APPENDIX K TO PART 36—NOISE REQUIREMENTS FOR TILTROTORS UNDER SUBPART K

Section K1 General

This appendix prescribes noise limits and procedures for measuring noise and adjusting the data to standard conditions for tiltrotors as specified in §36.1 of this part.

Section K2 Noise Evaluation Measure

The noise evaluation measure is the effective perceived noise level in EPNdB, to be calculated in accordance with section A36.4 of Appendix A to this part, except corrections for spectral irregularities must be determined using the 50 Hz sound pressure level found in section H36.201 of Appendix H to this part.

Section K3 Noise Measurement Reference Points

The following noise reference points must be used when demonstrating tiltrotor compliance with section K6 (Noise Certification Reference Procedures) and section K7 (Test Procedures) of this appendix:

(a) *Takeoff reference noise measurement points*—

As shown in Figure K1 below:

(1) The centerline noise measurement flight path reference point, designated A, is located on the ground vertically below the reference takeoff flight path. The measurement point is located 1,640 feet (500 m) in the horizontal direction of flight from the point Cr where transition to climbing flight is initiated, as described in section K6.2 of this appendix;

(2) Two sideline noise measurement points, designated as S(starboard) and S(port), are located on the ground perpendicular to and symmetrically stationed at 492 feet (150 m) on each side of the takeoff reference flight path. The measurement points bisect the centerline flight path reference point A.

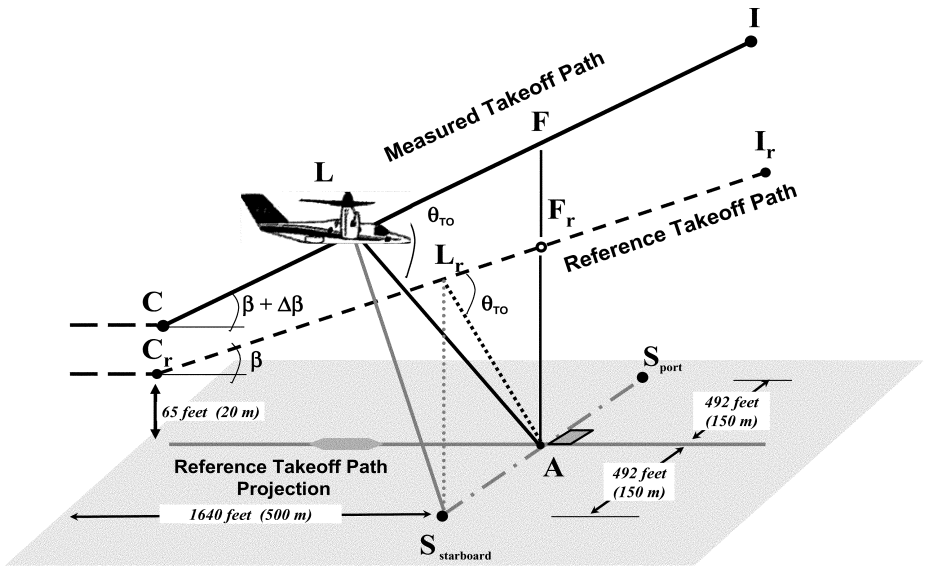

Figure K1.
Comparison of Measured and Reference Takeoff Profiles

(b) *Flyover reference noise measurement points*—

As shown in Figure K2 below:

(1) The centerline noise measurement flight path reference point, designated A, is located on the ground 492 feet (150 m) vertically below the reference flyover flight