



## Noise Testing October 2016 – Implementation, Limits, and Outcomes

### Overview:

At the end of the 2015 season the club, by popular vote, decided to increase the size of our take-off and landing strip. This has allowed (as intended) larger aircraft to fly at the site and consequently larger aircraft with noisier engines. This has worked well but has had a negative impact on some of our residents and our landlord. To address this and ensure the future sustainability of LAMMAC, we undertook to measure noise output from all i.c. aircraft and to establish practicable noise limits to adhere to.

### Procedure and Limits:

We began testing in early October. To arrive at a realistic noise limit for any given aircraft, four measurements were taken through four different orientations (front facing, side facing, rear facing, other side facing) at 7 metres distance from a dedicated decibel meter. A final average noise figure was then calculated and noted. To aid the process further, measurements were then taken at the field boundaries to assess the impact of aircraft noise on local residences. Measurements were taken at approx. 150m at the field hedge boundary and 300m at the landlords and residences dwellings.

Measurements above 86db subjectively seemed too noisy at 300m away (65-75), whereas under 86db subjectively seemed reasonable (55-65db) and indeed measure lower than a passing car or motorbike. Aircraft measuring around 82db at the point of testing gave the best result at 300m measuring around 50-55db.

The maximum noise limit for any model aircraft has now been set at 86db and will remain under constant review.

### Outcomes:

- To provide a further easing of potential noise impact on residents, the flying of IC aircraft will be restricted to between 11:00 and 18:00 on all days (see table 1 below), ***except for those aircraft which have been noise tested and achieve a noise emission of less than 82db at seven meters from the aircraft***
- All petrol powered aircraft must be noise tested by a nominated Committee Member before being allowed to fly. Aircraft that exceed 86 db will not be permitted to fly. Owners of aircraft which give a test reading between 82db and 86db will be encouraged to take measures to reduce noise towards the 82db level, such as fitting more noise efficient mufflers and/or propellers

- If any aircraft is perceived to be excessively noisy at the flying site, at any time, the pilot may be asked to stop flying and subject the model to a noise test, by a decision of any two committee members who are present.
- The no-fly zone has been amended to include land beyond the first hedge boundary looking due south towards the Farmers/landlords residence. This is approx. 150 metres away to the south of the pits area. Maps and diagrams to be updated in due course.

**Table 1 showing new Flight Times and Restrictions**

<b>Type</b>	<b>Start</b>	<b>Finish</b>	<b>No-Fly</b>
Electric, Quads, Gliders	10am	9pm (or before sunset)	Xmas and Boxing Day
Glow I.C. 2/4 stroke	11am	6pm (or before sunset)	Xmas and Boxing Day
Petrol (After Noise Testing)	11.am	6pm (or before sunset)	Xmas and Boxing Day
All I.C. confirmed at 82db or under	10. am	9pm (or before sunset)	Xmas and Boxing Day

Thanks to everyone who patiently participated in the process and helped with the work.

Mike Shepherd

Chairman