Federal Aviation Administration, DOT

with the logarithm of the helicopter weight (mass) at a rate of 3.0 EPNdB per halving of the weight (mass) down to 86 EPNdB, after which the limit is constant.

- (ii) For flyover—For a helicopter having a maximum certificated takeoff weight of 176,370 pounds (80,000 kg) or more, the noise limit is 104 EPNdB, which decreases linearly with the logarithm of the helicopter weight (mass) at a rate of 3.0 EPNdB per halving of the weight (mass) down to 84 EPNdB, after which the limit is constant.
- (iii) For approach—For a helicopter having a maximum certificated takeoff weight of 176,370 pounds (80,000 kg) or more, the noise limit is 109 EPNdB, which decreases linearly with the logarithm of the helicopter weight (mass) at a rate of 3.0 EPNdB per halving of the weight (mass) down to 89 EPNdB, after which the limit is constant.
- (b) Tradeoffs. Except to the extent limited under §36.11(b) of this part, the noise limits prescribed in paragraph (a) of this section may be exceeded by one or two of the takeoff, flyover, or approach calculated noise levels determined under section H36.203 of this appendix if
- (1) The sum of the exceedances is not greater than 4 EPNdB;
- (2) No exceedance is greater than 3 EPNdB; and
- (3) The exceedances are completely offset by reduction in the other required calculated noise levels

[Amdt. 36–14, 53 FR 3541, Feb. 5, 1988; 53 FR 4099, Feb. 11, 1988; 53 FR 7728, Mar. 10, 1988, as amended by Amdt. 36–54, 67 FR 45237, July 8, 2002; Amdt. 36–25, 69 FR 31234, June 2, 2004; Amdt. 36–25, 69 FR 41573, July 9, 2004; Amdt. 36–30, 79 FR 12045, Mar. 4, 2014; FAA Doc. No. FAA–2015–3782, Amdt. No. 36–31, 82 FR 46131, Oct. 4, 2017]

APPENDIX I TO PART 36 [RESERVED]

APPENDIX J TO PART 36—ALTERNATIVE NOISE CERTIFICATION PROCEDURE FOR HELICOPTERS UNDER SUBPART H HAVING A MAXIMUM CERTIFICATED TAKEOFF WEIGHT OF NOT MORE THAN 7.000 POUNDS

PART A—REFERENCE CONDITIONS

Sec.

J36.1 General.

J36.3 Reference Test Conditions.

J36.5 [Reserved]

PART B—NOISE MEASUREMENT PROCEDURE UNDER $\S 36.801$

J36.101 Noise certification test and measurement conditions.

J36.103 [Reserved]

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J36.109 Measurement of helicopter noise received on the ground.

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J36.113 [Reserved]

PART C—NOISE EVALUATION AND CALCULATION UNDER § 36.803

J36.201 Noise evaluation in SEL. J36.203 Calculation of noise levels. J36.205 Detailed data correction procedures.

PART D—NOISE LIMITS PROCEDURE UNDER \$36.805

J36.301 Noise measurement, evaluation, and calculation.

J36.303 [Reserved] J36.305 Noise limits.

PART A—REFERENCE CONDITIONS

Section 136.1 General

This appendix prescribes the alternative noise certification requirements identified under §36.1 of this part and subpart H of this part for helicopters in the primary, normal, transport, and restricted categories having maximum certificated takeoff weight of not more than 7,000 pounds including:

- (a) The conditions under which an alternative noise certification test under subpart H of this part must be conducted and the alternative measurement procedure that must be used under § 36.801 of this part to measure the helicopter noise during the test;
- (b) The alternative procedures which must be used under §36.803 of this part to correct the measured data to the reference conditions and to calculate the noise evaluation quantity designated as Sound Exposure Level (SEL): and
- (c) The noise limits for which compliance must be shown under $\S 36.805$ of this part.

Section J36.3 Reference Test Conditions.

- (a) Meteorological conditions. The following are the noise certification reference atmospheric conditions which shall be assumed to exist from the surface to the helicopter altitude:
- (1) Sea level pressure of 2116 pounds per square foot (76 centimeters mercury):
- (2) Ambient temperature of 77 degrees Fahrenheit (25 degrees Celsius);
 - (3) Relative humidity of 70 percent; and
 - (4) Zero wind.
- (b) Reference test site. The reference test site is flat and without line-of-sight obstructions across the flight path that encompasses the 10 dB down points of the A-weighted time history.
- (c) Level flyover reference profile. The reference flyover profile is a level flight, 492 feet (150 meters) above ground level as measured at the noise measuring station. The reference flyover profile has a linear flight track and passes directly over the noise