How Do I Tell if My Aircraft is Considered "Noisy"?



This guide is for aircraft owners and operators who want to know if their aircraft are subject to two noise-based restrictions on operations at the East Hampton Airport.

Two of the three local laws that the Town Board adopted on April 16, 2015, restrict operations of "noisy aircraft," defined to be "any airplane or rotorcraft for which there is a published Effective Perceived Noise in Decibels (EPNdB) approach (AP) level of 91.0 or greater." This guide provides advice on how to determine whether a specific aircraft falls under the "noisy aircraft" definition, using two sources:

- 1. Official List of Noisy Aircraft Types, posted on the Town of East Hampton website
- 2. Individual "Airplane Flight Manual" or "Rotorcraft Flight Manual"

1. List of Noisy Aircraft Types on the Town of East Hampton Website

The Town has published a list of aircraft models by ICAO aircraft type code and also by common description. The *List of Noisy Aircraft* is posted on the Town's website² and will be updated on an asneeded basis.

The list was derived from the Town's review of FAA Advisory Circular 36-1H, "Noise Levels for U.S. Certificated and Foreign Aircraft," which is available on the FAA's website. Appendix 1 presents the EPNdB levels for US-certificated turbojet-powered airplanes. Appendix 6 presents EPNdB levels for propeller-driven transport category airplanes. Appendix 10 presents EPNdB levels for helicopter models for which FAA conducts noise certification in terms of EPNdB. All three lists are in alphabetical order by manufacturer and model. The relevant noise level data are listed under the column with the subheading "AP" (approach), under the major heading "NOISE LEVEL (EPNdB)." Please note that the lists include noise levels for a range of configurations in many cases, including variation in such factors as engine model, maximum takeoff weights, landing weights, and takeoff and approach flap settings.

For aircraft with no published FAA level, the Town also reviewed detailed noise level data published by EASA.⁴ The EASA home page offers four spreadsheet downloads. Three of the spreadsheets provide EPNdB data for "heavy propeller driven aeroplanes," "jet aeroplanes," and "rotorcraft." The fourth spreadsheet, for "light propeller driven aeroplanes" is not relevant because it does not present EPNdB.

2. "Airplane Flight Manual" or "Rotorcraft Flight Manual" Noise Level Data

In some cases, a particular aircraft has a range of published EPNdB levels (maximum and minimum values, depending on specific configurations. Where a range for a specific aircraft type and model crosses the 91.0 EPNdB "noisy aircraft" definition cutoff, the specific aircraft listing is shaded on the *List of Noisy Aircraft*. In such cases, the Town recommends that owners and operators review their "Airplane Flight Manual" or "Rotorcraft Flight Manual." FAA Advisory Circular (AC) 36-4C ("Noise Standards: Aircraft Type and Airworthiness Certification") requires that those manuals present the certificated noise levels; therefore those manuals are the most definitive source of information for a specific aircraft.⁵

Any aircraft that has a published approach level below 91 EPNdB in its specific manual is exempt from the Town's definition of "noisy aircraft" even if that aircraft type is included on the *List of Noisy Aircraft*.

NOTES AND SOURCES

- (a) The Airport Director is directed to maintain on the Town website a current list of aircraft based upon the noise characteristics published by the Federal Aviation Administration, or (if data is not available from that agency), the European Aviation Safety Agency. Noisy Aircraft shall be defined as any airplane or rotorcraft for which there is a published Effective Perceived Noise in Decibels (EPNdB) approach (AP) level of 91.0 or greater
- (b) In lieu of being subject to the definition of "Noisy Aircraft" pursuant to subsection (a) on the basis of the Town's list of types of Noisy Aircraft, the owner of an Individual Aircraft may elect to have the noise classification of such Individual Aircraft determined by the sound levels on the basis of the EPNdB level that is published in the airplane or rotorcraft flight manual for such Individual Aircraft pursuant to 14 C.F.R. 36.1581(a). To obtain a noise classification of an Individual Aircraft, the owner of such aircraft shall provide the Airport Director with a true copy of the relevant pages from such manual showing the noise level data. In the event of a conflict between the Town's list of classifications of Noisy Aircraft types and classification based on the data set forth in the Individual Aircraft airplane or rotorcraft flight manual, the data in the Individual Aircraft airplane or rotorcraft flight manual shall prevail. Once the owner of an Individual Aircraft has provided the Airport Director with such data from the Individual Aircraft airplane or rotorcraft flight manual, and the Airport Director has determined the authenticity thereof, the Airport Director shall keep such data on file so that the owner need not resubmit the data for each Use of the Airport, and compliance by such Individual Aircraft with this Section shall be determined based on such data.

¹ Local Law 4 of 2015 and Local Law 5 of 2015, § 75-38 A(4) states: "Noisy Aircraft" shall mean any airplane or rotorcraft type classified as a Noisy Aircraft type pursuant to this Section.

² See http://www.town.east-hampton.ny.us/HtmlPages/AirportInterimNoiseAnalysis.html

³ See: http://www.faa.gov/documentLibrary/media/Advisory Circular/AC%2036-1H.pdf

⁴ See https://www.easa.europa.eu/document-library/noise-type-certificates-approved-noise-levels

⁵ AC 36-4C, SUBPART O – "Operating Limitations and Information," Section 36.1501(a), states (in part) "Noise levels achieved during type certification must be included in the approved airplane (rotorcraft) flight manual." Organization of flight manuals varies by manufacturer. The information may be presented in sections titled "noise certification," "noise levels," "noise characteristics," or similar. In some cases, the manufacturer may provide a separate "noise information manual" supplement.