

CLASSIC SPEED TO SAM 35 RULES

1. Objective:

To provide a handicap competition to enable several classes of classic speed models to compete on an equal basis. Competitors should note the details in BMFA Speed Rules, section 4.1.3 for information on safety and general procedures.

In order to have a more level 'playing field', engines should be as close as is practicable to 'standard' commercially available units. Hand made specials will not be allowed.

2. Model:

- (a) Eligible models are any C/L model which is kitted, or its plan published, before 31 December 1965.
- (b) The structure of the models shall be as near to the original as is practicable.
- (c) Wing/tail area may be increased by up to 30% to increase stability.

3. Engine:

- (a) Any engine produced or in production at 31 December 1965.
- (b) Later derivatives, i.e. manufacturers developed versions using largely interchangeable components, will be allowed.
- (c) Specifically excluded are engines incorporating technology not commercially available in the model aeroplane world at 31 December 1965. This includes any exhaust extensions and schnurle porting with boost port/s.
- (d) Commercially manufactured replica engines will be allowed.
- (e) In order to make classic speed fairer to all comers, the use of 'special' hand made engines is to be prohibited.
- (f) Apart from the rotor disc on rear induction engines and the cylinder head, all parts are to be of commercial manufacture.
- (g) If an engine is protested, the organisers have the right to thoroughly inspect a suspect engine and disqualify if appropriate.
- (h) To replace the '49' and '60' classes, it is proposed to introduce one for '40' size baffle piston (loop scavenge) engines of any age. The aim is to promote the use of readily available low cost engines without undue modifications. Perry (PDP) ported engines will not be permitted, even with a baffled piston.

- (i) The use of taper seat glowplugs will not be allowed. The only exception is Cox 049/09 engines with replacement heads due to limited availability of original heads.
- (j) ABC/AAC and similar material combinations will not be allowed for piston/liners.

4. Verification:

The competitor (or others with relevant information) must be prepared to produce documentation to verify authenticity of both airframe and engine if so requested by the Contest Director.

5. Propeller:

Any 2 blade commercially manufactured wood, thermoplastic or GFRP/carbon propeller may be used and re-worked as required. Metal propellers are not permitted.

6. Fuel:

- (a) Fuel is unrestricted within the limits of BMFA safety rules (see 4.1.3.4).
- (b) In the interests of safety, the use of propylene oxide is prohibited.

7. Entrant:

- (a) The entrant must be the owner of the model.
- (b) Proxy pilots are permitted.

8. Number of Entries:

- (a) Competitors may enter more than one model in any class.
- (b) Only the model with the fastest speed will count for classification purposes.

9. Lines:

- (a) Line length and diameter shall be as noted in the table below and will be measured from centre of handgrip to centre of crankshaft of the engine.
- (b) Model, handle and lines shall be pull-tested immediately prior to each attempt/flight in accordance with the table below.
- (c) A safety strap must be worn between handle & wrist when flying.
- (d) Only 2 single strand wire lines will be allowed, no mono-line, and all sizes are subject to a -2.5% tolerance.
- (e) No groupers are allowed.

10. Timing:

- (a) The timed distance will be one half mile for all classes.
- (b) Timing will commence two laps after the pilot enters the pylon, or if a pylon is not used, two laps after the pilot's "ready" signal.
- (c) Proto Speed is timed from the moment of release.
- (d) Timing shall normally be with two watches with the average of them being recorded. If times differ by more than 0.2seconds, the pilot will be offered the option of the slowest time or a re-flight.
- (e) Speed (MPH) = $1,800/\text{time in seconds}$ for all classes.

11. Contest Flights:

Maximums of three flights per model are allowed, with two attempts per flight, subject to time being available on the day. The Contest Director will call an attempt when a model fails to become airborne within 5 minutes or if the pilot fails to give a ready signal. No second attempt will be allowed for any Flight once timing has commenced.

12. Whipping:

In the event that a pylon is not available:

- (a) The pilot must walk forward at all times.
- (b) The control handle must be on the pilot's chin or chest.
- (c) Whipping or shortening the flight path in any way, leading the model etc. shall result in a "No Flight". The flight will be declared void and NO second attempt allowed.
- (d) Proto Speed (Class 8) models may be whipped for one lap only, after which, the handle must be on pilot's chest or chin and the pilot is to be walking forwards.

13. Scoring:

Placings will be finalised according to a Handicap System similar to that used in the BMFA Speed Rules, section 4.1.3.21. A list of current highest speeds attained will be held by the Control Line Technical Committee, and Contest Directors can contact them via the BMFA Leicester Office.

14. Class Definitions:

| Class | Maximum Capacity cu.ins. (cc) | Maximum Weight ozs. | Line Length | Line diameter | Test pull (lbs.) | No. of Laps |
|-----------|-------------------------------|---------------------|-------------|---------------|------------------|-------------|
| 1 | 0.051 (0.9) | 12 | 42'0" | 0.25mm | 13 | 10 |
| 2 | 0.10 (1.64) | 12 | 46'8" | 0.30mm | 20 | 9 |
| 3 | 0.15 (2.5) | 16 | 52'6" | 0.30 mm | 30 | 8 |
| 5 | 0.305 (5.0) | 24 | 60'0" | 0.40mm | 50 | 7 |
| 8 (Proto) | 0.305 (5.0) | 24 | 60'0" | 0.40mm | 40 | 7 |
| 9 | 0.40 (6.5) | 32 | 60'0" | 0.45mm | 60 | 7 |

15. Target Speeds:

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|---|----------|
| 1 | 90 mph |
| 2 | 100 mph |
| 3 | 120 mph |
| 5 | 150 mph |
| 8 | 120 mph |
| 9 | 150 mph. |

Once speeds are set, these will be substituted

16. Proto Speed:

Model

(a) Any control line model, kit or plan resembling a full size aircraft having a full fuselage, a cockpit or cabin in proportion, a completely cowled engine and two wheel undercarriage, published by 31.12.65.

(b) The wing area, including the projected area within the fuselage, to be at least 125 sq.ins.

Engine

The engine capacity is a maximum of .305 cu ins.

Contest Rules

All other rules shall be as BMFA Class 4.1.5 Vintage Speed