amendment supersedes two airworthiness directives (ADs) that apply to International Aero Engines AG (IAE) V2500-A1 series turbofan engines. The first superseded AD, AD 98-20-18, currently requires removal from service of affected high pressure turbine (HPT) disks, identified by part number and serial number in the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 The second superseded AD, AD 99-05-05, requires initial and repetitive inspections of certain HPT stage 1 and stage 2 disks utilizing an improved ultrasonic method when the disks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 if a subsurface anomaly is found, removal from service and replacement with a serviceable part. This supersedure requires the initial inspection mandated 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 is redefined to eliminate the cyclic limit and thus be less restrictive. This superseding action is prompted by results from investigations 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 supersedure is also prompted by further analysis that indicates a reduction in risk if the initial inspection required by AD 99-05-05 is completed sooner and the subsequent required inspections can be redefined to eliminate the cyclic limit, thereby creating less burden on operators. The actions specified by this AD are intended to prevent HPT disk fracture, which could result in an uncontained engine failure and damage to the airplane.

DATES: Effective January 7, 2000.

The incorporation by reference of International Aero Engines SB V2500-ENG-72-0344, dated December 18, 1998, as listed in the regulations, was approved by the Director of the Federal Register as of April 30, 1999 (64 FR 9910, March 1, 1999).

The incorporation by reference of all other publications listed in the regulations is approved by the Director of the Federal Register as of January 7, 2000.

ADDRESSES: The service information referenced in this AD may be obtained from Rolls-Royce Commercial Aero Engine Limited, P. O. Box 31, Derby, England, DE2488J, Attention: Publication Services ICL-TP; telephone +44-1-33-22-46553, fax +44-1-33-22-46302. The information referenced in this AD may be examined at the FAA, New England Region, Office of the Regional Counsel, 12 New England Executive Park, Burlington, MA; or at the Office of the Federal Register, 800 North Capitol Street, NW, suite 700, Washington, DC.

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: A proposal to amend part 39 of the Federal Aviation Regulations (14CFR part 39) by superseding airworthiness directive (AD) 98-20-18, Amendment 39-10871 (63 FR 63398, November 13, 1998), and AD 99-05-05, Amendment 39-11053 (64 FR 9910, March 1, 1999), applicable to International Aero Engines AG (IAE) V2500-A1 series turbofan engines was published in the **Federal Register** on September 15, 1999 (64 FR 50020).

Supersedure Requirements

This supersedure requires that the initial inspection mandated by AD 99-05-05 be completed at the next shop visit regardless of the planned maintenance or the reason for shop removal. The repetitive ultrasonic inspection interval is redefined to eliminate the cyclic limit by requiring the repetitive inspection to be performed whenever the high pressure turbine (HPT) stage 1 or stage 2 disks are disassembled from the HPT module. In addition, this supersedure allows the disks identified by serial number (S/N) that were retired by AD 98-20-18 to be reintroduced into service following an initial ultrasonic inspection specified by this AD.

Comment Received

Interested persons have been afforded an opportunity to participate in the making of this amendment. One favorable comment was received.

Conclusion

After careful review of the available data, including the comment noted above, the FAA has determined that air safety and the public interest require the adoption of the rule as proposed.

Cost Impact

Since this AD only adjusts the timing of inspections already required, there is no additional adverse economic impact.

Regulatory Impact

This rule does not have federalism implications, as defined in Executive Order No. 13132, because it does 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. Accordingly, the FAA has not consulted with state authorities prior to publication of this rule.

For the reasons discussed above, I certify that this action (1) is not a "significant regulatory action" under Executive Order 12866; (2) is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and (3) 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 final evaluation has been prepared for this action and it is contained in the Rules Docket. A copy of it may be obtained from the Rules Docket at the location provided under the caption **ADDRESSES**.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends 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 removing amendment 39-10871 (63 FR 63398, November 13, 1998) and amendment 39-11053 (64 FR 9910, March 1, 1999) and by adding a new airworthiness directive to read as follows:

AIRWORTHINESS DIRECTIVE

REGULATORY SUPPORT DIVISION
P.O. BOX 26460
OKLAHOMA CITY, OKLAHOMA 73125-0460



U.S. Department
of Transportation
**Federal Aviation
Administration**

The following Airworthiness Directive issued by the Federal Aviation Administration in accordance with the provisions of Title 14 of the Code of Federal Regulations (14 CFR) part 39, applies to an aircraft model of which our records indicate you may be the registered owner. Airworthiness Directives affect aviation safety and are regulations which require immediate attention. You are cautioned that no person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of the Airworthiness Directive (reference 14 CFR part 39, subpart 39.3).

99-25-03 International Aero Engines AG: Amendment 39-11446. Docket No. 98-ANE-76-AD. Supersedes AD 98-20-18, Amendment 39-10871, and AD 99-05-05, Amendment 39-11053. Issued November 22, 1999.

Applicability: International Aero Engines AG (IAE) V2500-A1 series turbofan engines, installed on but not limited to Airbus Industrie A320 series airplanes.

Note 1: This airworthiness directive (AD) applies to each engine 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 engines 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 (c) 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 high pressure turbine (HPT) disk fracture, which could result in an uncontained engine failure and damage to the airplane, accomplish the following:

Inspections

(a) Perform initial and repetitive ultrasonic inspections of HPT stage 1 and 2 disks for subsurface anomalies, identified by serial numbers (S/Ns) in Table 1 of IAE Service Bulletin (SB) V2500-ENG-72-0344, Revision 1, dated February 12, 1999, in accordance with the Accomplishment Instructions of IAE SB V2500-ENG-72-0344, dated December 18, 1998, or Revision 1, dated February 12, 1999, as follows:

(1) Initially inspect at the first opportunity when the engine is at a maintenance base after the effective date of this AD regardless of the planned maintenance or the reason for engine removal.

(2) Thereafter, inspect whenever the HPT stage 1 or stage 2 disks are disassembled from the HPT module.

(3) Remove disks from service if a subsurface anomaly is found, and replace with serviceable parts.

Return to Service of Certain Disks

(b) HPT stage 1 disks, part numbers (P/N's) 2A1801, S/N's P100421, P100430, P100618, and P100621, may return to service following a successful inspection in accordance with paragraph (a) of this AD.

Alternative Methods of Compliance

(c) 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, Engine Certification Office (ECO). Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, which may add comments and then send it to the Manager, ECO.

Note 2: Information concerning the existence of approved alternative methods of compliance with this airworthiness directive, if any, may be obtained from the ECO.

Ferry Flights

(d) 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 aircraft to a location where the inspection requirements of this AD can be accomplished.

Incorporation by Reference

(e) The actions required by this AD shall be done in accordance with IAE SB V2500-ENG-72-0344, dated December 18, 1998, or Revision 1, dated February 12, 1999. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Rolls-Royce Commercial Aero Engine Limited, P. O. Box 31, Derby, England, DE2488J, Attention: Publication Services ICL-TP; telephone +44-1-33-22-46553, fax +44-1-33-22-46302. Copies may be inspected at the FAA, New England Region, Office of the Regional Counsel, 12 New England Executive Park, Burlington, MA; or at the Office of the Federal Register, 800 North Capitol Street, NW, suite 700, Washington, DC.

(f) This amendment becomes effective on January 7, 2000.

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.