

[4910-13-U]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39 [65 FR 36783 6/12/2000]

[Docket No. 98-ANE-45-AD; Amendment 39-11783; AD 2000-12-05]

RIN 2120-AA64

Airworthiness Directives; International Aero Engines AG V2500-A1/-A5/-D5 Series Turbofan Engines

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule.

SUMMARY: This amendment supersedes an existing airworthiness directive (AD), applicable to International Aero Engines AG (IAE) V2500-A1/-A5/-D5 series turbofan engines, that requires revisions to the Airworthiness Limitations Section (ALS) and Maintenance Scheduling Section (MSS) of the Instructions for Continued Airworthiness (ICA), located in the Time Limits Manual (Chapter 05-10-00) of the Engine Manuals, to include required enhanced inspection of selected critical life-limited parts at each piece-part exposure. This action would add additional critical life-limited parts for enhanced inspection. This action is prompted by additional focused inspection procedures that have been developed by the manufacturer. The actions specified by this AD are intended to prevent critical life-limited rotating engine part failure, which could result in an uncontained engine failure and damage to the airplane.

DATES: Effective date August 11, 2000.

ADDRESSES: The rulemaking docket may be examined at the Federal Aviation Administration (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: A proposal to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) by superseding AD 99-08-11, Amendment 39-11117 (64 FR 17956, April 13, 1999), to require revisions to the Airworthiness Limitations Section (ALS) and Maintenance Scheduling Section (MSS) of the Instructions for Continued Airworthiness (ICA), located in the Time Limits Manual (Chapter 05-10-00) of the Engine Manuals, for International Aero Engines AG (IAE) V2500-A1/-A5/-D5 series turbofan engines to include focused inspection procedures for additional critical life-limited parts at each piece-part exposure was published in the **Federal Register** on October 7, 1999 (64 FR 54580). This AD will also require an air carrier's approved continuous airworthiness maintenance program to incorporate these additional inspection procedures.

Interested persons have been afforded an opportunity to participate in the making of this amendment. Due consideration has been given to the comments received.

Publication of inspection procedures

Two commenters request that the comment period be extended until after the proposed inspection procedures have been provided to operators to allow time to review those inspection procedures. The FAA

does not agree. The FAA believes that the nature and scope of the added inspections will not be significantly different from existing inspections. However, the effective date of this AD has been extended to 90 days after publication to allow time for the specific procedures to be published. Operators may submit comments on the specific procedures once they are published and the FAA will consider extending the effective date further or initiating additional rulemaking, as necessary. The extra time until the AD becomes effective should also allow the manufacturer to issue a manual revision. The FAA does not believe, however, that this final rule need be delayed pending the publication of the inspection procedures, or extend the initial compliance time to accommodate the manufacturer's manual revision cycle.

Time Limits Manual

One commenter states that paragraph (a) of the Compliance section refers to the V2500 Time Limits Manuals as if they are part of the V2500 Engine Manuals. However, the Time Limits Manuals are separate documents with part numbers T-V2500-11A and T-V2500-31A. The commenter believes that all references to the Engine Manuals and their part numbers should be replaced with references to the Time Limits Manuals and their part numbers. The FAA does not concur. The V2500 Engine Manuals E-V2500-11A and E-2500-31A contain the required Instructions for Continued Airworthiness, including the Chapter 5 Time Limits Manual section. Since the Time Limits Manuals T-V2500-11A and T-V2500-31A are referenced in the V2500 Engine Manual chapter 5 requirements, the AD references the Engine Manuals.

Compliance section paragraph identification

One commenter notes that the Compliance Section of the proposed rule does not conform to FAA's conventional paragraph identification structure (e.g. a, 1, i, etc.). The FAA concurs and the paragraph structure will be changed. Additionally, an error was discovered in the proposed supersedure and paragraph (a) (2) has been changed from "Whenever a Group A part identified in this paragraph (see 2.1 for definition of Group A)..." to "Whenever a Group A part identified in this paragraph (see 3.0 for definition of Group A)..." Also, it was determined that subparagraph designators (a) (2) (A) and (B) were unnecessary and they have been dropped.

Discussion section wording

One commenter notes that the preamble published with this Notice of Proposed Rulemaking (NPRM) does not include the same explanation of when the enhanced disk inspections are required compared to the preamble published for the current AD. This commenter requests that those guidelines be added to the final rule. The FAA does not agree. The inspection program established by the current AD remains unchanged. This NPRM proposed to add additional parts to the list of parts that must be inspected, but did not proposed to change how air carriers must manage the inspection program. Future AD's may be issued to introduce additional intervention strategies in order to further reduce uncontained engine failures, including AD's that add new parts to the list of parts requiring inspection. However, the inspection program established by the current AD will remain unless specifically altered in a future proposal.

Request to Remove "of this chapter" from Paragraph (e) of the Compliance Section

One commenter requests that the FAA remove the statement "of this chapter" from the first sentence of paragraph (e) of this AD. The commenter feels that removing the statement will improve the clarity of the paragraph. The FAA agrees. The statement "of this chapter" has been removed from the first sentence of paragraph (e).

Economic Analysis

No comments were received on the economic analysis contained in the proposed rules. The FAA has determined that the annual cost of complying with this AD does not create a significant economic impact on small entities.

Adoption of the Proposed Rule

After careful review of the available data, including the comments noted above, the FAA has determined that air safety and the public interest require the adoption of the rule with the changes described previously. The FAA has determined that these changes will neither increase the economic burden on any operator nor increase the scope of the AD.

Regulatory Impact

This final rule does not have federalism implications, as defined in Executive Order 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 final 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, 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 39-11117 (64 FR 17956, April 13, 1999), and by adding a new airworthiness directive, Amendment 39-11783, 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**

AD's are posted on the internet at <http://av-info.faa.gov>

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).

2000-12-05 International Aero Engines AG: Amendment 39-11783, Docket No. 98-ANE-45-AD. Supersedes AD 99-08-11, Amendment 39-11117.

Applicable Engines

International Aero Engines AG (IAE) V2500-A1/-A5/-D5 series turbofan engines, installed on but not limited to Airbus Industrie A319, A320, and A321 series, and McDonnell Douglas MD-90 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 critical life-limited rotating engine part failure, which could result in an uncontained engine failure and damage to the airplane, accomplish the following:

Inspections

(a) Within the next 90 days after the effective date of this AD, revise the Airworthiness Limitations Section (ALS) and Maintenance Scheduling Section (MSS) of the Instructions for Continued Airworthiness (ICA), located in the Time Limits Manual (Chapter 05-10-00) of the Engine Manuals, part number (P/N) E-V2500-1IA and P/N E-V2500-3IA, and for air carrier operations revise the approved continuous airworthiness maintenance program, by

(1) Adding the following to paragraph 1, entitled "Airworthiness Limitations:" "Refer to paragraph 2 – Maintenance Scheduling for information that sets forth the operator's maintenance requirements for the V2500 On-Condition engine."

(2) Adding the following paragraph 2, entitled "Maintenance Scheduling:" "Whenever a Group A part identified in this paragraph (see 3.0 for definition of Group A) satisfies both of the following conditions:

The part is considered completely disassembled when accomplished in accordance with the disassembly instructions in the engine manufacturer's engine manual; and

The part has accumulated more than 100 cycles in service since the last piece-part opportunity inspection, provided that the part was not damaged or related to the cause for its removal from the engine; then that part is considered to be at the piece-part level and it is mandatory to perform the inspections for that part as specified in the following:

Part Nomenclature	Part number (P/N)	Inspect per Engine Manual Chapter
Fan Disk	All	Chapter 72-31-12, Subtask 72-31-12-230-054
Stage 1 HP Turbine Hub	All	Chapter 72-45-11, Task 72-45-11-200-002
Stage 2 HP Turbine Hub	All	Chapter 72-45-31, Task 72-45-31-200-004"

(b) Except as provided in paragraph (c) of this AD, and notwithstanding contrary provisions in section 43.16 of the Federal Aviation Regulations (14 CFR 43.16), these mandatory inspections shall be performed only in accordance with the ALS and MSS of the ICA in the Time Limits Manual (Chapter 05-10-00) of the Engine Manuals, P/N E-V2500-11A and P/N E-V2500-31A.

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 Engine Certification Office (ECO). Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector (PMI), who may add comments and then send it to the 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 airplane to a location where the requirements of this AD can be accomplished.

Continuous Airworthiness Maintenance Program

(e) FAA-certificated air carriers that have an approved continuous airworthiness maintenance program in accordance with the record keeping requirement of § 121.369 (c) of the Federal Aviation Regulations [14 CFR 121.369 (c)] must maintain records of the mandatory inspections that result from revising the ALS and MSS of the ICA in the Time Limits Manual (Chapter 05-10-00) of the Engine Manuals, P/N E-V2500-11A and P/N E-V2500-31A, and the air carrier's continuous airworthiness program. Alternately, certificated air carriers may establish an approved system of record retention that provides a method for preservation and retrieval of the maintenance records that include the inspections resulting from this AD, and include the policy and procedures for implementing this alternate method in the air carrier's maintenance manual required by § 121.369 (c) of the Federal Aviation Regulations [14 CFR 121.369 (c)]; however, the alternate system must be accepted by the appropriate PMI and require the maintenance records be maintained either indefinitely or until the work is repeated. Records of the piece-part inspections are not required under § 121.380 (a) (2) (vi) of the Federal Aviation Regulations [14 CFR

121.380 (a) (2) (vi)]. All other operators must maintain the records of mandatory inspections required by the applicable regulations governing their operations.

Note 3: The requirements of this AD have been met when the engine manual changes are made and air carriers have modified their continuous airworthiness maintenance plans to reflect the requirements in the Engine Manuals.

(f) This amendment becomes effective on August 11, 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.

Issued in Burlington, Massachusetts, on June 6, 2000.

David A. Downey, Assistant Manager, Engine and Propeller Directorate, Aircraft Certification Service.

SUPERSEDED