

NDRCC Sound Rules

The sound level of all aircraft flying at the NDRCC field shall be subject to a sound check measured with the Club's dB meter, set to the "A" weighting, slow response and with the windscreen installed.

The meter may be held or placed on a stand approximately 24" above the ground, crosswind and perpendicular to the side of the aircraft at a distance of 25 feet. The test area should be in the "south infield" area, clear of buildings and the runway. A minimum of a 5 second full throttle engine run is required.

The sound limit for all aircraft flying at the NDRCC field is:

100 dB

All Club Members are empowered to conduct Sound Checks. However, the NDRCC Board may also appoint designated members (Sound Testing Members) to carry out Sounds Checks when an aircraft is suspected of being over the dB limit.

Often minor throttle programming adjustments can be made at the field which will reduce the noise level sufficiently to allow aircraft to continue to fly that day. However, if minor adjustments do not reduce the noise level sufficiently, the aircraft cannot fly at Eagle Field until appropriate modifications are made.

Common ways to reduce aircraft dB Levels;

- Use the correct engine application for the model. Excessive engine sizes are hard on airframes and also hard to muffle properly.
- "Pitts style" mufflers are better than side mounted exhaust diverters. When it comes to mufflers, larger is almost always quieter.
- Three blade props are usually quieter. Second choice is smaller diameter, higher pitch 2 blade props (example 20 X 10 versus 22 x 8).
- Canisters and muffled tuned pipes can really reduce exhaust noise if your aircraft has adequate room. Prices are coming down on this stuff (most now comes from China).

If an aircraft exceeds the sound limit, and there are no commercially available accessories to enable the aircraft to meet the sound limit, the owner may apply for a Waiver from the NDRCC Board by submitting a completed Waiver Application to the Board via the Sound Testing Member. The Board may either approve the Waiver, or make recommendations to help reduce the sound level so that the aircraft is not excessively loud/or agitating to other NDRCC members and require the aircraft to be re-tested following modifications. After reviewing the re-test results, the Board shall decide if a waiver is applicable. If at a future date commercially available accessories become available that will enable the waived aircraft to meet the specified noise limits, the aircraft shall be modified immediately or not fly at Eagle Field.

Waivers issued in 2010 will remain valid in 2011, but are not exempt from all conditions of the waiver provision.

Turbines are exempt from sound checks.

Sound Checks may be waived for special events when recommended by the Event CD and approved by the NDRCC Board.