

earlier than 5 years before the issue of the type certificate.

(b) Section 21.101(a) of this chapter notwithstanding, each person who applies for an acoustical change to a type design specified in §21.93(b) of this chapter must show compliance with the applicable requirements of this part that are effective on the date of application for the change in type design. When the time interval between the date of application for the change in type design and the issuance of the amended or supplemental type certificate exceeds 5 years, the applicant must show that the aircraft meets the applicable requirements of this part that were effective on a date, to be selected by the applicant, not earlier than 5 years before the issue of the amended or supplemental type certificate.

(c) If an applicant elects to comply with a standard in this part that was effective after the filing of the application for a type certificate or change to a type design, the election:

- (1) Must be approved by the FAA;
- (2) Must include standards adopted between the date of application and the date of the election;
- (3) May include other standards adopted after the standard elected by the applicant as determined by the FAA.

[Amdt. 36-54, 67 FR 45211, July 8, 2002; Amdt. 36-24, 67 FR 63195, Oct. 10, 2002]

§36.3 Compatibility with airworthiness requirements.

It must be shown that the aircraft meets the airworthiness regulations constituting the type certification basis of the aircraft under all conditions in which compliance with this part is shown, and that all procedures used in complying with this part, and all procedures and information for the flight crew developed under this part, are consistent with the airworthiness regulations constituting the type certification basis of the aircraft.

[Doc. No. 9337, 34 FR 18364, Nov. 18, 1969, as amended by Amdt. 36-14, 53 FR 3540, Feb. 5, 1988]

§36.5 Limitation of part.

Pursuant to 49 U.S.C. 1431(b)(4), the noise levels in this part have been de-

termined to be as low as is economically reasonable, technologically practicable, and appropriate to the type of aircraft to which they apply. No determination is made, under this part, that these noise levels are or should be acceptable or unacceptable for operation at, into, or out of, any airport.

§36.6 Incorporation by reference.

(a) *General.* This part prescribes certain standards and procedures which are not set forth in full text in the rule. Those standards and procedures are contained in published material which is reasonably available to the class of persons affected and has been approved for incorporation by reference by the Director of the Federal Register under 5 U.S.C. 552 (a) and 1 CFR Part 51.

(b) *Incorporated matter.* (1) Each publication, or part of a publication, which is referenced but not set forth in full text in this part and which is identified in paragraph (c) of this section is hereby incorporated by reference and made a part of Part 36 of this chapter with the approval of the Director of the Federal Register.

(2) Incorporated matter which is subject to subsequent change is incorporated by reference according to the specific reference and to the identification statement. Adoption of any subsequent change in incorporated matter is made under Part 11 of this chapter and 1 CFR Part 51.

(c) *Identification statement.* The complete title or description which identifies each published matter incorporated by reference in this part is as follows:

(1) *International Electrotechnical Commission (IEC) Publications.* (i) IEC Publication No. 179, entitled "Precision Sound Level Meters," dated 1973.

(ii) IEC Publication No. 225, entitled "Octave, Half-Octave, Third Octave Band Filters Intended for the Analysis of Sounds and Vibrations," dated 1966.

(iii) IEC Publication No. 651, entitled "Sound Level Meters," first edition, dated 1979.

(iv) IEC Publication No. 561, entitled "Electro-acoustical Measuring Equipment for Aircraft Noise Certification," first edition, dated 1976.

(v) IEC Publication No. 804, entitled “Integrating-averaging Sound Level Meters,” first edition, dated 1985.

(vi) IEC Publication 61094–3, entitled “Measurement Microphones—Part 3: Primary Method for Free-Field Calibration of Laboratory Standard Microphones by the Reciprocity Technique”, edition 1.0, dated 1995.

(vii) IEC Publication 61094–4, entitled “Measurement Microphones—Part 4: Specifications for Working Standard Microphones”, edition 1.0, dated 1995.

(viii) IEC Publication 61260, entitled “Electroacoustics-Octave-Band and Fractional-Octave-Band filters”, edition 1.0, dated 1995.

(ix) IEC Publication 61265, entitled “Instruments for Measurement of Aircraft Noise-Performance Requirements for Systems to Measure One-Third-Octave-Band Sound pressure Levels in Noise Certification of Transport-Category Aeroplanes,” edition 1.0, dated 1995.

(x) IEC Publication 60942, entitled “Electroacoustics—Sound Calibrators,” edition 2.0, dated 1997.

(2) *Society of Automotive Engineers (SAE) Publications.* (i) SAE ARP 866A, entitled “Standard Values at Atmospheric Absorption as a Function of Temperature and Humidity for Use in Evaluating Aircraft Flyover Noise,” dated March 15, 1975.

(3) International Standards and Recommended Practices entitled “Environmental Protection, Annex 16 to the Convention on International Civil Aviation, Volume I, Aircraft Noise”, Third Edition, July 1993, Amendment 7, effective March 21, 2002.

(d) *Availability for purchase.* Published material incorporated by reference in this part may be purchased at the price established by the publisher or distributor at the following mailing addresses:

(1) *IEC publications.*

(i) International Electrotechnical Commission, 3, rue de Varembe, Case postale 131, 1211 Geneva 20, Switzerland.

(ii) American National Standard Institute, 11 West 42nd Street, New York City, New York 10036.

(2) *SAE publications.* Society of Automotive Engineers, Inc., 400 Common-

wealth Drive, Warrentown, Pennsylvania 15096.

(3) *ICAO publications.* International Civil Aviation Organization (ICAO), Document Sales Unit, 999 University Street, Montreal, Quebec H3C 5H7, Canada.

(e) *Availability for inspection.* A copy of each publication incorporated by reference in this part is available for public inspection at the following locations:

(1) U.S. Department of Transportation, Docket Management System, 400 7th Street, SW., Room PL 401, Washington, DC.

(2) Department of Transportation, Branch Library, Room 930, Federal Aviation Administration Headquarters Building, 800 Independence Avenue, SW., Washington, DC.

(3) The National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

(4) The respective Region Headquarters of the Federal Aviation Administration as follows:

(i) New England Region Headquarters, 12 New England Executive Park, Burlington, Massachusetts 01803.

(ii) Eastern Region Headquarters, Federal Building, John F. Kennedy (JFK) International Airport, Jamaica, New York 11430.

(iii) Southern Region Headquarters, 1701 Columbia Avenue, College Park, Georgia, 30337.

(iv) Great Lakes Region Headquarters, O’Hare Lake Office Center, 2300 East Devon Avenue, Des Plaines, Illinois 60018.

(v) Central Region Headquarters, Federal Building, 601 East 12th Street, Kansas City Missouri 64106.

(vi) Southwest Region Headquarters, 2601 Meacham Boulevard, Fort Worth, Texas, 76137–4298.

(vii) Northwest Mountain Region Headquarters, 1601 Lind Avenue, Southwest, Renton, Washington 98055.

(viii) Western-Pacific Region Headquarters, 15000 Aviation Boulevard, Hawthorne, California 92007.

(ix) Alaskan Region Headquarters, 222 West 7th Avenue, #14, Anchorage, Alaska, 99513.

(x) European Office Headquarters, 15, Rue de la Loi (3rd Floor), B-1040 Brussels, Belgium.

[Amdt. 36-9, 43 FR 8739, Mar. 3, 1978, as amended by Amdt. 36-16, 53 FR 47400, Nov. 22, 1988; Amdt. 36-20, 57 FR 42854, Sept. 16, 1992; Amdt. 36-54, 67 FR 45212, July 8, 2002; Amdt. 36-24, 28 FR 1512, Jan. 10, 2003; 68 FR 2402, Jan. 16, 2003; Amdt. 36-26, 70 FR 38748, July 5, 2005]

§ 36.7 Acoustical change: Transport category large airplanes and jet airplanes.

(a) *Applicability.* This section applies to all transport category large airplanes and jet airplanes for which an acoustical change approval is applied for under § 21.93(b) of this chapter.

(b) *General requirements.* Except as otherwise specifically provided, for each airplane covered by this section, the acoustical change approval requirements are as follows:

(1) In showing compliance, noise levels must be measured and evaluated in accordance with the applicable procedures and conditions prescribed in Appendix A of this part.

(2) Compliance with the noise limits prescribed in section B36.5 of appendix B must be shown in accordance with the applicable provisions of sections B36.7 and B36.8 of appendix B of this part.

(c) *Stage 1 airplanes.* For each Stage 1 airplane prior to the change in type design, in addition to the provisions of paragraph (b) of this section, the following apply:

(1) If an airplane is a Stage 1 airplane prior to the change in type design, it may not, after the change in type design, exceed the noise levels created prior to the change in type design. The tradeoff provisions of section B36.6 of appendix B of this part may not be used to increase the Stage 1 noise levels, unless the aircraft qualifies as a Stage 2 airplane.

(2) In addition, for an airplane for which application is made after September 17, 1971—

(i) There may be no reduction in power or thrust below the highest airworthiness approved power or thrust,

during the tests conducted before and after the change in type design; and

(ii) During the flyover and lateral noise tests conducted before the change in type design, the quietest airworthiness approved configuration available for the highest approved takeoff weight must be used.

(d) *Stage 2 airplanes.* If an airplane is a Stage 2 airplane prior to the change in type design, the following apply, in addition to the provisions of paragraph (b) of this section:

(1) *Airplanes with high bypass ratio jet engines.* For an airplane that has jet engines with a bypass ratio of 2 or more before a change in type design—

(i) The airplane, after the change in type design, may not exceed either (A) each Stage 3 noise limit by more than 3 EPNdB, or (B) each Stage 2 noise limit, whichever is lower:

(ii) The tradeoff provisions of section B36.6 of appendix B of this part may be used in determining compliance under this paragraph with respect to the Stage 2 noise limit or to the Stage 3 plus 3 EPNdB noise limits, as applicable; and

(iii) During the flyover and lateral noise test conducted before the change in type design, the quietest airworthiness approved configuration available for the highest approved takeoff weight must be used.

(2) *Airplanes that do not have high bypass ratio jet engines.* For an airplane that does not have jet engines with a bypass ratio of 2 or more before a change in type design—

(i) The airplane may not be a Stage 1 airplane after the change in type design; and

(ii) During the flyover and lateral noise tests conducted before the change in type design, the quietest airworthiness approved configuration available for the highest approved takeoff weight must be used.

(e) *Stage 3 airplanes.* If an airplane is a Stage 3 airplane prior to the change in type design, the following apply, in addition to the provisions of paragraph (b) of this section:

(1) If compliance with Stage 3 noise levels is not required before the change in type design, the airplane must—

(i) Be a Stage 2 airplane after the change in type design and compliance