## The Tasuma Trophy Series - SAM 35 RC Power Duration Rules 2024

This is a traditional free flight duration type competition for vintage and classic era power models but with the use of RC to enable thermal hunting and to land back within the field. Engine types are restricted to limit power and cost and the engine run time is varied according to engine size and type of model. Equivalent electric propulsion can be used. The intention is that a wide variety of vintage and classic 'competition' and 'sport' type models should be competitive.

**Competition procedure:** the CD will specify the launch (or take-off) and landing areas depending on the conditions prevailing. 3 rounds will be flown to a 5 minute maximum followed by a fly-off if necessary. A helper is permitted for starting and launching. In the event of an engine over-run or a flight of less than 1 minute, a single 'no flight' is permitted in each of the preliminary rounds. Landing outside of the specified area results in a zero score. When flying decentralised the site must not benefit from slope lift and landing must be within 100 metres of the place of launch.

Procedure for Class A models, at the CD 's discretion, flight times can be modified to 12 second motor run ( Sport Class 18 seconds ) with 3 minute max.

Results will then be mathematically calculated to assimilate to standard times

**Multiple entries:** are accepted if for different models but only the results from one model may be carried forward from the rounds and count toward the overall results.

**Model eligibility:** designs must have been flown, published or kitted by 1<sup>st</sup> January 1961. Construction must follow the original plan although substitution of materials, local strengthening, and adaptation for the engine used or electric propulsion and for RC are permitted. Scaling is permitted with appropriate changes to material sizes and rib spacing but all outlines and sections must remain in proportion.

Radio: must be 2.4Ghz.

## Power bands and engine run times:

Power band	(A)	(B)	(C)
IC engine capacity	Up to 0.8cc	Up to 3.5cc	Up to 10.5cc
Electric power	wing area power factor 0.4  Maximum 100 watts	wing area power factor 0.87  Maximum 300 watts	wing area power factor 0.87 Open wattage
'Competition' models	20 secs run time	16 secs run time	10 secs run time
'Sport' models	30 secs run time	24 secs run time	15 secs run time

Explanation of power factor.

This specifies the motor wattage permitted in relation to the wing area in square inches

The engine run is timed from launch or start of take off roll. The wing area is the developed wing area (i.e. with the panels laid out flat, as on the plan, and including the fuselage width) in square inches.

**In the event of adverse flying conditions:** the CD may proportionately reduce the engine run times, the 'no-flight' time and the maximum.

**IC engines:** 2 stroke engines must be non-schneurle and plain bearing except that in power band (A) a single ball race is permitted. 4 stroke engines (not supercharged) are permitted in power band (C) but only for 'sport' models and for vintage 'competition' models (vintage designs must have been flown, published or kitted by 1<sup>st</sup> January 1951).

**Electric propulsion:** the wattage is that measured between the battery and the ESC when run on the ground with the flight propeller and a fully charged battery. Folding propellers are not permitted.

'Competition' and 'sport' models: designs deemed to be 'competition' models are the high performance types, typically but not exclusively of the pylon layout. 'Sport' models are lower performance types, typically but not exclusively of the cabin layout. Some cabin models, such as many of the PAAloaders, are high performance 'competition' types whereas some non-cabin models, such as the Simplex, are deemed to be lower performance 'sport' models.

All designs with a publication date before January 1950 may be classed as Sport Models, regardless of being cabin or pylon configuration, and built to original size

Common sense will apply and models may be reclassified in the light of experience. Those considering building a 'marginal' model should consult the RC Secretary for a ruling. If necessary the CD will adjudicate on the day.