## Federal Aviation Administration, DOT

Method for Free-Field Calibration of Laboratory Standard Microphones by the Reciprocity Technique, edition 1.0, 1995 (IEC 61094-3) IBR approved for appendix A to part 36.

(6) Publication No. 61094-4, Measurement Microphones—Part 4: Specifications for Working Standard Microphones, edition 1.0, 1995, (IEC 61094-4) IBR approved for appendix A to part 36.

(7) Publication No. 61260, Electroacoustics-Octave-Band and Fractional-Octave-Band Filters, edition 1.0, 1995, (IEC 61260), IBR approved for appendix A to part 36.

(8) Publication No, 60942, Electroacoustics-Sound Calibrators, edition 2.0, 1997, (IEC 60942) IBR approved for appendix A to part 36.

(d) Society of Automotive Engineers, Inc. (SAE), 400 Commonwealth Drive, Warrentown, PA 15096, http:// www.sae.org/pubs/.

(1) ARP 866A, Standard Values at Atmospheric Absorption as a Function of Temperature and Humidity for use in Evaluating Aircraft Flyover Noise, March 15, 1975, IBR approved for appendix H to part 36.

(2) [Reserved]

[Doc. No. FAA-2015-3782, Amdt. No. 36-31, 82 FR 46129, Oct. 4, 2017]

## §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 de-

sign, 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—