

## TRI-AREA RC FLYERS NOISE ABATEMENT RECOMMENDATIONS

*The perception of noise as objectionable is very subjective and is not always directly correlated to decibel levels. The sweet sound of an engine purring may be music to our ears, but to our neighbors it may sound more like fingernails scraping on a blackboard. Therefore it would seem prudent to encourage everyone to take a few simple steps to reduce the noise from our models so as to avoid annoying our neighbors as much as possible. The following recommendations are offered in that spirit.*

1. Use a good muffler, either the stock one that came with your engine or a good after-market substitute.
2. Research has shown propeller noise to be a significant component of the overall noise footprint of model aircraft. This can be reduced significantly by reducing the tip speed of the propeller, either by using a shorter prop with higher pitch, or a shorter 3-blade prop with the same pitch. These two options will have differing effects on your airplane's performance, but you may end up with a much better flying airplane by experimenting with different propeller diameter and pitch combinations. Use the chart below as a guide for propeller diameter selection.
3. Consider soft mounts for your engine, especially for airplanes with open frameworks and plastic covering materials. Soft mounts prevent the engine vibrations from traveling back through the structure and resonating like a drum. This will also reduce or eliminate vibration damage to your on-board radio gear.
4. Be aware that performing wild gyrations in the air with full power creates a random undulating noise pattern which, similar to a mosquito or jet ski, is very annoying to many people, even fellow modelers, regardless of the actual decibel level. Consider switching to an electric powered airplane for this type of flying.

