

# Proposed Rules

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This section of the FEDERAL REGISTER contains notices to the public of the proposed issuance of rules and regulations. The purpose of these notices is to give interested persons an opportunity to participate in the rule making prior to the adoption of the final rules.

## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

#### 14 CFR Part 39

[Docket No. 98-ANE-45-AD]

RIN 2120-AA64

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

**AGENCY:** Federal Aviation Administration, DOT.

**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** This document proposes the superseding of an existing airworthiness directive (AD), applicable to International Aero Engines AG (IAE) V2500-A1/-A5/-D5 series turbofan engines, that currently requires revisions to the Airworthiness Limitations Section (ALS) and Maintenance Scheduling Section (MSS) of the Instructions for Continued Airworthiness (ICA) 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 proposal is prompted by additional focused inspection procedures that have been developed by the manufacturer. The actions specified by this proposed 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:** Comments must be received by December 6, 1999.

**ADDRESSES:** Submit comments to the Federal Aviation Administration (FAA), New England Region, Office of the Regional Counsel, Attention: Rules Docket No. 98-ANE-45-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.

#### 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 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-45-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-45-AD, 12 New England Executive Park, Burlington, MA 01803-5299.

## Discussion

On April 2, 1999, the Federal Aviation Administration (FAA) issued airworthiness directive (AD) 99-08-11, Amendment 39-311117 (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) in the Time Limits Manual (Chapter 05-10-00) of the Engine Manuals of International Aero Engines AG (IAE) V2500-A1/-A5/-D5 series turbofan engines to include required enhanced inspection of selected critical life-limited parts at each piece-part exposure.

### New Inspection Procedures

Since the issuance of that AD, IAE has developed additional focused inspection procedures. This proposal would add additional parts that would require enhanced inspection at each piece-part exposure.

### Proposed Actions

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 supersede AD 99-08-11 to add additional critical life-limited parts for enhanced inspection at each piece-part opportunity.

### Economic Analysis

The FAA estimates that 229 engines installed on airplanes of U.S. registry would be affected by this proposed AD, that it would take approximately 2 work hours per engine to perform the enhanced inspection for both high pressure (HP) turbine disks. The FAA estimates that approximately 458 HP turbine disks (stage 1 and 2) would be inspected. The average labor rate is \$60 per work hour. The total cost of the new inspections per engine would be approximately \$120. Using average shop visitation rates, the annual cost impact of the added inspections on U.S. operators is approximately \$28,000.

### 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 removing Amendment 39-11117 (64 FR 17956, April 13, 1999), and by adding a new airworthiness directive, to read as follows:

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

**Applicability:** 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 30 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) 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

(i) 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."

(ii) Adding the following paragraph 2, entitled "Maintenance Scheduling:" "Whenever a Group A part identified in this paragraph (see 2.1 for definition of Group A) satisfies both of the following conditions:

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

(B) 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 No. (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-V2500-1IA and P/N E-V2500-3IA.

#### 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)] of this chapter 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-V2500-1IA and P/N E-V2500-3IA, 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.

Issued in Burlington, Massachusetts, on September 30, 1999.

**David A. Downey,**

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*Engine and Propeller Directorate,*

*Aircraft Certification Service.*

[FR Doc. 99-26137 Filed 10-6-99; 8:45 am]

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## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

#### 14 CFR Part 39

[Docket No. 98-ANE-66-AD]

RIN 2120-AA64

#### Airworthiness Directives; Pratt & Whitney PW4000 Series Turbofan Engines

**AGENCY:** Federal Aviation Administration, DOT.

**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** This document proposes the superseding of an existing airworthiness directive (AD), applicable to Pratt & Whitney PW4000 series turbofan engines, that currently requires revisions to the Time Limits Section of the manufacturer's Engine Manuals (EMs) 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 proposal is prompted by additional focused inspection procedures for other critical life-limited rotating engine parts that have been developed by the manufacturer. The actions specified by this proposed 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:** Comments must be received by December 6, 1999.

**ADDRESSES:** Submit comments to the Federal Aviation Administration (FAA), New England Region, Office of the Regional Counsel, Attention: Rules Docket No. 98-ANE-66-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.

#### FOR FURTHER INFORMATION CONTACT:

Peter White, Aerospace Engineer, Engine Certification Office, FAA, Engine and Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803-5299; telephone (781) 238-7128, 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.

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##### Availability of NPRMs

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##### Discussion

On April 2, 1999, the Federal Aviation Administration (FAA) issued airworthiness directive (AD) 99-08-15, Amendment 39-311121 (64 FR 17947, April 13, 1999), to require revisions to the Time Limits Section in the Engine Manuals (EMs) for certain Pratt &

Whitney (PW) PW4000 series turbofan engines to include required enhanced inspection of selected critical life-limited rotating components in the fan rotor at each piece-part exposure.

#### New Procedures and Parts

Since the issuance of that AD, additional focused inspection procedures for other critical life-limited rotating engine parts have been developed. The new parts are the:

- High Pressure Compressor (HPC) 5th stage disk
- HPC front drum rotor
- HPC rear drum rotor
- HPC 15th stage disk
- High Pressure Turbine (HPT) 1st stage airseal—on certain models
- HPT 2nd stage airseal—on certain models
- HPT 1st stage (front) hub
- HPT 2nd stage (rear) hub

#### Proposed Actions

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 supersede AD 99-08-15 to require the additional critical life-limited rotating engine parts to be subject to focused inspection at each piece-part opportunity.

#### Changes From AD 99-08-15

The FAA has revised the piece-part definition to make it clearer at which assembly level (assembly or detail) inspection of the part is acceptable.

Also, the FAA has added additional part numbers (P/Ns) to the LPC Hub Assembly section of the AD to include the PW4098 models. While the inspections required for these parts were included in the manufacturer's service documentation upon entry into service and therefore do not need to be included in this AD, the FAA has included these P/Ns to make this AD an all-inclusive inspection requirement for all PW4000 series engine models.

Finally, the FAA has corrected an error in the LPC hub assembly, which was discovered in the original AD. The detail P/N for the LPC hub assembly P/N 51B631 was changed from "50B601" to "51B601."

#### Economic Analysis

The FAA estimates that 450 engines installed on airplanes of US registry would be affected by this proposed AD, that it would take approximately 8 work hours per engine to accomplish the proposed actions. The average labor rate is \$60 per work hour, the average Shop Visit Rate is .097, and the average usage is 3,250hrs/year/engine. Based on these