Classic Pattern Competition C2022 Rules

Overview
Castor oil, leaky retracts and low passes! Come and join us as we bring back the classics! This new Classic Class is open to everyone – beginner to expert. The schedule is right from the 1970's. Come and fly with any model designed and flown prior to October 1983. Nitro, electric – it does not matter!

Although this is not a FAI class, the general rules of the FAI F3A sporting code apply, with the following variations. You must have the current sporting code at hand when reading these rules. Remember these rules add to the Sporting Code, and do not replace the Sporting Code.

PART FIVE – TECHNICAL REGULATIONS FOR RADIO CONTROLLED CONTESTS

5.1.2. **General Characteristics of Radio-Controlled Aerobatic Models**

One of the key aspects of Classic Pattern is the use of a Classic model. What is a Classic Model?

> Any radio-controlled model aircraft that was designed, and prototype flown, prior to the 15th October 1983 - the finish date of the 1983 world championships.

Can any changes be made? Yes – modern construction materials can be used, modern aerofoils, etc. So long as the aircraft is a recognisable 'classic' design, it should be ok. The contest director has the discretion to not allow aircraft which push the boundaries of what is 'classic'. When viewed from 10m, it must represent a classic design.

Maximum overall span	2000mm
Maximum overall length	2000mm
Maximum total weight, with batteries but not fuel	5000g
Maximum total sweep volume of the engine(s)	10.66cc (0.65cuin) 2 stroke or 15.59cc (0.951cuin) 4 stroke

The engine(s) must be fitted with effective silencers.

b) Propulsion device limitations: Electric battery voltage limited to 26.00V (measured prior to take-off). No contra rotating drives allowed.

d) The maximum sound/noise level of the model aircraft and its propulsion device: The competition entry form may include information on noise limits - this may be the limit in the country of competition or may be a local limit at the competition site. If no limit is notified, the limit will be 95dB(A) at 3m – measured as per the current F3A sporting code.

5.1.9. **Classification**
As is usual with any local competition, the contest director may decide on the number of rounds flown. A typical competition may consist of 4-6 rounds, with 1 round being dropped if 2-4 rounds have been completed, and 2 rounds dropped if 5-6 rounds have been completed.

TBL and normalising are used as per the FAI rules.

5.1.11. **Organisation for Radio Controlled Aerobatics Contests**
b) At the discretion of the CD, in addition to 2.4GHz, other radio systems legal in the country of competition may be used.

5.1.12. **Execution of Manoeuvres**
The Classic schedule consists of centre manoeuvres only. The sequence is flown as a series of centre manoeuvres, one on each upwind and downwind pass. After take-off, you are allowed one free pass heading downwind, before coming back to start the schedule into wind. The name of each manoeuvre must be announced to the judges by either the pilot or caller. Commence (or start) must be called (again by either the pilot or caller) 1-2 seconds before the start of each manoeuvre, and complete (or finish) called 1-2 seconds after the finish of each manoeuvre. Provided there is neither a call of 'Commence' (or start), nor the aircraft flown past centre, the pilot may manoeuvre the aircraft to position it to his/her satisfaction prior to execution of the manoeuvre. However, all manoeuvres must be completed within the allocated flight time of 8 minutes from the model being placed on the runway for take-off.

5.1.13. **Schedule of Manoeuvres**

	Manoeuvre (C2022)		**K-factor**
1	Triangular Loop with roll	Into wind	4
2	Cuban Eight with half rolls	Down wind	3
3	Top Hat, point rolls up and down	Into wind	4
4	Slow Roll	Down wind	3
5	Two Reverse Outside Loops, half roll entry and exit	Into wind	3
6	Cobra Roll	Down wind	3
7	Double Immelmann, point rolls	Into wind	3
8	Four Point roll	Down wind	4
9	Square Horizontal Eight	Into wind	4
10	Three Horizontal Rolls	Down wind	3
11	Three Turn Spin	Into wind	2
		Total K-factor:	**36**

ANNEX 5A DESCRIPTION OF MANOEUVRES

All Manoeuvres will start and finish in straight and level flight and have the same altitude and heading for entry and exit unless otherwise stated.

All Manoeuvres which have more than one loop shall have the loops the same diameter similarly all manoeuvres which more than one roll shall have the rolls the same roll rate. All consecutive rolls shall be at the same altitude.

The manoeuvres are judged and flown as per the current FAI sporting code.

1. Triangular Rolling Loop**:** Model pulls up into 45 degrees climb, holds the line for approximately one to two seconds, loops through a 3/8 inside loop to inverted flight, does one complete roll, loops through a 3/8 inside loop, holds the line for approximately one to two seconds and recovers in level flight at the same point that the manoeuvre started. The climbing and descending lines should be the same length.

2. Cuban Eight: Model pulls up and executes a 5/8 inside loop, when at 45 degrees inverted model does a half roll, followed by a ¾ inside loop, again when 45 degrees inverted the model does another half roll and recovers to level flight.

3. Top Hat: Model pulls up into a vertical up line before centre and executes a 2x4 point roll, pulls to inverted horizontal flight. Once an equal distance past centre the model pulls to a vertical down line followed by 2x4, exits upright. Top had shall be square when viewed from the centre.

4. Slow Roll: Model rolls slowly through 360 degrees, in either direction, manoeuvre takes approximately five seconds.

5. Two Reverse Outside Loops: Model rolls inverted, pauses for approximately 1 second then on centre pushes up to perform 2 consecutive outside loops, pauses for approximately 1 second then rolls to upright level flight - all loops to be superimposed.

6. Cobra Roll: Model pulls to a 45 upline and completes one half roll, pulls 90 degrees through centre, completes a further half roll in the same direction and exists upright.

7. Double Immelmann: Model pulls up into a half inside loop, immediately performs a 2x4 point roll upright, flies straight and level for approximately one second, does a half outside loop and immediately performs 2x4 point roll to level flight.

8. Four Point Roll: Model rolls through 360 degrees hesitating at each 90 degree point the wings should be parallel or vertical to the horizon at each point- manoeuvre to take approximately 5 seconds.

9. Square Horizontal Eight: Model pulls up from level flight past centre and completes 3 corners of an inside square loop, then pushes the remaining 4 of an outside square loop, then a single 90 degree inside loop to exit back to level flight.

10. Three Horizontal Rolls: Model rolls at a uniform rate through three complete revolutions in either direction - manoeuvre takes approximately five seconds.

11. Three Turn Spin: The model establishes a heading, power is reduced, the model is held in a slightly nose high attitude until it stalls and commences to spin. The model will rotate through three complete turns and recovers on the same heading but at a different altitude than entry.

ANNEX 5B MANOEUVRE EXECUTION GUIDE

The current FAI sporting code guidelines should be used as a guide for manoeuvre execution.

Positioning: The competitor should centre their aerobatic manoeuvres in such a way that they can be easily judged. Because Classic models tend to be smaller than current designs, the competitor may centre their aerobatic manoeuvres at an average distance of 100 meters from himself.

While no special bonus is justified for exceptionally low altitude, excessively high altitude is cause for downgrading.

Contest Director Notes

1. A concourse de elegance award may be offered to a competitor for the best presented model. The winner chosen in a manner decided by the contest director. The model must have participated in the competition to be eligible for this award.
2. What about aircraft designed after October 15th 1983? What if someone turns up with an Aurora or similar .60 size model? We would recommend at local club events the contest director show some discretion – so long as the model meets the power plant limitations and other specifications. However, at National or International events, the October 1983 cut off should be respected.
3. Those models which do not represent 'Classic' pattern aircraft should be denied entry.