

SAM 35 Profile Proto Speed Rules

Incorporating F2D and .29 Loop Scavenged classes only.

1. Model

To be made with a profile fuselage of semi-scale like appearance and a side-mounted engine facing outwards, having nominal thickness of 1/2" to the profile fuselage. Slimming the fuselage to the tail is permitted. The model must have a vertical tail-fin. No cowling or fairing of the engine top half or tank is allowed. The cockpit outline may be simply painted onto the fuselage. A fuselage inner cowl/fairing may be extended rearwards to encompass and blend with the first 1/2 of the wing if required. The control system/bellcrank is to be exposed. Maximum weight of model is 16oz for F2D and 24oz for .29 Loop Scavenged classes. Models may fly clockwise or anticlockwise direction.

2. Wing

To be made from 5/16" minimum thickness material which may be thinned towards the tips with a minimum wing area of 100 sq in. for F2D class and 125 sq. in. for .29 Loop Scavenged class. The wing shall be fitted with a hardwood, ply or spruce spar to take the bell-crank.

3. Engines

The F2D class may use any F2D legal engine, which must be fitted with F2D legal muffler. For the .29 class any engine providing that it has a cross-flow scavenge system (a piston with a baffle) and a maximum swept volume of 0.305 cu. In. (5cc). A silencer is permitted, providing that it does not materially increase engine performance. Tuned exhaust systems are specifically excluded.

4. Spinner

All engines must be fitted with a spinner or rounded safety nut.

5. Propellers

Any commercially available propeller designed for use with I/C engines. No propellers designed for electric motors or metal blades are allowed.

7. Fuel and fuel system

Only Formula Irvine Contest 10 glow fuel can be used in F2D Proto and this will be supplied by the organisers at each event. .29 Loop Scavenged Proto may use any fuel within BMFA safety rules. Propylene Oxide is specifically excluded as a fuel constituent by SAM 35 on the grounds of health and safety. Pressurised fuel systems using either crankcase, exhaust or bladder pressure are permitted.

8. Control lines, Pull Test and Handle

For F2D class - 2 x 0.3mm minimum diameter and for .29 Loop Scavenged class 2 x 0.4mm diameter single strand carbon music wire with a length from centre-line of model to centre-line of handle of 52'6". Tolerance on

line length is, plus anything, minus nothing. Line ends must be made in accordance with BMFA recommendations. A pull test of 25 lbs will be applied to the F2D model and 35lb for .29 class control lines and handle before each competition series of flights. Handles must be equipped with a safety strap or rope, which must be fastened around the wrist before any flight and may be subject to the pull test.

9. Timed distance

A distance of one mile will be flown for both F2D and .29 Loop Scavenged classes from a standing start (16 laps). The control handle must be held in line with the centre of the pilots chest after the first lap without any degree of leading or whipping the model. Recommended position is that the handle be held to the pilots chest or under chin.

10. Undercarriage

One or two wheels with a 2" minimum diameter.

11. Wing/fuselage joint

Two hardwood, metal or carbon fibre dowels shall be securely epoxied and pinned through the wing/fuselage joint with one passing through the spar/fuselage joint.

12. Safety wire

A visible stranded safety wire of 50lb breaking strain minimum is to be employed using a self-tightening lasso around the engine which is to be attached by crimped connection and or similarly rated big-game fishing connections to the bell-crank mounting screw.