

South Pacific Scale Masters

The event is for three levels of scale competition with a sub class in the Classic scale class (Builder of the model) allowing team entries. The other class is for ARF models.

A competitor may only enter in one class.

It is a condition of entry that competitors assist in the running of the event.

Models weighing over 7.0 KG and turbine powered models must have the required M.A.A.A. permits.

The maximum power source voltage for electric powered models is 42 volts.

Where a dispute or situation arises that is not covered by the ARF and Classic class rules then F4C rules will apply.

ARF CLASS.

The model must be a commercially available pre-covered/painted scale model.

A photograph of the full size prototype must be presented with the entry. This does not have to be the same aircraft as the model but must be indicative of the type.

A pilot's bust must be fitted in the cockpit.

The model will not be static judged however models that are considered grossly inaccurate may be refused entry by the contest director.

CLASSIC CLASS

This is a builder of the model class. Individual and Team.

In the team class, a separate pilot named on the entry form may be used to perform the flight. The builder and flyer must be present at the competition.

The model must have been assembled, finished and detailed by the entrant. Models built or assembled from a plan, kit, fibreglass/foam or moulded components and from scratch are eligible. Purchased complete models are ineligible.

The source of the model's design and manufacture will be stated on the competitors entry form and submitting erroneous information may lead to disqualification. Any entrant can protest the legality of a Classic class entry. A total of three independent protests will cause the contest director to request proof of the entries' legality. If the protest is upheld by the contest director it will result in disqualification of the protested entry.

To qualify for static judging points at least two photographs of the full size must be submitted. At least one should be of the full size aircraft modelled.

Static judging Classic class.

Each model will be static judged for overall realism including colours and markings and craftsmanship at a distance of two metres using the submitted photographs as a guide.

The judges will assess the overall field and award the best model a point score of 100.

All other models will be awarded points based on their relationship to the best model.

CLASSIC AND ARF CLASS FLIGHT RULES

Flight schedule

After being called to the start position, the competitor has three minutes in which to start their engine and commence the takeoff.

Multi engines models will be allowed an additional two minutes for each additional engine.

The flight schedule will consist of take off and landing plus the three compulsory and five optional manoeuvres chosen from the F4C list

The flight judges will award each of the ten manoeuvres a score between 0 and 10 points using half points if required.

If the engine(s) stops after the take-off has commenced, but before the model aircraft is airborne, the engine(s) may be restarted. In the case of a repeated attempt, no points will be assigned for the take -off.

The maximum flight time is twelve minutes plus any multiple engine start time, beginning when the competitor is placed on time. Flight scoring will stop at the end of this period.

Only one attempt is permitted for each manoeuvre, the only exception is the procedure of getting a model aircraft airborne, as defined above.

All manoeuvres must be performed parallel with the judges' line such that if any part of the manoeuvre is performed behind the judges' line it will score ZERO. Exceptions from this rule are manoeuvres Take-off, Landing, and Touch and Go. These manoeuvres have the right to be performed into wind as long as they do not overfly a designated area behind the judges' line laid out for the protection of spectators, officials and other competitors or helpers. If a model aircraft is in the opinion of the Judges or Contest / Flight line Director unsafe, or being flown in an unsafe manner, they may instruct the pilot to land.

Marking (flight points)

Each manoeuvre will be awarded marks from 0 to 10 using increments of half points by each of the judges during the flight.

The manoeuvres must be performed in a plane and at a height that will allow them to be seen clearly by the judges. The non-observance of this rule will be penalised by loss of points.

FLIGHT MANOEUVRE LIST ALL CLASSES

6.3.6.1. Take-off.....K = 9

6.3.6.2. Straight flightK = 3

6.3.6.3. Figure EightK = 9

6.3.6.4. Descending 360° CircleK = 9

6.3.6.5. OptionK = 6

6.3.6.6. OptionK = 6

6.3.6.7. OptionK = 6

6.3.6.8. OptionK = 6

- 6.3.6.9. OptionK = 6
- 6.3.6.10. Approach and LandingK = 12
- 6.3.6.11. Realism of flight
 - (a) Engine soundK=3
 - (b) Model speedK=7
 - (c) Smoothness of flightK=6
 - (d) Choice of optionsK=12

6.3.7. Optional Demonstrations

Competitors must be prepared, if required by the judges, to give evidence that the options selected are typical and within the normal capabilities of the aircraft subject type modelled. Only one manoeuvre involving the demonstration of a mechanical function may be included in a competitor's choice of options. These include (options D (Bombs/Fuel Tank Drop), L (Parachute Drop), and, if applicable, P or Q (Flight Functions by subject aircraft).

Selection must be given to judges in writing before taking off. The options may be flown in any order. A competitor may not select option "C" (Retract and extend flaps) if option "B" (Retract and extend landing gear) has also been selected. The order in which the optional manoeuvres are flown must be marked on the score sheet and any manoeuvre flown out of order will be marked zero.

- A Chandelle.....K = 6
- B Retract and extend landing gearK = 6
- C Retract and extend flapsK = 6
- D Dropping of bombs or fuel tanks K = 6
- E Stall turnK = 6
- F Immelman turnK = 6
- G One loop.....K = 6
- H Split S (Reversal)K = 6
- I Cuban eightK = 6
- J Normal spin (three turns)K = 6
- K Roll.....K = 6
- L ParachuteK = 6
- M Touch and go K = 6
- N Overshoot.....K = 6
- O Side slip to left or rightK = 6
- P 1st Flight function by subject aircraft..... K = 6
- Q 2nd Flight function by subject aircraft.....K = 6

Competitors may demonstrate up to two different flight functions of their own choice, but must be prepared to supply evidence that each function was performed by the prototype modelled.

Competitors must indicate to the Flight Judges the nature of the demonstration(s) before going to the flight line.

- R Flight in triangular circuitK = 6
- S Flight in rectangular circuitK = 6
- T Flight in a straight line at constant height
(maximum height 6 metres).....K = 6
- U Flight in a straight line with one engine throttled
(for multi-engined model aircraft only)K = 6
- V Lazy Eight.....K = 6
- W WingoverK = 6
- X Inverted flight.....K = 6
- Y Derry TurnK = 6

Note: for a description of manoeuvres refer to the F4C Annex 6C rules at www.fai.org/aeromodelling/documents/sc4

NOTE

The K factor for choice of manoeuvre options is high (K12) so that choosing the options is very important. For example if you fly an aerobatic type model and choose non aerobatic options the choice of options score will be downgraded. The opposite is to choose aerobatic manoeuvres when flying a non aerobatic model where a downgrade will also occur. However for those aircraft with limited aerobatic potential such as for example early WWI fighters then a combination of aerobatic and non aerobatic manoeuvres is satisfactory.

FLIGHT SCORE, CLASSIC AND ARF CLASS

Round scores will be normalised as follows. The highest flight score in a round will be awarded 1000 points. All other scores will be awarded a percentage of 1000 points based on their percentage of the highest raw flight score. Example, if a flight score is half of the highest score then it will get 500 points.

If for any cause beyond the control of the organisers less than four official rounds can be flown, the scoring shall be completed as follows :-

If only one round is flown, the single flight score of that one round is recorded

If two rounds are flown, the average of the two flights is used.

When more than two rounds are flown the average of the two highest scores is used.

The scores in an official round can be recorded only if all competitors had equal opportunity for a flight in that round.

The final competitors score will be the sum of the flight score and static score.