

**MAR/C POLICY 2012-1**  
**SOUND ABATEMENT PROGRAM AT**  
**THE MARYMOOR R/C AIRFIELD**

**Background.** In order to be good neighbors for both park users and the adjacent community, a sound limit of 90dBA measured at 25 feet was imposed on all airplanes as of September 1, 2010. This limit was agreed to by park authorities and the Club. Testing started several months before September 1 and is ongoing. Initially, all airplanes with glow or gasoline engines were tested. During September, 2012, the test data collected to date was reviewed. It was found that 2 cycle glow engines having a displacement of .91 cubic inch or less, and 4 cycle glow engines having a displacement of 1.25 cubic inches and less always passed the test. Consequently, these engines will no longer be tested unless they are unusually loud on the ground or in the air. Since airplanes with electric motors (electrics) are usually quiet, they generally will not be tested unless they are unusually loud on the ground or in air.

**Test Applicability.** An airplane will be tested if it:

1. Is considered unusually loud by the MAR/C test conductor.
2. Has a gasoline engine.
3. Has a 2 cycle glow engines with displacement above .91 cubic inch.
4. Has a 4 cycle glow engines with displacement above 1.25 cubic inches.
5. Has a tuned pipe, flow through muffler or a muffler that is not a stock muffler.

**Test Procedure.** The sound meter will be used in the "A" weighting position and "Fast" switch position. Momentarily press the "Hold" button so that the meter will retain the maximum dB level; following the test, show the level on the meter to the flyer. Position it 25 feet from the model in the plane of the prop at a height of 2-3 feet and with no noise reflecting objects within three feet. Point it directly at the model and have the engine run at full power. Visually ensure throttle stick is full forward and that carb barrel is fully open. Record maximum dB achieved during a 5-10 second run-up. If the test conductor perceives the engine is tuned excessively rich, and not achieving potential maximum RPM, he may cancel the test and request a retuning of the engine before another certification attempt.

**Pass/Fail Certification .** Using the sound test form (an original plus carbon), the test conductor will circle "Pass" or "Fail" along with the observed dB reading. The form will record pilot's name, model type, engine, prop type/diameter, pitch & number of blades, and muffler type. In the case of a "Fail," the test conductor will also include an opinion of the cause, either muffling system or propeller. If a "Pass," the test conductor will sticker the fuselage with a serialized sticker and record same on the form. The test conductor and pilot will date and sign the form.

Usually an airplane that fails the test will not be permitted to fly; however, the test conductor, at his discretion may authorize the airplane to fly for a limited time by programming the radio to limit throttle position so that the 90 dBA limit is met.

**Program Administration.** To setup an appointment for a test, contact the Sound Test Manager (Mike Powell, 425-883-2465) or anyone that is a Club Board Member. A file of all completed test forms (bottom copy) will be maintained by the Sound Test Manager.