



# Federal Register

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**Wednesday,  
February 11, 2004**

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## **Part IV**

# **Department of Transportation**

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**Federal Aviation Administration**

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**14 CFR Part 36**

**Noise Stringency Increase for Single-  
Engine Propeller-Driven Small Airplanes;  
Proposed Rule**

**DEPARTMENT OF TRANSPORTATION****Federal Aviation Administration****14 CFR Part 36**

[Docket No. FAA-2004-17041]

RIN 2120-AH44

**Noise Stringency Increase for Single-Engine Propeller-Driven Small Airplanes****AGENCY:** Federal Aviation Administration (FAA), DOT.**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** The FAA is proposing a change to the noise limits for propeller-driven small airplanes. The proposal is based on the noise limit change adopted by the International Civil Aviation Organization (ICAO) Annex 16 on February 26, 1999. The Federal Aviation Administration (FAA), the European Joint Aviation Authorities (JAA), and representatives from the United States and European propeller-driven small airplane industries developed the ICAO Annex 16 noise limit change in a joint effort. The proposed change would provide nearly uniform noise certification standards for airplanes certificated in the United States and in the JAA countries. The harmonization of the noise limits would simplify airworthiness approvals for import and export purposes.

**DATES:** Send your comments on or before June 10, 2004.**ADDRESSES:** You may send comments (identified by Docket Number FAA-2004-17041) 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; U.S. Department of Transportation, 400 Seventh Street, SW., 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, SW., 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 [\[dms.dot.gov\]\(http://dms.dot.gov\), including any personal information you provide. For more information, see the Privacy Act discussion in the \*\*SUPPLEMENTARY INFORMATION\*\* section of this document.](http://</a></p>
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*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, SW., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

**FOR FURTHER INFORMATION CONTACT:** Mehmet Marsan, Office of Environment and Energy (AEE), Federal Aviation Administration, 800 Independence Avenue, SW., Washington, DC 20591; telephone (202) 267-7703.

**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 a.m. and 5 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](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, SW., 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***Current Regulations*

Under 49 U.S.C. 44715, the Administrator of the Federal Aviation Administration is directed to prescribe "standards to measure aircraft noise and sonic boom; \* \* \* and regulations to control and abate aircraft noise and sonic boom." Part 36 of title 14 of the Code of Federal Regulations contains the FAA's noise standards and regulations that apply to the issuance of type certificates for all types of aircraft. The standards and requirements that apply to propeller-driven small airplanes and propeller-driven commuter category airplanes are found in § 36.501 and Appendix G to part 36. Appendix G was added to part 36 in 1988 to require actual takeoff noise tests instead of the level flyover test that was formerly required under Appendix F, for airplanes for which certification tests were completed before December 22, 1988.

Appendix G specifies the test conditions, procedures, and noise levels necessary to demonstrate compliance with certification requirements for propeller driven small airplanes and propeller-driven, commuter category airplanes.

### *Synopsis of the Proposal*

In June 1995, the ICAO Committee on Aviation and Environmental Protection (CAEP) met in Montreal, Canada. Representatives that attended the meeting were from the Joint Aviation Authorities (JAA) Council, which consists of JAA members from European countries, the U.S. and European aviation industries, and the FAA. At the meeting, the need to study the environmental impact of propeller-driven small airplane noise was identified and added to the work plan of CAEP's aircraft noise working group.

The aircraft noise working group formed a task group to study the environmental impact of propeller-driven small airplane noise. The task group was also asked to recommend remedies to reduce environmental impact depending on the study results, such as a stringency increase, operational limitations, and economic incentives. During the initial meetings, the task group agreed that it was important to base any remedy on the current technology, and that any changes recommended would be aimed at preventing noise levels from increasing beyond the best current technology in production.

In subsequent meetings, the task group concluded that the noise problem from propeller-driven small airplanes is regional in nature and characterized primarily by training flights using single-engine airplanes. This conclusion by the task group led to the decision to limit its review of available technology to noise abatement of single-engine small propeller-driven airplanes. The task group agreed that the multi-engine small propeller airplanes were not the noise problem because single-engine airplanes are the ones most frequently used for training.

The task group compiled a database of noise certification level and performance data for each model of single-engine small propeller-driven airplanes in production. The purpose of the database was to identify the effectiveness of available noise abatement technologies applicable to single-engine propeller-driven airplanes that would not affect airworthiness of the airplanes.

The task group studied several stringency options for the airplanes in the database, and decided to propose new noise stringency levels that are at the noise levels of current production airplanes. The proposed noise stringency level reflects the current noise abatement technology that is applied to the single-engine propeller-driven small airplanes in production.

Raising the stringency to the level of current production guarantees that future designs do not generate greater noise levels than current production airplanes.

The proposed rule includes a 6 dBA noise limit reduction for single-engine propeller-driven small airplanes having maximum take-off weight less than 1,257 lb. (570 kg), and a 3 dBA noise limit reduction for airplanes with weights above 3,307 lb. (1,500 kg). The new limits will apply to new type certificates (TC's) and Supplemental Type Certificates (STC's) for which application is made after November 4, 2004.

### **Section-by-Section Analysis**

#### *Section G36.301 Aircraft Noise Limits*

Current § G36.301(b) covers both single and multi-engine small propeller driven airplanes. These current noise limits are not changing for multi-engine airplanes and the proposal changes the application of paragraph (b) to multi-engine airplanes only. We are proposing a new paragraph (c) for the single-engine airplanes.

Proposed new paragraph (c) would require a 6 dBA noise limit reduction for single-engine propeller-driven small airplanes having maximum take-off weight less than 1,257 lb. (570 kg) and a 3 dBA noise limit reduction for airplanes with weights above 3,307 lb. (1,500 kg). The noise limit would increase at a rate of 10.75 dB per doubling of weight between 1,257 lb. and 3,307 lb. The proposed change would ensure that the noise level of single-engine propeller-driven small airplanes is held to that appropriate for current noise abatement technology.

### **Regulatory Evaluation Summary**

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 requires agencies to analyze the economic effect of regulatory changes on small businesses and other small entities. Third, the Office of Management and Budget directs agencies to assess the effect of regulatory changes on international trade. In conducting these analyses, the FAA has determined that this proposed rule: (1) Would generate benefits that justify its costs and is not a "significant regulatory action" as defined in the Executive Order; (2) is not significant as defined in the Department of

Transportation's Regulatory Policies and Procedures; (3) would not have a significant impact on a substantial number of small entities; (4) would not constitute a barrier to international trade; and (5) would not contain any Federal intergovernmental or private sector mandate. These analyses are summarized here in the preamble.

This proposed rule would make the FAA's single-engine propeller-driven small airplanes noise regulation more consistent with international standards.

The FAA has determined that this proposed rule would provide more uniform noise certification standards for airplanes certificated in the United States and in the Joint Aviation Authorities (JAA) countries and would ensure that future type certificate applicants incorporate at least the current noise reduction technology. The FAA believes that this proposed rule would impose minimal, if any, costs on supplemental type certificate applicants and would impose no cost on type certificate applicants, because airplanes in current production already meet the proposed noise standards.

### **Initial Regulatory Flexibility Determination**

The Regulatory Flexibility Act (RFA) of 1980 establishes "as a principle of regulatory issuance that agencies shall endeavor, consistent with the objective of the rule and of applicable statutes, to fit regulatory and informational requirements to the scale of the business, organizations, and governmental jurisdictions subject to regulation." To achieve that principal, the Act requires agencies to solicit and consider flexible regulatory proposals and to explain the rationale for their actions. The Act 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 proposed or final rule will have a significant economic impact on a substantial number of small entities. If the determination is that it will, the agency must prepare a regulatory flexibility analysis as described in the Act.

However, if an agency determines that a proposed or final rule is not expected to have a significant economic impact on a substantial number of small entities, section 605(b) of the 1980 act provides that the head of the agency may so certify and an RFA is not required. The certification must include a statement providing the factual basis for this determination, and the reasoning should be clear.

The FAA believes that very few, if any, small entities that apply for supplemental type certificate would be rejected as a result of the proposed rule, so small entities would incur minimal, if any, costs. The FAA also believes that no new type certificate applicant would fail the more stringent noise standard required by this proposed rule because airplanes in current production already meet the proposed standards. Thus, the FAA has determined that this proposed rule would not have a significant adverse economic impact on a substantial number of small entities, therefore, a regulatory flexibility analysis is not required under the terms of the RFA. The FAA solicits comments with respect to this finding and determination and requests that all comments be accompanied by clear documentation.

#### International Trade Impact Assessment

The Trade Agreement Act of 1979 prohibits Federal agencies from engaging in any standards or 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 proposed rule would provide more uniform noise certification standards for airplanes certificated in the United States and in the JAA countries. The harmonization of the noise limits would simplify airworthiness approvals for import and export purposes.

#### Unfunded Mandates Assessment

Title II of the Unfunded Mandates Reform Act of 1995 (the Act), enacted as Public Law 104-4 on March 22, 1995, requires each Federal agency, to the extent permitted by law, to prepare a written assessment of the effects of any Federal mandate in a proposed or final agency rule that may result in the expenditure of \$100 million or more (when adjusted annually for inflation) in any one year by State, local, and tribal governments in the aggregate, or by the private sector. Section 204(a) of the Act, 2 U.S.C. 1534(a), requires the Federal agency to develop an effective process to permit timely input by elected officers (or their designees) of State, local, and tribal governments on a proposed "significant intergovernmental mandate." A "significant intergovernmental mandate" under the Act is any provision in a Federal agency regulation

that would impose an enforceable duty upon State, local, and tribal governments in the aggregate of \$100 million (adjusted annually for inflation) in any one year. Section 203 of the Act, 2 U.S.C. 1533, which supplements section 204(a), provides that, before establishing any regulatory requirements that might significantly or uniquely affect small governments, the agency shall have developed a plan, which, among other things, must provide for notice to potentially affected small governments, if any, and for a meaningful and timely opportunity for these small governments to provide input in the development of regulatory proposals.

This proposed rule does not contain any Federal intergovernmental or private sector mandates. Therefore, the requirements of Title II of the Unfunded Mandates Reform Act of 1995 do not apply.

#### 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 proposed regulations.

#### Executive Order 13132, Federalism

The FAA has analyzed this proposed rule under the principles and criteria of Executive Order 13132, Federalism. We 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. Therefore, we determined that this notice of proposed rulemaking would not have federalism implications.

#### Paperwork Reduction Act

There are no requirements for information collection associated with this proposed rule that would require approval under the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*).

#### 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), regulations,

standards, and exemptions (including those, which if implemented may cause a significant impact on the human environment) qualify for a categorical exclusion. The FAA proposes that this NPRM qualifies for a categorical exclusion because no significant impacts to the environment are expected to result from its implementation.

#### Regulations That Significantly Affect Energy Supply, Distribution, or Use

The FAA has analyzed this NPRM 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.

#### List of Subjects in 14 CFR Part 36

Aircraft, Noise control.

#### Proposed Amendments

In consideration of the foregoing, the Federal Aviation Administration proposes to amend part 36 of title 14 Code of Federal Regulations as follows:

#### PART 36—NOISE STANDARDS: AIRCRAFT TYPE AND AIRWORTHINESS CERTIFICATION

1. The authority citation for part 36 continues to read as follows:

**Authority:** 49 U.S.C. 4321 *et seq.* 49 U.S.C. 106(g), 40113, 44701-44702, 44704, 44715, sec. 305, Pub. L. 96-193, 94 Stat. 50, 57; E.O. 11514, 35 FR 4247, 3 CFR, 1966-1970 Comp., p. 902.

2. Section G36.301 of Appendix G is amended by revising the first sentence in paragraph (b); revising Figure G2; and, adding new paragraph (c) to read as follows:

#### Appendix G to Part 36—Takeoff Noise Requirements for Propeller-Driven Small Airplane and Propeller-Driven Commuter Category Airplane Certification Tests on or After December 22, 1988

\* \* \* \* \*

Sec. G36.301 Aircraft noise limits.

(a) \* \* \*

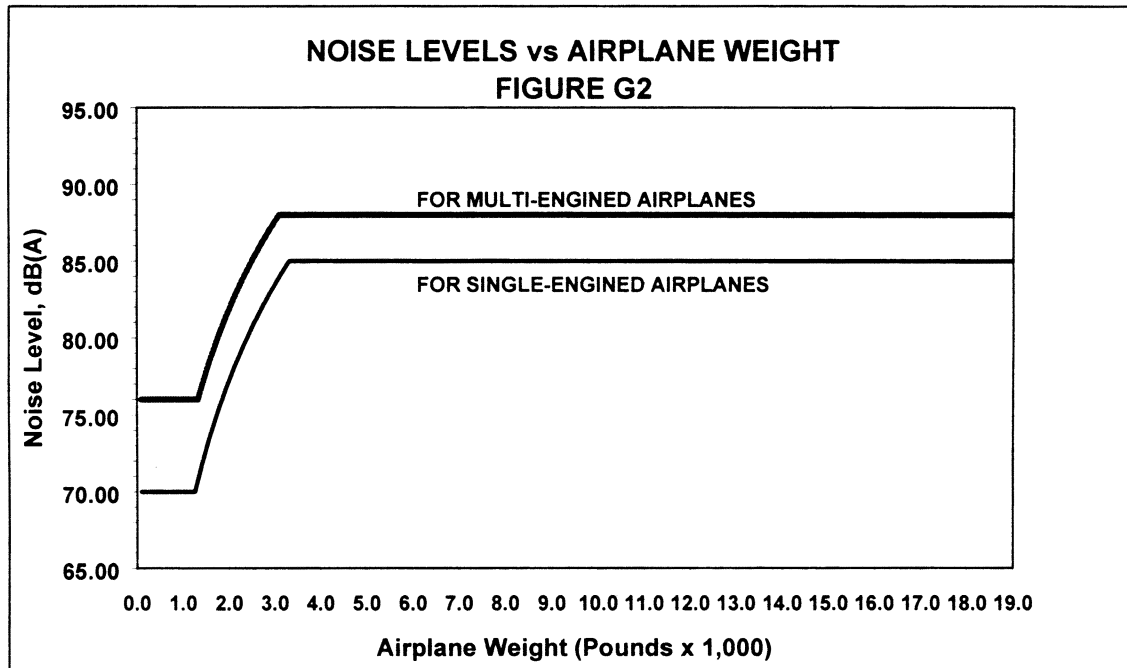
(b) For multi-engine airplanes, the noise level must not exceed 76 dB(A) up to and including aircraft weights of 1,320 pounds (600 kg). \* \* \*

(c) For single-engine airplanes, the noise level must not exceed 70 dB (A) for aircraft having a maximum certificated take-off weight of 1,257 pounds (570 kg) or less. For

aircraft weights greater than 1,257 pounds, the noise limit increases from that point with the logarithm of airplane weight at the rate

of 10.75 dB (A) per doubling of weight, until the limit of 85 dB (A) is reached, after which the limit is constant up to and including

19,000 pounds (8,618 kg). Figure G2 depicts noise level limits for airplane weights for single-engine airplanes.



Issued in Washington, DC, on February 4, 2004.

**Paul R. Dykeman,**

*Deputy Director of Environment and Energy.*

[FR Doc. 04-2891 Filed 2-10-04; 8:45 am]

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