

Federal Aviation Administration
Aviation Rulemaking Advisory Committee

Transport Airplane and Engine Issue Area
Engine Harmonization Working Group

Task 14 – Overtorque

Task Assignment

[Federal Register: October 20, 1998 (Volume 63, Number 202)]
[Notices]
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DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

Aviation Rulemaking Advisory Committee; Transport Airplane and
Engine Issues--New Tasks

AGENCY: Federal Aviation Administration (**FAA**), DOT.

ACTION: Notice of new task assignments for the Aviation Rulemaking
Advisory Committee (ARAC).

SUMMARY: Notice is given of new tasks assigned to and accepted by the
Aviation Rulemaking Advisory Committee (ARAC). This notice informs the
public of the activities of ARAC.

FOR FURTHER INFORMATION CONTACT:

Stewart R. Miller, Transport Standards Staff (ANM-110), Federal
Aviation Administration, 1601 Lind Avenue, SW., Renton, WA 98055-4056;
phone (425) 227-1255; fax (425) 227-1320.

SUPPLEMENTARY INFORMATION:

Background

The **FAA** has established an Aviation Rulemaking Advisory Committee
to provide advice and recommendations to the **FAA** Administrator, through
the Associate Administrator for Regulation and Certification, on the
full range of the **FAA**'s rulemaking activities with respect to aviation-
related issues. This includes obtaining advice and recommendations on
the **FAA**'s commitment to harmonize its Federal Aviation Regulations
(FAR) and practices with its trading partners in Europe and Canada.

One area ARAC deals with is Transport Airplane and Engine Issues.
These issues involve the airworthiness standards for transport category
airplanes and engines in 14 CFR parts 25, 33, and 35 and parallel
provisions in 14 CFR parts 121 and 135.

The Tasks

This notice is to inform the public that the **FAA** has asked ARAC to
provide advice and recommendation on the following harmonization tasks:

Task 11: Safety and Failure Analysis

1. JAR-E requires a summary listing of all failures which result in
major or hazardous effects and an estimate of the probability of

occurrence of these major and hazardous effects. Part 33 requires an assessment of failures which lead to four specified hazards.

2. JAR requires a list of assumptions and the substantiation of those assumptions. Most of the JAR-E assumptions are covered by other Part 33 paragraphs.

3. JAR-E includes a unique hazard, ``toxic bleed air''.

4. While both regulations require analysis to examine malfunctions and single and multiple failures. Part 33 also requires an examination of improper operation.

The **FAA** expects ARAC to submit its recommendation(s) resulting from this task by January 31, 2000.

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Task 12: Endurance Test Requirements Study

Review and evaluate the feasibility and adequacy of harmonizing: (1) FAR 33.87 and JAR-E 740 endurance test requirements, including thrust reverser operation during endurance testing, in consideration of changes in engine technology; and (2) FAR 33.88 and JAR-E 700 overtemperature/excess operating conditions. The Aviation Rulemaking Advisory Committee (ARAC) is specifically tasked to study these issues and document findings in the form of a report.

The **FAA** expects ARAC to submit the report by December 31, 1999.

The report must include industry-provided data for an **FAA** economic analysis. This data should include the effects on small operators and small businesses. The report also should include industry-provided data regarding the record-keeping burden on the public.

Task 13: Fatigue Pressure Test/Analysis

JAR-E 640(b)(2) requires fatigue pressure testing of major engine casings. The FAR's do not have a specific requirement for fatigue pressure tests of major engine casings.

The **FAA** expects ARAC to submit its recommendation(s) resulting from this task by January 31, 1999.

Task 14: Overtorque

JAR-E 820 requires testing at maximum over-torque in combination with maximum turbine-entry and the most critical oil-inlet temperatures for the power turbine to validate transient overtorque values. The **FAA** does not have a specific requirement. Note: The 33.87 endurance test includes requirements that can be used to satisfy JAR-E requirements.

The **FAA** expects ARAC to submit its recommendation(s) resulting from this task by January 31, 1999.

Task 15: Compressor/Fan and Turbine Shafts

1. JAR-E 850 establishes probability limits for shaft failures based on the consequences of the failure. If the consequences of a shaft failure are not readily predictable, a test is required to determine the consequences. FAR 33.27(c)(2)(vi) requires all shaft failures, regardless of failure probability, to be considered when determining rotor integrity requirements.

2. ACJ E 850 provides guidance to determine the likelihood of a failure at a given location on a shaft and also provides guidance for

conducting tests to determine the dynamic characteristics and fatigue capability of the shaft. The FAR's do not provide any guidance material.

The **FAA** expects ARAC to submit its recommendation(s) resulting from this task by January 31, 2000.

Task 16: Electrical and Electronic Engine Control Systems

1. Advisory material exists for JAR-E (AMJ 20X-1). Advisory material does not exist for Part 33, which has caused difficulty during certification programs.

2. AMJ 20X-1 clearly defines the engine/airframe substantiation responsibilities, while FAR material does not define these requirements.

3. JAR-E states that an electronic control system ``should provide for the aircraft at least the equivalent safety, and the related reliability level, as achieved by Engines/Propellers equipped with hydromechanical control and protection systems.'' Part 33 does not state a desired reliability level. Part 33 states that failures must not result in unsafe conditions.

The **FAA** expects ARAC to submit its recommendation(s) resulting from this task by January 31, 2000.

For the above tasks the working group is to review airworthiness, safety, cost, and other relevant factors related to the specified difference, and reach consensus on harmonization of current Part 33/ JAR-E regulations and guidance material.

The **FAA** requests that ARAC draft appropriate regulatory documents with supporting economic and other required analyses, and any other related guidance material or collateral documents to support its recommendations. If the resulting recommendation(s) are one or more notices of proposed rulemaking (NPRM) published by the **FAA**, the **FAA** may ask ARAC to recommend disposition of any substantive comments the **FAA** receives.

Working Group Activity

The Engine Harmonization Working Group is expected to comply with the procedures adopted by ARAC. As part of the procedures, the working group is expected to:

1. Recommend a work plan for completion of the tasks, including the rationale supporting such a plan, for consideration at the meeting of ARAC to consider transport airplane and engine issues held following publication of this notice.

2. Give a detailed conceptual presentation of the proposed recommendations, prior to proceeding with the work stated in item 3 below.

3. Draft appropriate regulatory documents with supporting economic and other required analyses, and/or any other related guidance material or collateral documents the working group determines to be appropriate; or, if new or revised requirements or compliance methods are not recommended, a draft report stating the rationale for not making such recommendations. If the resulting recommendation is one or more notices of proposed rulemaking (NPRM) published by the **FAA**, the **FAA** may ask ARAC to recommend disposition of any substantive comments the **FAA** receives.

4. Provide a status report at each meeting of ARAC held to consider transport airplane and engine issues.

The Secretary of Transportation has determined that the formation and use of ARAC are necessary and in the public interest in connection with the performance of duties imposed on the **FAA** by law.

Meetings of ARAC will be open to the public. Meetings of the Engine Harmonization Working Group will not be open to the public, except to the extent that individuals with an interest and expertise are selected to participate. No public announcement of working group meetings will be made.

Issued in Washington, DC, on October 13, 1998.

Joseph A. Hawkins,
Executive Director, Aviation Rulemaking Advisory Committee.
[FR Doc. 98-28038 Filed 10-19-98; 8:45 am]
BILLING CODE 4910-13-M

Recommendation

[4910-13]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Parts 1 and 33

[Docket No. XXXXX; Notice No. XX-XXX]

RIN NO. 2120-XXXX

Airworthiness Standards; Aircraft Engine Standards Overtorque Limits

AGENCY: Federal Aviation Administration (FAA) DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: This notice proposes to amend the certification standards for original and amended type certificates for aircraft engines and would introduce standards for maximum overtorque by adding a new engine overtorque test, amending engine ratings and operating limitations, and amending the general definitions. The proposed rule, if adopted, would establish nearly uniform standards for overtorque design and tests for turbopropeller and turboshaft engines that incorporate free power-turbines, certificated in the United States under 14 CFR part 33 and by the Joint Aviation Authorities (JAA) under the Joint Airworthiness Requirements – Engines (JAR-E).

DATE: Send your comments on or before [Insert date 90 days after the date of publication in the Federal Register].

ADDRESSES: You may send comments, identified by the Docket Number *FAA-200X-XXXXX*, using any of the following methods:

- DOT Docket web site: Go to <http://dms.dot.gov> and follow the instructions for sending your comments electronically.

- Government-wide rulemaking web site: Go to <http://www.regulations.gov> and follow the instructions for sending your comments electronically.
- Mail: Docket Management Facility; US Department of Transportation, 400 Seventh Street, S.W., Nassif Building, Room PL-401, Washington, DC 20590-001.
- Fax: 1-202-493-2251.
- Hand Delivery: Room PL-401 on the plaza level of the Nassif Building, 400 Seventh Street, S.W., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For more information on the rulemaking process, see the SUPPLEMENTARY INFORMATION section of this document.

Privacy: We will post all comments we receive, without change, to <http://dms.dot.gov>, including any personal information you provide. For more information, see the Privacy Act discussion in the SUPPLEMENTARY INFORMATION section of this document.

Docket: To read background documents or comments received, go to <http://dms.dot.gov> at any time or to Room PL-401 on the plaza level of the Nassif Building, 400 Seventh Street, S.W., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

FOR FURTHER INFORMATION CONTACT: Tim Mouzakis, Engine and Propeller Standards Staff, ANE-110, Engine and Propeller Directorate, Aircraft Certification Service, Federal Aviation Administration (FAA), New England Region, 12 New England Executive Park, Burlington, Massachusetts 01803-5299; telephone (781) 238-7114; fax (781) 238-7199; electronic mail “Timoleon.Mouzakis@faa.gov”.

SUPPLEMENTARY INFORMATION:

Comments Invited

The FAA invites interested persons to participate in this rulemaking by submitting written comments, data, or views. We also invite comments relating to the economic, environmental, energy, or federalism impacts that might result from adopting the proposals in this document. The most helpful comments reference a specific portion of the proposal, explain the reason for any recommended change, and include supporting data. We ask that you send us two copies of written comments.

We will file in the docket all comments we receive, as well as a report summarizing each substantive public contact with FAA personnel concerning this proposed rulemaking. The docket is available for public inspection before and after the comment closing date. If you wish to review the docket in person, go to the address in the ADDRESSES section of this preamble between 9:00 a.m. and 5:00 p.m., Monday through Friday, except Federal holidays. You may also review the docket using the Internet at the web address in the ADDRESSES section.

Privacy Act: Using the search function of our docket web site, anyone can find and read the comments received into any of our dockets, including the name of the individual sending the comment (or signing the comment on behalf of an association, business, labor union, etc.). You may review DOT's complete Privacy Act Statement in the Federal Register published on April 11, 2000 (65 FR 19477-78) or you may visit <http://dms.dot.gov>.

Before acting on this proposal, we will consider all comments we receive on or before the closing date for comments. We will consider comments filed late if it is possible to do so without incurring expense or delay. We may change this proposal in light of the comments we receive.

If you want the FAA to acknowledge receipt of your comments on this proposal, include with your comments a pre-addressed, stamped postcard on which the docket number appears.

We will stamp the date on the postcard and mail it to you.

Availability of Rulemaking Documents

You can get an electronic copy using the Internet by:

(1) Searching the Department of Transportation's electronic Docket Management System (DMS) web page (<http://dms.dot.gov/search>);

(2) Visiting the Office of Rulemaking's web page at <http://www.faa.gov/avr/arm/index.cfm>; or

(3) Accessing the Government Printing Office's web page at http://www.access.gpo.gov/su_docs/aces/aces140.html.

You can also get a copy by submitting a request to the Federal Aviation Administration, Office of Rulemaking, ARM-1, 800 Independence Avenue S.W, Washington, DC 20591, or by calling (202) 267-9680. Make sure to identify the docket number, notice number, or amendment number of this rulemaking.

Background

Part 33 of Title 14 of the Code of Federal Regulations (14 CFR part 33) prescribes airworthiness standards for original and amended type certificates for aircraft engines. The Joint Aviation Requirements-Engines (JAR-E) prescribes corresponding airworthiness standards for the certification of aircraft engines by the Joint Aviation Authorities (JAA). While part 33 and JAR-E are similar, they differ in several respects. For applicants seeking certification under both part 33 and JAR-E, these differences result in additional costs and delays in the time required for certification.

The FAA is committed to undertaking and supporting the harmonization of part 33 and the JAR-E requirements. In August 1989, the FAA Engine and Propeller Directorate participated

in a meeting with the JAA, Aerospace Industries Association (AIA), and The European Association of Aerospace Industries (AECMA). The purpose of the meeting was to establish a philosophy, guidelines, and a working relationship regarding the resolution of issues identified as needing to be harmonized, including some where new standards are needed. All parties agreed to work in a partnership to jointly address the harmonization effort task. This partnership was later expanded to include Transport Canada, which is the airworthiness authority of Canada.

This proposal has been selected as an Aviation Rulemaking Advisory Committee (ARAC) project. This task was assigned to the Engine Harmonization Working Group (EHWG) of the Transport Airplane and Engine Issues Group (TAEIG) and notice of the task was published in the Federal Register on October 20, 1998 (63 FR 56059). On August 25, 1999, the TAEIG recommended to the FAA that it proceed with the rulemaking. This proposed rule reflects the ARAC recommendations.

Discussion of the Proposed Rule

Currently the FAA has no explicit standards in part 33 for approval of a maximum overtorque limit. Engine manufacturers have obtained FAA approvals of maximum overtorque limit based on other certification engine tests and analysis that did not directly address considerations for maximum overtorque limit, and allowed for different interpretations of the data by different FAA offices. The proposed rule would establish a single standard for all FAA offices to use in approving maximum overtorque limit. In addition, because the JAR-E does contain specific standards for the approval of maximum overtorque limits, US aircraft engine manufacturers face additional costs when seeking certification of their engine designs by the JAA for export.

The proposed rule would nearly harmonize with the JAR-E 820 approach for approving

engine overtorque transients, and would apply only to turbopropeller and turboshaft engines incorporating free power-turbines. The proposed rule would not, however, use the current JAR-E 820 wording but would contain changes to clarify the requirements, and would provide that an overtorque limit associated with operation at the 30-second and 2-minute OEI ratings is not permitted.

This rule is being adopted to address a condition that can occur on turbopropeller and turboshaft engines with free power turbines. Sudden large changes in rotorcraft/aircraft blade pitch, or power demand, such as an engine failure on a twin engine rotorcraft, can cause a large decrease in rotor/propeller speed. For rotorcraft engine, overtorque conditions may occur during the period that the engine is accelerating the rotor system back to normal operating speeds. This rule prescribes the requirements to establish a maximum transient (20 seconds maximum) overtorque limit.

The following paragraph provides clarification to the test requirement of paragraph (b)(4) in the proposed rule regarding maximum turbine entry temperature.

The torque transmitting components in a free turbine engine are typically the turbine blades, wheels, shafts, and gears (if an internal gearbox exists). Torque has differing effects on the stress levels in these components. For example, the stresses in turbine blades and wheels are dominated by centrifugal loads (and to a lesser extent, by temperature) and the effects of gas loads producing torque have a minor effect on total stress in these components. The stress levels of components such as shafts and gears are typically dominated by the amount of torque they are transmitting. Turbine entry temperatures generally have little effect on the stress levels in shafts and gears. Typically the time spent at maximum steady state temperature and high speed during the § 33.87 endurance test results in higher turbine blade and disc stresses than would occur

during a maximum overtorque event. Therefore, when the evidence of the § 33.87 testing could be used to provide the substantiation, the requirement to run the § 33.84 test at maximum steady state temperature maybe waived.

Paperwork Reduction Act

The Paperwork Reduction Act of 1995 (44 U.S.C. 3507(d)) requires that the FAA consider the impact of paperwork and other information collection burdens imposed on the public. We have determined that there are no new information collection requirements associated with this proposed rule.

International Compatibility

In keeping with U.S. obligations under the Convention on International Civil Aviation, it is FAA policy to comply with International Civil Aviation Organization (ICAO) Standards and Recommended Practices to the maximum extent practicable. The FAA has determined that there are no ICAO Standards and Recommended Practices that correspond to these proposed regulations.

Executive Order 12866 and DOT Regulatory Policies and Procedures

Executive Order 12866, Regulatory Planning and Review, directs the FAA to assess both the costs and benefits of a regulatory change. We are not allowed to propose or adopt a regulation unless we make a reasoned determination that the benefits of the intended regulation justify the costs. Our assessment of this proposal indicates that its economic impact is minimal because the proposed rules, if adopted, would establish nearly uniform standards for overtorque design and tests for turbopropeller and turboshaft engines that incorporate free power-turbines, certificated in the United States under 14 CFR part 33 and by the Joint Aviation Authorities (JAA) under the Joint Airworthiness Requirements – Engines (JAR-E). Because the costs and

benefits do not make it a "significant regulatory action" as defined in the Order, we have not prepared a "regulatory evaluation," which is the written cost/benefit analysis ordinarily required for all rulemaking proposals under the DOT Regulatory Policies and Procedures. We do not need to do a full evaluation where the economic impact of a proposed rule is minimal.

By directly addressing maximum overtorque limits for the affected turbines, the proposed rule is expected to bring about cost savings by (1) reducing manufacturers' administrative and analysis expenses associated with successive requests for the determination of overtorque limits, (2) establishing a single set of performance standards for the affected turbines, rather than allowing the development of multiple standards, which may result in duplicative efforts by various FAA offices, and (3) avoiding the costs incurred by manufacturers who may have to carry out more than one test in order to establish an engine's conformance with both FAA and JAA regulations. Since the proposed rule both clarifies requirements, and was supported in the EHWG by representatives of the affected engine manufacturers, it is expected to either reduce costs or impose no net costs on aircraft engine manufacturers.

The proposed rule is expected to maintain the current level of safety.

Since the rule is expected to have no effect on the level of safety, and provide benefits to manufacturers and the FAA by avoiding potential costs that could result from the existence of differing certification requirements, the proposed rule is expected to be cost-beneficial. The FAA invites comments on the effects of this proposed regulation, and, in particular, would appreciate relevant quantitative data, if available.

Economic Assessment, Regulatory Flexibility Determination, Trade Impact Assessment, and Unfunded Mandates Assessment

Proposed changes to Federal regulations must undergo several economic analyses. First,

Executive Order 12866 directs that each Federal agency shall propose or adopt a regulation only upon a reasoned determination that the benefits of the intended regulation justify its costs.

Second, the Regulatory Flexibility Act of 1980 requires agencies to analyze the economic effect of regulatory changes on small entities. Third, the Trade Agreements Act (19 U.S.C. §§ 2531-2533) prohibits agencies from setting standards that create unnecessary obstacles to the foreign commerce of the United States. In developing U.S. standards, this Trade Act also requires agencies to consider international standards and, where appropriate, use them as the basis of U.S. standards. Fourth, the Unfunded Mandates Reform Act of 1995 (Public Law 104-4) requires agencies to prepare a written assessment of the costs, benefits, and other effects of proposed or final rules that include a Federal mandate likely to result in the expenditure by State, local, or tribal governments, in the aggregate, or by private sector, of \$100 million or more annually (adjusted for inflation).

In conducting these analyses, FAA has determined this rule (1) has benefits that justify its costs, is not a “significant regulatory action” as defined in section 3(f) of Executive Order 12866, and is not “significant” as defined in DOT's Regulatory Policies and Procedures; (2) will not have a significant economic impact on a substantial number of small entities; (3) will not reduce barriers to international trade; and (4) does not impose an unfunded mandate on state, local, or tribal governments, or on the private sector. These analyses, available in the docket, are summarized below.

Regulatory Flexibility Determination

The Regulatory Flexibility Act of 1980 (RFA) directs the FAA to fit regulatory requirements to the scale of the business, organizations, and governmental jurisdictions subject to the regulation. We are required to determine whether a proposed or final action will have a

“significant economic impact on a substantial number of small entities” as they are defined in the Act. If we find that the action will have a significant impact, we must do a “regulatory flexibility analysis.”

This proposed rule, if adopted, would establish nearly uniform standards for overtorque design and tests for turbopropeller and turboshaft engines that incorporate free power-turbines, certificated in the United States under 14 CFR part 33 and by the Joint Aviation Authorities (JAA) under the Joint Airworthiness Requirements – Engines (JAR-E). Therefore, we certify that this action will not have a significant economic impact on a substantial number of small entities.

Trade Impact Analysis

The Trade Agreement Act of 1979 prohibits Federal agencies from establishing any standards or engaging in related activities that create unnecessary obstacles to the foreign commerce of the United States. Legitimate domestic objectives, such as safety, are not considered unnecessary obstacles. The statute also requires consideration of international standards and, where appropriate, that they be the basis for U.S. standards. The FAA has assessed the potential effect of this rulemaking and has determined that it will accept the European standards as the basis for U.S. regulations and support the Administration's policy on free trade.

Unfunded Mandates Reform Act.

The Unfunded Mandates Reform Act of 1995 (the Act) is intended, among other things, to curb the practice of imposing unfunded Federal mandates on State, local, and tribal governments. Title II of the Act requires each Federal agency to prepare a written statement assessing the effects of any Federal mandate in a proposed or final agency rule that may result in

an expenditure of \$100 million or more (adjusted annually for inflation) in any one year by State, local, and tribal governments, in the aggregate, or by the private sector; such a mandate is deemed to be a "significant regulatory action."

This NPRM does not contain such a mandate. The requirements of Title II of the Act, therefore, do not apply.

Executive Order 13132, Federalism

The FAA has analyzed this proposed rule under the principles and criteria of Executive Order 13132, Federalism. The FAA has determined that this action 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, and therefore would not have federalism implications.

Environmental Analysis

FAA Order 1050.1D defines FAA actions that may be categorically excluded from preparation of a National Environmental Policy Act (NEPA) environmental impact statement. In accordance with FAA Order 1050.1D, appendix 4, paragraph 4(j), this rulemaking action qualifies for a categorical exclusion.

Energy

The energy impact of the notice has been assessed in accordance with the Energy Policy and Conservation Act (EPCA) P.L. 94-163, as amended (43 U.S.C. 6362) and FAA Order 1053.1. We have determined that the notice is not a major regulatory action under the provisions of the EPCA.

List of Subjects 14 CFR Part 1

Flights, Transportation, Air Safety, Safety, Aviation Safety, Air Transportation, Aircraft,

Airplanes, helicopters, Rotorcraft, Heliports, Engines, Ratings.

List of Subjects in 14 CFR Part 33

Air transportation, Aircraft, Aviation safety, Safety.

The Proposed Amendment

In consideration of the foregoing, the Federal Aviation Administration proposes to amend parts 1 and 33 of Title 14, Code of Federal Regulations (14 CFR parts 1 and 33) as follows:

PART 1 - DEFINITIONS AND ABBREVIATIONS

1. The authority citation for part 1 continues to read as follows:

Authority: 49 USC 106(g), 40113, 44701.

2. Section 1.1 is amended by adding the definition in alphabetical order of “Maximum engine overtorque” to read as follows:

§ 1.1 General definitions

* * * * *

Maximum engine overtorque (applicable only to turbopropeller and turboshaft engines incorporating free power-turbines for all ratings except OEI ratings of two minutes or less) means the maximum torque of the free power-turbine, inadvertent occurrence of which, for periods of up to 20 seconds, will not require rejection of the engine from service, or any maintenance action other than to correct the cause.

* * * * *

PART 33 - AIRWORTHINESS STANDARDS: AIRCRAFT ENGINES

3. The authority citation for part 33 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701-44702, 44704

4. Section 33.7 is amended by adding new paragraph (c)(17), and new § 33.84 to read as

follows:

§ 33.7 Engine ratings and operating limitations.

* * * * *

(c) * * *

(17) Maximum engine overtorque for turbopropeller and turboshaft engines incorporating free power-turbines.

§ 33.84. Engine Overtorque Test

(a) If approval of a maximum engine overtorque is sought for an engine incorporating a free power turbine, compliance with this paragraph must be demonstrated by test.

(1) The test may be run as part of the endurance test required by § 33.87 of this part.

Alternatively, tests may be performed on a complete engine or on individual groups of components provided they are shown to be equivalent.

(2) Upon conclusion of such tests, each engine part or individual groups of components shall meet the requirements of § 33.93(a)(1) and (a)(2) of this part.

(b) The test conditions must be as follows:

(1) A total of 15 minutes run at the maximum engine overtorque to be approved. This may be done in separate runs, each being of at least 2 ½ minute's duration.

(2) A power turbine rotational speed equal to the highest speed at which the maximum overtorque can occur in service. The test speed shall not be more than the limit speed of take-off or OEI ratings longer than 2 minutes, whichever is higher.

(3) For engines incorporating a reduction gearbox, a gearbox oil temperature equal to the maximum temperature at which the maximum overtorque could occur in service; and for all other engines, an oil temperature within the normal operating range.

(4) A turbine entry gas temperature equal to the maximum steady state temperature approved for use during periods longer than 20 seconds, other than conditions associated with 30-second or 2-minutes OEI ratings. The requirement to run the test at the maximum approved steady state temperature may be waived if it can be shown that other testing provides substantiation of the temperature effects when considered in combination with the other parameters identified in paragraphs (b)(1), (b)(2) and (b)(3) of this section.

Issued in Washington, DC, on

[AE1]

Mr. Ron Priddy
President, Operations
National Air Carrier Association
1100 Wilson Blvd., Suite 1700
Arlington, VA 22209

Dear Mr. Priddy:

The Federal Aviation Administration (FAA) recently completed a regulatory program review. That review focused on prioritizing rulemaking initiatives to more efficiently and effectively use limited industry and regulatory rulemaking resources. The review resulted in an internal Regulation and Certification Rulemaking Priority List that will guide our rulemaking activities, including the tasking of initiatives to the Aviation Rulemaking Advisory Committee (ARAC). Part of the review determined if some rulemaking initiatives could be addressed by other than regulatory means, and considered products of ARAC that have been or are about to be forwarded to us as recommendations.

The Regulatory Agenda will continue to be the vehicle the FAA uses to communicate its rulemaking program to the public and the U.S. government. However, the FAA also wanted to identify for ARAC those ARAC rulemaking initiatives it is considering to handle by alternative actions (see the attached list). At this time, we have not yet determined what those alternative actions may be. We also have not eliminated the possibility that some of these actions in the future could be addressed through rulemaking when resources are available.

If you have any questions, please feel free to contact Gerri Robinson at (202) 267-9678 or gerri.robinson@faa.gov.

Sincerely,

Anthony F. Fazio
Executive Director, Aviation Rulemaking Advisory Committee

Enclosure

cc:

William W. Edmunds, Air Carrier Operation Issues
Sarah MacLeod, Air Carrier/General Aviation Maintenance Issues
James L. Crook, Air Traffic Issues
William H. Schultz, Aircraft Certification Procedures Issues
Ian Redhead, Airport Certification Issues

Billy Glover, Occupant Safety Issues
John Tigue, General Aviation Certification and Operations Issues
David Hilton, Noise Certification Issues
John Swihart, Rotorcraft Issues
Roland B. Liddell, Training and Qualification Issues
Craig Bolt, Transport Airplane and Engine Issues

ARAC Projects that will be handled by Alternative Actions rather than Rulemaking

(Beta) Reverse Thrust and propeller Pitch Setting below the Flight Regime (25.1155)
Fire Protection (33.17)
Rotor Integrity--Overspeed (33.27)
Safety Analysis (33.75)
Rotor Integrity – Over-torque (33.84)
2 Minute/30 Second One Engine Inoperative (OEI) (33.XX)
Bird Strike (25.775, 25.571, 25.631)
Casting Factors (25.621)
Certification of New Propulsion Technologies on Part 23 Airplanes
Electrical and Electronic Engine Control Systems (33.28)
Fast Track Harmonization Project: Engine and APU Loads Conditions (25.361, 25.362)
Fire Protection of Engine Cowling (25.1193(e)(3))
Flight Loads Validation (25.301)
Fuel Vent System Fire Protection (Part 25 and Retrofit Rule for Part 121, 125, and 135)
Ground Gust Conditions (25.415)
Harmonization of Airworthiness Standards Flight Rules, Static Lateral-Directional Stability, and Speed Increase and Recovery Characteristics (25.107(e)(1)(iv), 25.177©, 25.253(a)(3)(4)(50)). Note: 25.107(a)(b)(d) were enveloping tasks also included in this project—They will be included in the enveloping NPRM)
Harmonization of Part 1 Definitions Fireproof and Fire Resistant (25.1)
Jet and High Performance Part 23 Airplanes
Load and Dynamics (Continuous Turbulence Loads) (25.302, 25.305, 25.341 (b), etc.)
Restart Capability (25.903(e))
Standardization of Improved Small Airplane Normal Category Stall Characteristics Requirements (23.777, 23.781, 23.1141, 23.1309, 23.1337, 25.1305)

ATTC (25.904/App I)
Cargo Compartment Fire Extinguishing or Suppression Systems (25.851(b), 25.855, 25.857)
Proof of Structure (25.307)
High Altitude Flight (25.365(d))
Fatigue and Damage Tolerance (25.571)
Material Properties (25.604)

(e) From subsection (e)(3) (Notice to Subjects) because providing such detailed information would impede law enforcement in that it could compromise investigations by: revealing the existence of an otherwise confidential investigation and thereby provide an opportunity for the subject of an investigation to conceal evidence, alter patterns of behavior, or take other actions that could thwart investigative efforts; reveal the identity of witnesses in investigations, thereby providing an opportunity for the subjects of the investigations or others to harass, intimidate, or otherwise interfere with the collection of evidence or other information from such witnesses; or reveal the identity of confidential informants, which would negatively affect the informant's usefulness in any ongoing or future investigations and discourage members of the public from cooperating as confidential informants in any future investigations.

(f) From subsections (e)(4)(G) and (H) (Agency Requirements), and (f) (Agency Rules) because portions of this system are exempt from the individual access provisions of subsection (d) for the reasons noted above, and therefore DHS is not required to establish requirements, rules, or procedures with respect to such access. Providing notice to individuals with respect to existence of records pertaining to them in the system of records or otherwise setting up procedures pursuant to which individuals may access and view records pertaining to themselves in the system would undermine investigative efforts and reveal the identities of witnesses, and potential witnesses, and confidential informants.

(g) From subsection (e)(5) (Collection of Information) because in the collection of information for law enforcement purposes it is impossible to determine in advance what information is accurate, relevant, timely, and complete. Compliance with (e)(5) would preclude DHS agents from using their investigative training and exercise of good judgment to both conduct and report on investigations.

(h) From subsection (e)(8) (Notice on Individuals) because compliance would interfere with DHS' ability to obtain, serve, and issue subpoenas, warrants, and other law enforcement mechanisms that may be filed under seal, and could result in disclosure of investigative techniques, procedures, and evidence.

(i) From subsection (g) to the extent that the system is exempt from other specific subsections of the Privacy Act relating to individuals' rights to access and amend their records contained in the system. Therefore DHS is not required to establish rules or procedures pursuant to which individuals may seek a civil remedy for the agency's: Refusal to amend a record; Refusal to comply with a request for access to records; failure to maintain accurate, relevant timely and complete records; or failure to otherwise

comply with an individual's right to access or amend records.

Hugo Teufel III,

Chief Privacy Officer, Department of Homeland Security.

[FR Doc. E8-19033 Filed 8-15-08; 8:45 am]

BILLING CODE 4410-10-P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Parts 1 and 33

[Docket No.: FAA-2007-27899; Amendment No. 33-25]

RIN 2120-AI96

Airworthiness Standards: Rotorcraft Turbine Engines One-Engine-Inoperative (OEI) Ratings, Type Certification Standards

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: The Federal Aviation Administration (FAA) is amending the One-Engine-Inoperative (OEI) rating definitions and type certification standards for 30-second OEI, 2-minute OEI, and 30-minute OEI ratings for rotorcraft turbine engines. This action revises the ratings' standards to reflect recent analyses of the ratings' use and lessons learned from completed engine certifications and service experience. This rule harmonizes FAA type certification standards for these ratings with the requirements of the European Aviation Safety Agency in the Certification Specifications for Engines and with proposed requirements for Transport Canada Civil Aviation, thus simplifying airworthiness approvals for import and export.

DATES: This amendment becomes effective October 17, 2008.

FOR FURTHER INFORMATION CONTACT: Dorina Mihail, Engine and Propeller Standards Staff, ANE-110, Engine and Propeller Directorate, Aircraft Certification Service, FAA, New England Region, 12 New England Executive Park, Burlington, Massachusetts 01803-5229; (781) 238-7153; facsimile: (781) 238-7199; e-mail: dorina.mihail@faa.gov.

SUPPLEMENTARY INFORMATION:

Authority for This Rulemaking

The FAA's authority to issue rules regarding aviation safety is found in Title 49 of the United States Code. Subtitle I, Section 106 describes the authority of the FAA Administrator.

Subtitle VII, Aviation Programs, describes in more detail the scope of the agency's authority.

This rulemaking is promulgated under the authority described in Subtitle VII, Part A, Subpart III, Section 44701, "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce, including minimum safety standards for aircraft engines. This rule is within the scope of that authority because it updates the existing regulations for type certification standards for OEI ratings for rotorcraft turbine engines.

Background

On May 4, 2007, the FAA published a notice of proposed rulemaking (NPRM) titled "Airworthiness Standards: Rotorcraft Turbine Engines One-Engine-Inoperative (OEI) Ratings, Type Certification Standards" (72 FR 25207). The comment period for the NPRM closed on August 2, 2007.

The OEI power ratings provide rotorcraft with higher than takeoff and maximum continuous power ratings needed when one engine of a multi-engine rotorcraft fails or is shut down during flight, such as during takeoff, cruise, or landing. These OEI power rating powers enable the rotorcraft to continue safe flight until it reaches a suitable landing site. Part 33 prescribes airworthiness standards for 30-second OEI, 2-minute OEI, 2½-minute OEI, 30-minute OEI, and continuous OEI ratings for the issuance of type certificates for rotorcraft turbine engines. All OEI ratings are optional ratings that engine manufacturers may select from those specified in § 33.7.

This final rule harmonizes with the corresponding airworthiness standards for OEI ratings of the European Aviation Safety Agency (EASA) without reducing the existing level of safety.

Summary of Comments

Three commenters, including a turbine engine manufacturer, General Electric (GE); a foreign aviation authority, Transport Canada Civil Aviation (TCCA); and an industry association, Aerospace Industries Association (AIA); responded to the NPRM request for comments. The GE and AIA comments are identical. TCCA had a number of comments. All of the commenters generally supported the proposed changes. All comments included suggested changes, as discussed in the discussion of the final rule below.

The FAA received comments on the following general areas of the proposal:

- Instrument connection.
- Fuel system.
- Endurance test.
- Engine overtemperature test.
- Airworthiness Limitations Section.

Discussion of the Final Rule

Below is a more detailed discussion of the rule as it relates to the comments on the proposal.

Instrument Connection

We revised § 33.29(c) to specify that the applicant must provide a means or a provision for a means to satisfy the requirements for the use of the defined 30-second OEI and 2-minute OEI ratings. The applicant, for example an engine manufacturer, may satisfy “a means” by providing a recorder to record entry into the OEI power bands. Alternatively, the applicant may fulfill “a provision for a means” by specifying that the installer provide a recorder to record entry into the OEI power bands. We also added a new § 33.29(c)(4) to specify the requirements for verification of the proper operation of indicating, recording, and retrieval systems.

The TCCA commented that existing § 33.29(c) should not be changed because full compliance to crew interface would be difficult to achieve at engine certification. The TCCA claimed the proposed changes to § 33.29(c) are redundant to the requirements of §§ 27.1305 and 29.1305.

We believe the requirement for the engine to have either a means or a provision for a means is engine specific and can be met at engine certification. Advisory circulars will provide further guidance. The FAA harmonized this change with EASA’s rule. Section 33.29(c) is adopted without change.

We also proposed to add § 33.29(d) which limits resetting the recordings required by paragraph (c) to only while on the ground.

The TCCA believes that compliance to proposed § 33.29(d) can only be found at rotorcraft, not engine, certification and this section, therefore, should not be part of engine requirements.

The FAA partially agrees with this comment. We determined that § 33.29(d) should apply to § 33.29(c)(2) and (c)(3) but not to § 33.29(c)(1) and (c)(4). Specifically, we found that in-flight resetting of the pilot alert required under (c)(1) and the routine verification required under (c)(4) should not be addressed by engine regulations. We retained the § 33.29(d) requirement that recordings under (c)(2) and (c)(3) should not be reset in-flight because we find these requirements should be met at

engine certification. We, therefore, modified § 33.29(d) in the final rule to refer only to § 33.29(c)(2) and (c)(3).

Fuel System

We proposed a revision to § 33.67(d) to clarify the intent of “automatic control” of the 30-second OEI power is to control the engine operating conditions, which should not exceed the engine’s operating limits. We clarified in the preamble of the NPRM that the applicant’s design, however, should not limit the time interval at which OEI power is used. This design feature enables the pilot to exceed OEI time limits to safely land the rotorcraft in an in-flight emergency as permitted by § 91.3(b).

GE requested clarification that the OEI power limit can be exceeded in the event of an emergency under the requirements of § 33.67(d).

The intent of § 33.67(d) is that use of 30-second OEI power should be subject to automatic control and should not be exceeded. This automatic control requirement is intended to avoid the need for the pilot to monitor engine parameters, such as output shaft torque or power, output shaft speed, gas producer speed, and gas path temperature during OEI operation. Once the automatic control system is activated, it automatically controls the 30-second OEI power and prevents the engine from exceeding its specified operating limits. Section 33.67(d) is adopted as proposed.

Endurance Test

The amended § 33.87 reduces test complexity and adds test flexibility under the revisions to § 33.87(a); harmonizes the test schedule under § 33.87(c) with that of the Certification Specifications for Engines (CS-E); and clarifies the test schedule and test sequence under § 33.87(f).

We proposed to revise § 33.87(a)(5) so the maximum air bleed for engine and aircraft services under § 33.87(a)(5) need not be used for the final 120-minute test required under § 33.87(f)(1) through (f)(8) if the applicant can show by testing, or analysis based on testing, that the validity of the endurance test is preserved. This proposed revision was intended to reduce test complexity and improve the flexibility needed to attain the key parameters (speed, temperature and torque) during the tests.

We also proposed to revise § 33.87(a)(6) to allow the applicant to run the final 120-minute test under §§ 33.87(f)(1) through (f)(8) without loading the accessory drives and mounting attachments if the applicant can substantiate that the durability of

any accessory drive or engine component is not significantly affected.

The TCCA commented that § 33.87(a)(5) should not require the maximum air bleed and § 33.87(a)(6) should not require loading of accessory drive and mounting attachments to be part of the test configuration for § 33.87(f) test sequences. The TCCA recommended changes to § 33.87(a)(5) and (a)(6) that do not mention “120-minute,” which is the minimum time duration of the test required under paragraph (f).

We have revised § 33.87(a)(5) and (a)(6) in the final rule by removing references to “120-minute.” These changes clarify the exceptions specified in § 33.87(a)(5) and (a)(6) are for the entire test duration performed under § 33.87(f).

GE recommended changes to § 33.87 it believes would ensure FAA requirements are not more severe than EASA’s for the endurance test requirements under § 33.87(a)(3) and (a)(7).

We find that GE’s recommendation would substantially affect § 33.87 requirements for all non-OEI engine ratings. Such a change is beyond the scope of this rule.

Engine Overtemperature Test

We proposed to revise § 33.88(a) to clarify that these requirements apply to all engine ratings, including all OEI ratings other than the 30-second and 2-minute OEI ratings, regardless of whether the engine is equipped with an automatic temperature control.

The TCCA disagreed with our proposed change to § 33.88(a) because it claimed the proposed new language could result in more tests being performed than is intended by the proposal.

We agree that the proposed language in § 33.88(a) could be interpreted to also apply to 30-second and 2-minute OEI ratings and result in unintended testing. We are, therefore, withdrawing the proposed change to § 33.88(a). We have, however, revised § 33.88(b) in the final rule to clarify that testing under § 33.88(a) applies to all engine ratings, except for 30-second OEI and 2-minute OEI ratings.

The TCCA commented that §§ 33.88(b) and 33.93(b)(2) should refer to “mandatory inspections and maintenance actions.”

We find that § 33.4 and Appendix A to Part 33 adequately reference mandatory inspections and maintenance actions.

*Airworthiness Limitations Section,
Appendix A*

We are revising Appendix A, Section A33.4, Airworthiness Limitations Section (ALS), by adding a new paragraph for rotorcraft engines having 30-second OEI and 2-minute OEI ratings. For these engines, we require the applicant to prescribe mandatory post-flight inspection and maintenance actions in the ALS of the Instructions for Continued Airworthiness following the use of these ratings. In order to harmonize with CS-E 25, we are requiring the applicant to create a mandatory in-service engine evaluation program to ensure continued adequacy of the airworthiness instructions for the engines.

The 30-second OEI and 2-minute OEI ratings allow for limited use in service followed by mandatory inspection and maintenance. These ratings assume some engine parts or components may not be suitable for further use and will need to be replaced after the application of these ratings. The mandatory inspections and maintenance actions following the use of 30-second OEI or 2-minute OEI ratings must (1) identify and correct any component distress that could significantly reduce subsequent engine reliability or prevent the engine from achieving 30-second OEI and 2-minute OEI power ratings; and (2) maintain the engine in condition for safe OEI flight. The applicant must validate the adequacy of the required inspections and maintenance actions.

The TCCA commented that the requirements for validation of inspection and maintenance actions should not be included in paragraph (b)(1) of A33.4 but under § 33.90.

The FAA partially agrees. We find the requirement for validation of inspection and maintenance actions is more appropriate in the ALS. Section 33.90 establishes when the initial maintenance inspection is required. We revised proposed paragraphs in A33.4(b) to separate the ALS content requirements from the validation requirements. We revised A33.4(b) into these separate requirements: Paragraph (b)(1) specifies the content of the ALS and paragraph (b)(2) specifies the validation requirements. We redesignated proposed (b)(2) as (b)(3) and revised (b)(3) to reference (b)(1) for the requirements related to the instructions for mandatory post-flight inspection and maintenance actions.

The TCCA also commented that it is inappropriate to place an in-service engine evaluation program in the airworthiness requirements of A33.4 as this would become an "open issue" at

engine type certification. The TCCA recommends instead that this program be described in an advisory circular as an acceptable means of compliance.

We intend that the applicant should submit an in-service engine evaluation program at engine certification, and that this program should have provisions for the applicant to continue its evaluation throughout the service life of the engine. We note that this requirement harmonizes with CS-E 25 and is unlikely to become a certification issue.

Paperwork Reduction Act

The Paperwork Reduction Act of 1995 (44 U.S.C. 3507(d)) requires that the FAA consider the impact of paperwork and other information collection burdens imposed on the public. We have determined there is no current or new requirement for information collection associated with this amendment.

International Compatibility

In keeping with U.S. obligations under the Convention on International Civil Aviation, it is FAA policy to comply with International Civil Aviation Organization (ICAO) Standards and Recommended Practices to the maximum extent practicable. The FAA has reviewed the corresponding ICAO Standards and Recommended Practices and has identified no differences with these regulations.

Economic Assessment, Regulatory Flexibility Determination, Trade Impact Assessment, and Unfunded Mandates Assessment

Changes to Federal regulations must undergo several economic analyses. First, Executive Order 12866 directs that each Federal agency shall propose or adopt a regulation only upon a reasoned determination that the benefits of the intended regulation justify its costs. Second, the Regulatory Flexibility Act of 1980 (Pub. L. 96-354) requires agencies to analyze the economic impact of regulatory changes on small entities. Third, the Trade Agreements Act (Pub. L. 96-39) prohibits agencies from setting standards that create unnecessary obstacles to the foreign commerce of the United States. In developing U.S. standards, the Trade Act requires agencies to consider international standards and, where appropriate, that they be the basis of U.S. standards. Fourth, the Unfunded Mandates Reform Act of 1995 (Pub. L. 104-4) requires agencies to prepare a written assessment of the costs, benefits, and other effects of proposed or final rules that include a Federal mandate likely to result in the expenditure by

State, local, or tribal governments, in the aggregate, or by the private sector, of \$100 million or more annually (adjusted for inflation with base year of 1995). This portion of the preamble summarizes the FAA's analysis of the economic impacts of this final rule.

Department of Transportation Order DOT 2100.5 prescribes policies and procedures for simplification, analysis, and review of regulations. If the expected cost impact is so minimal that a proposed or final rule does not warrant a full evaluation, this order permits that a statement to that effect and the basis for it be included in the preamble if a full regulatory evaluation of the cost and benefits is not prepared. Such a determination has been made for this final rule. The reasoning for this determination follows:

This final rule codifies existing certification practices while maintaining the existing level of safety. The existing certification practices reflect the ratings' use and lessons learned from completed engine certifications and service experience.

The final rule also harmonizes the FAA standards with those of EASA. Presently, engine manufacturers must satisfy both United States and European requirements to certify and market part 33 engines in both the United States and in Europe. Meeting two sets of certification requirements raises the cost of development often with no increase in safety. In the interest of fostering international trade, lowering the cost of development, and making the certification process more efficient, the FAA, EASA, and manufacturers have worked to create to the maximum possible extent a single set of certification requirements accepted in both the United States and Europe.

This final rule harmonizes FAA type certification standards for OEI ratings with the requirements already in existence in Europe, thus simplifying airworthiness approvals for import and export. The FAA has not attempted to quantify the cost savings that may accrue due to harmonization of this rule, beyond noting that they will contribute to certification and validation savings. There is also potential for increased safety by having clearer and more explicit regulations. In addition, safety after an engine failure or shutdown under the requirements contained in this final rule will be at least equivalent to safety under the previous requirements and certification practices. We received no comments regarding our initial minimal cost determination in the NPRM, and arrive at the same minimal cost determination for this final rule.

Currently, manufacturers that hold OEI ratings are: General Electric Aircraft Engines, Rolls-Royce Corporation (Indiana), Light Helicopter Turbine Engine Company (LHTEC), and Honeywell International, Inc. These manufacturers also seek validation in Europe. For example, the General Electric CT7-8 series turbine engine was validated in Europe in November 2004. Because all existing manufacturers with OEI ratings also seek validation in Europe, where the requirements of this final rule are already in place, it codifies common industry business practice.

Because this final rule codifies existing certification practices while maintaining the existing level of safety, we have determined that this final rule is not a "significant regulatory action" as defined in section 3(f) of Executive Order 12866, and is not "significant" as defined in DOT's Regulatory Policies and Procedures. The benefits of this final rule justify the costs and the existing level of safety will be preserved.

Regulatory Flexibility Determination

The Regulatory Flexibility Act of 1980 (Pub. L. 96-354) (RFA) establishes "as a principle of regulatory issuance that agencies shall endeavor, consistent with the objectives of the rule and of applicable statutes, to fit regulatory and informational requirements to the scale of the businesses, organizations, and governmental jurisdictions subject to regulation. To achieve this principle, agencies are required to solicit and consider flexible regulatory proposals and to explain the rationale for their actions to assure that such proposals are given serious consideration." The RFA covers a wide range of small entities, including small businesses, not-for-profit organizations, and small governmental jurisdictions.

Agencies must perform a review to determine whether a rule will have a significant economic impact on a substantial number of small entities. If the agency determines that it will, the agency must prepare a regulatory flexibility analysis as described in the RFA.

However, if an agency determines that a rule is not expected to have a significant economic impact on a substantial number of small entities, section 605(b) of the RFA provides that the head of the agency may so certify and a regulatory flexibility analysis is not required. The certification must include a statement providing the factual basis for this determination, and the reasoning should be clear.

In the Initial Regulatory Flexibility Determination, we found that there

would not be a significant economic impact on a substantial number of small entities. There were no comments on our initial regulatory flexibility determination.

Using the Small Business Administration Size Standards, we find that there are no small business manufacturers who hold OEI ratings. In addition, this rule reduces certification costs. Because this rule reduces costs and no small businesses are affected, our final regulatory flexibility determination is that this rule will not have a significant economic impact on a substantial number of small entities.

Therefore, as the Acting FAA Administrator, I certify that this final rule will not have a significant economic impact on a substantial number of small entities.

International Trade Impact Assessment

The Trade Agreements Act of 1979 (Pub. L. 96-39) prohibits Federal agencies from establishing any standards or engaging in related activities that create unnecessary obstacles to the foreign commerce of the United States. Legitimate domestic objectives, such as safety, are not considered unnecessary obstacles. The statute also requires consideration of international standards and, where appropriate, that they be the basis for U.S. standards.

This final rule considers and incorporates an international standard as the basis of an FAA regulation. Thus this final rule complies with the Trade Agreements Act of 1979 and does not create unnecessary obstacles to international trade.

Unfunded Mandates Assessment

Title II of the Unfunded Mandates Reform Act of 1995 (Pub. L. 104-4) requires each Federal agency to prepare a written statement assessing the effects of any Federal mandate in a proposed or final agency rule that may result in an expenditure of \$100 million or more (in 1995 dollars) in any one year by State, local, and tribal governments, in the aggregate, or by the private sector; such a mandate is deemed to be a "significant regulatory action." The FAA currently uses an inflation-adjusted value of \$136.1 million in lieu of \$100 million.

The FAA has assessed the potential effect of this final rule and determined that it does not contain such a mandate. Therefore, the requirements of Title II of the Unfunded Mandates Reform Act of 1995 do not apply.

Executive Order 13132, Federalism

The FAA has analyzed this final rule under the principles and criteria of

Executive Order 13132, Federalism. We determined that this action will not have a substantial direct effect on the States, or the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government, and, therefore, does not have federalism implications.

Environmental Analysis

FAA Order 1050.1E identifies FAA actions that are categorically excluded from preparation of an environmental assessment or environmental impact statement under the National Environmental Policy Act in the absence of extraordinary circumstances. The FAA has determined this rulemaking action qualifies for the categorical exclusion identified in paragraph 312f and involves no extraordinary circumstances.

Regulations That Significantly Affect Energy Supply, Distribution, or Use

The FAA has analyzed this final rule under Executive Order 13211, Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use (May 18, 2001). We have determined that it is not a "significant energy action" under the executive order because it is not a "significant regulatory action" under Executive Order 12866, and it is not likely to have a significant adverse effect on the supply, distribution, or use of energy.

Availability of Rulemaking Documents

You can get an electronic copy of rulemaking documents using the Internet by—

1. Searching the Federal eRulemaking Portal (<http://www.regulations.gov>);
2. Visiting the FAA's Regulations and Policies Web page at http://www.faa.gov/regulations_policies/; or
3. Accessing the Government Printing Office's Web page at <http://www.gpoaccess.gov/fr/index.html>

You can also get a copy by sending a request to the Federal Aviation Administration, Office of Rulemaking, ARM-1, 800 Independence Avenue, SW., Washington, DC 20591, or by calling (202) 267-9680. Make sure to identify the amendment number or docket number of this rulemaking.

Anyone is able to search the electronic form of all comments received into any of our dockets by the name of the individual submitting the comment (or signing the comment, if submitted on behalf of an association, business, labor union, etc.). You may review DOT's complete Privacy Act statement in the **Federal Register**

published on April 11, 2000 (Volume 65, Number 70; Pages 19477-78) or you may visit <http://DocketsInfo.dot.gov>.

Small Business Regulatory Enforcement Fairness Act

The Small Business Regulatory Enforcement Fairness Act (SBREFA) of 1996 requires the FAA to comply with small entity requests for information or advice about compliance with statutes and regulations within its jurisdiction. If you are a small entity and you have a question regarding this document, you may contact your local FAA official, or the person listed under the **FOR FURTHER INFORMATION CONTACT** heading at the beginning of the preamble. You can find out more about SBREFA on the Internet at http://www.faa.gov/regulations_policies/rulemaking/sbre_act/.

List of Subjects

14 CFR Part 1

Air transportation, Aircraft, Aviation safety, Engines, Helicopters, Ratings, Rotorcraft, Safety.

14 CFR Part 33

Air transportation, Aircraft, Aviation safety, Engines, Ratings, Rotorcraft, Safety.

The Amendment

■ In consideration of the foregoing, the Federal Aviation Administration amends parts 1 and 33 of Title 14, Code of Federal Regulations as follows:

PART 1—DEFINITIONS AND ABBREVIATIONS

■ 1. The authority citation for part 1 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

■ 2. Amend § 1.1 by revising the definitions for “Rated 30-second OEI power,” “Rated 2-minute OEI power,” “Rated continuous OEI power,” “Rated 30-minute OEI power,” and “Rated 2½-minute OEI power,” to read as follows:

§ 1.1 General definitions.

* * * * *

Rated 30-second OEI Power, with respect to rotorcraft turbine engines, means the approved brake horsepower developed under static conditions at specified altitudes and temperatures within the operating limitations established for the engine under part 33 of this chapter, for continuation of one flight operation after the failure or shutdown of one engine in multiengine rotorcraft, for up to three periods of use no longer than 30 seconds each in any one flight, and followed by mandatory

inspection and prescribed maintenance action.

Rated 2-minute OEI Power, with respect to rotorcraft turbine engines, means the approved brake horsepower developed under static conditions at specified altitudes and temperatures within the operating limitations established for the engine under part 33 of this chapter, for continuation of one flight operation after the failure or shutdown of one engine in multiengine rotorcraft, for up to three periods of use no longer than 2 minutes each in any one flight, and followed by mandatory inspection and prescribed maintenance action.

Rated continuous OEI power, with respect to rotorcraft turbine engines, means the approved brake horsepower developed under static conditions at specified altitudes and temperatures within the operating limitations established for the engine under part 33 of this chapter, and limited in use to the time required to complete the flight after the failure or shutdown of one engine of a multiengine rotorcraft.

* * * * *

Rated 30-minute OEI power, with respect to rotorcraft turbine engines, means the approved brake horsepower developed under static conditions at specified altitudes and temperatures within the operating limitations established for the engine under part 33 of this chapter, and limited in use to one period of use no longer than 30 minutes after the failure or shutdown of one engine of a multiengine rotorcraft.

Rated 2½-minute OEI power, with respect to rotorcraft turbine engines, means the approved brake horsepower developed under static conditions at specified altitudes and temperatures within the operating limitations established for the engine under part 33 of this chapter for periods of use no longer than 2½ minutes each after the failure or shutdown of one engine of a multiengine rotorcraft.

* * * * *

PART 33—AIRWORTHINESS STANDARDS: AIRCRAFT ENGINES

■ 3. The authority citation for part 33 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701-44702, 44704.

■ 4. Amend § 33.5 to add a new paragraph (b)(4) to read as follows:

§ 33.5 Instruction manual for installing and operating the engine.

* * * * *

(b) * * *

(4) For rotorcraft engines having one or more OEI ratings, applicants must

provide data on engine performance characteristics and variability to enable the aircraft manufacturer to establish aircraft power assurance procedures.

* * * * *

■ 5. Amend § 33.29 by revising paragraph (c) and adding paragraph (d) to read as follows:

§ 33.29 Instrument connection.

* * * * *

(c) Each rotorcraft turbine engine having a 30-second OEI rating and a 2-minute OEI rating must have a means or a provision for a means to:

(1) Alert the pilot when the engine is at the 30-second OEI and the 2-minute OEI power levels, when the event begins, and when the time interval expires;

(2) Automatically record each usage and duration of power at the 30-second OEI and 2-minute OEI levels;

(3) Alert maintenance personnel in a positive manner that the engine has been operated at either or both of the 30-second and 2-minute OEI power levels, and permit retrieval of the recorded data; and

(4) Enable routine verification of the proper operation of the above means.

(d) The means, or the provision for a means, of paragraphs (c)(2) and (c)(3) of this section must not be capable of being reset in flight.

■ 6. Revise § 33.67(d) to read as follows:

§ 33.67 Fuel system.

* * * * *

(d) Rotorcraft engines having a 30-second OEI rating must incorporate a means, or a provision for a means, for automatic availability and automatic control of the 30-second OEI power within its operating limitations.

■ 7. Amend § 33.87 by:

■ A. Redesignating paragraphs (c)(2) and paragraphs (c)(4) through (c)(6) as paragraphs (c)(4) through (c)(7);

■ B. By adding new paragraph (c)(2); and

■ C. By revising paragraphs (a)(5), (a)(6), (c)(3), newly redesignated paragraphs (c)(4) through (c)(7), (f) introductory text, (f)(4) and (f)(8) to read as follows:

§ 33.87 Endurance test.

(a) * * *

(5) Maximum air bleed for engine and aircraft services must be used during at least one-fifth of the runs, except for the test required under paragraph (f) of this section, provided the validity of the test is not compromised. However, for these runs, the power or thrust or the rotor shaft rotational speed may be less than 100 percent of the value associated with the particular operation being tested if the FAA finds that the validity of the endurance test is not compromised.

(6) Each accessory drive and mounting attachment must be loaded in accordance with paragraphs (a)(6)(i) and (ii) of this section, except as permitted by paragraph (a)(6)(iii) of this section for the test required under paragraph (f) of this section.

(i) The load imposed by each accessory used only for aircraft service must be the limit load specified by the applicant for the engine drive and attachment point during rated maximum continuous power or thrust and higher output.

(ii) The endurance test of any accessory drive and mounting attachment under load may be accomplished on a separate rig if the validity of the test is confirmed by an approved analysis.

(iii) The applicant is not required to load the accessory drives and mounting attachments when running the tests under paragraphs (f)(1) through (f)(8) of this section if the applicant can substantiate that there is no significant effect on the durability of any accessory drive or engine component. However, the applicant must add the equivalent engine output power extraction from the power turbine rotor assembly to the engine shaft output.

* * * * *

(c) * * *

(2) *Rated maximum continuous and takeoff power.* Thirty minutes at—

(i) Rated maximum continuous power during fifteen of the twenty-five 6-hour endurance test cycles; and

(ii) Rated takeoff power during ten of the twenty-five 6-hour endurance test cycles.

(3) *Rated maximum continuous power.* One hour at rated maximum continuous power.

(4) *Rated 30-minute OEI power.* Thirty minutes at rated 30-minute OEI power.

(5) *Incremental cruise power.* Two hours and 30 minutes at the successive power lever positions corresponding with not less than 15 approximately equal speed and time increments between maximum continuous engine rotational speed and ground or minimum idle rotational speed. For engines operating at constant speed, power may be varied in place of speed. If there are significant peak vibrations anywhere between ground idle and maximum continuous conditions, the number of increments chosen must be changed to increase the amount of running conducted while subject to peak vibrations up to not more than 50 percent of the total time spent in incremental running.

(6) *Acceleration and deceleration runs.* Thirty minutes of accelerations

and decelerations, consisting of six cycles from idling power to rated takeoff power and maintained at the takeoff power lever position for 30 seconds and at the idling power lever position for approximately 4½ minutes. In complying with this paragraph, the power control lever must be moved from one extreme position to the other in not more than one second. If, however, different regimes of control operations are incorporated that necessitate scheduling of the power control lever motion from one extreme position to the other, then a longer period of time is acceptable, but not more than two seconds.

(7) *Starts.* One hundred starts, of which 25 starts must be preceded by at least a two-hour engine shutdown. There must be at least 10 false engine starts, pausing for the applicant's specified minimum fuel drainage time, before attempting a normal start. There must be at least 10 normal restarts not more than 15 minutes after engine shutdown. The remaining starts may be made after completing the 150 hours of endurance testing.

* * * * *

(f) *Rotorcraft Engines for which 30-second OEI and 2-minute OEI ratings are desired.* For each rotorcraft engine for which 30-second OEI and 2-minute OEI power ratings are desired, and following completion of the tests under paragraphs (b), (c), (d), or (e) of this section, the applicant may disassemble the tested engine to the extent necessary to show compliance with the requirements of § 33.93(a). The tested engine must then be reassembled using the same parts used during the test runs of paragraphs (b), (c), (d), or (e) of this section, except those parts described as consumables in the Instructions for Continued Airworthiness. Additionally, the tests required in paragraphs (f)(1) through (f)(8) of this section must be run continuously. If a stop occurs during these tests, the interrupted sequence must be repeated unless the applicant shows that the severity of the test would not be reduced if it were continued. The applicant must conduct the following test sequence four times, for a total time of not less than 120 minutes:

* * * * *

(4) *30-minute OEI power, continuous OEI power, or maximum continuous power.* Five minutes at whichever is the greatest of rated 30-minute OEI power, rated continuous OEI power, or rated maximum continuous power, except that, during the first test sequence, this period shall be 65 minutes. However, where the greatest rated power is 30-minute OEI power, that sixty-five

minute period shall consist of 30 minutes at 30-minute OEI power followed by 35 minutes at whichever is the greater of continuous OEI power or maximum continuous power.

* * * * *

(8) *Idle.* One minute at flight idle.

* * * * *

■ 8. Amend § 33.88 by removing paragraph (b), redesignating (c) and (d) as paragraphs (b) and (c), respectively; and revising the text of the newly designated paragraph (b) to read as follows:

§ 33.88 Engine overtemperature test.

* * * * *

(b) In addition to the test requirements in paragraph (a) of this section, each engine for which 30-second OEI and 2-minute OEI ratings are desired, that incorporates a means for automatic temperature control within its operating limitations in accordance with § 33.67(d), must run for a period of 4 minutes at the maximum power-on rpm with the gas temperature at least 35 °F (19 °C) higher than the maximum operating limit at 30-second OEI rating. Following this run, the turbine assembly may exhibit distress beyond the limits for an overtemperature condition provided the engine is shown by analysis or test, as found necessary by the FAA, to maintain the integrity of the turbine assembly.

* * * * *

■ 9. Revise § 33.93(b)(2) to read as follows:

§ 33.93 Teardown inspection.

* * * * *

(b) * * *

(2) Each engine may exhibit deterioration in excess of that permitted in paragraph (a)(2) of this section, including some engine parts or components that may be unsuitable for further use. The applicant must show by inspection, analysis, test, or by any combination thereof as found necessary by the FAA, that structural integrity of the engine is maintained; or

* * * * *

■ 10. Amend Appendix A to part 33 by revising section A33.4 to read as follows:

Appendix A to Part 33—Instructions for Continued Airworthiness

* * * * *

A33.4 AIRWORTHINESS LIMITATIONS SECTION

The Instructions for Continued Airworthiness must contain a section titled Airworthiness Limitations that is segregated and clearly distinguishable from the rest of the manual.

(a) For all engines:

(1) The Airworthiness Limitations section must set forth each mandatory replacement time, inspection interval, and related procedure required for type certification. If the Instructions for Continued Airworthiness consist of multiple documents, the section required under this paragraph must be included in the principal manual.

(2) This section must contain a legible statement in a prominent location that reads: "The Airworthiness Limitations section is FAA approved and specifies maintenance required under §§ 43.16 and 91.403 of Title 14 of the Code of Federal Regulations unless an alternative program has been FAA approved."

(b) For rotorcraft engines having 30-second OEI and 2-minute OEI ratings:

(1) The Airworthiness Limitations section must also prescribe the mandatory post-flight inspections and maintenance actions associated with any use of either 30-second OEI or 2-minute OEI ratings.

(2) The applicant must validate the adequacy of the inspections and maintenance actions required under paragraph (b)(1) of this section A33.4.

(3) The applicant must establish an in-service engine evaluation program to ensure the continued adequacy of the instructions for mandatory post-flight inspections and maintenance actions prescribed under paragraph (b)(1) of this section A33.4 and of the data for § 33.5(b)(4) pertaining to power availability. The program must include service engine tests or equivalent service engine test experience on engines of similar design and evaluations of service usage of the 30-second OEI or 2-minute OEI ratings.

Issued in Washington, DC, on July 10, 2008.

Robert A. Sturgell,

Acting Administrator.

[FR Doc. E8-18936 Filed 8-15-08; 8:45 am]

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DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 61

[Docket No. FAA-2007-27812; Amendment No. 61-121]

RIN 2120-AI91

Modification of Certain Medical Standards and Procedures and Duration of Certain Medical Certificates; Correcting Amendment

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule; correcting amendment.

SUMMARY: The FAA is correcting amendatory language and regulatory text regarding one paragraph of the final rule entitled "Modification of Certain Medical Standards and Procedures and Duration of Certain Medical Certificates". The rule extends the duration of first- and third-class medical certificates for certain individuals. The FAA intended to revise an entire paragraph of the section entitled "Duration of a medical certificate"; however, the amendatory language incorrectly indicates that only one paragraph is being revised.

DATES: Effective August 18, 2008.

FOR FURTHER INFORMATION CONTACT: Zara V. Willis, Office of Rulemaking, Federal Aviation Administration, 800 Independence Avenue, SW., Washington, DC 20591; telephone (202) 493-4405; e-mail *Zara.Willis@faa.gov*.

SUPPLEMENTARY INFORMATION:

Background

On July 24, 2008, the FAA published a final rule that extends the duration of the FAA airman medical certificates for certain pilots under the age of 40 at the time of their last medical examination (73 FR 43059). First-class medical certificates, required for airline transport pilot operations, are now valid for 1 year instead of 6 months; third-class medical certificates, required for private pilot operations, are now valid for 5 years instead of 3 years.

In the final rule, the FAA intended to revise § 61.23(d) in its entirety, but inadvertently categorized it only as a revision to paragraph (d)(1).

Correction

This correction makes no changes to the substance of the original final rule. It corrects the amendatory language by revising the entire paragraph (d) of § 61.23, as intended, instead of only paragraph (d)(1). It also corrects the regulatory text by removing (1) of the introductory text to paragraph (d). Moreover, the correction brings paragraph designations under (d) in conformance with the proper format requirements. Consequently, the paragraphs in the first column that were previously designated as (i), (ii), and (iii) are now designated as (1), (2), and (3). The paragraphs in the second column that were previously designated with capital letters ((A), (B), (C), etc.) are now designated with roman numerals ((i), (ii), (iii), etc.). The text of the entire table remains the same.

List of Subjects in 14 CFR Part 61

Aircraft, Airmen, Aviation safety, and Reporting and recordkeeping requirements.

■ Accordingly, 14 CFR part 61 is corrected by making the following correcting amendment:

PART 61—CERTIFICATION: PILOTS, FLIGHT INSTRUCTORS, AND GROUND INSTRUCTORS

■ 1. The authority citation for part 61 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701-44703, 44707, 44709-44711, 45102-45103, 45301-45302.

■ 2. Amend § 61.23 by revising paragraph (d) to read as follows:

§ 61.23 Medical certificates: Requirement and duration.

* * * * *

(d) *Duration of a medical certificate.*
Use the following table to determine duration for each class of medical certificate:

If you hold	And on the date of examination for your most recent medical certificate you were	And you are conducting an operation requiring	Then your medical certificate expires, for that operation, at the end of the last day of the
(1) A first-class medical certificate.	(i) Under age 40	an airline transport pilot certificate	12th month after the month of the date of examination shown on the medical certificate.
	(ii) Age 40 or older	an airline transport pilot certificate	6th month after the month of the date of examination shown on the medical certificate.
	(iii) Any age	a commercial pilot certificate or an air traffic control tower operator certificate.	12th month after the month of the date of examination shown on the medical certificate.