5.5.6 F5D ELECTRIC POWERED PYLON RACING MODEL AIRCRAFT

5.5.6.1 General

General Rules 5.5.1. and Contest Rules 5.5.2. are applicable except where otherwise stated.

5.5.6.2 Technical Specifications

a) Model Aircraft
Minimum weight.....1'000 g
Maximum surface loading.....65 g/dm2

b) Battery

Battery is limited by either weight or number of cells.
Maximum weight: 425g including soldering, insulation, cables and connectors.
Maximum size of cylindrical cells: 24mm diameter and 45mm length.
Maximum number of cells: 7

c) Each competitor may use a maximum of three model aircrafts during the contest.

d) Any one model aircraft may not be used by more than one team, nor may roles be interchanged in a team.

5.5.6.3 Safety rules

a) All officials (timekeepers, lap counters and pylon judges) must stay in a minimum of 45 m outside of the course on the spectators side.

b) A Sideline Judge will be posted in the front on the pit area on the spectator side of the racing course. The Sideline Judge will record as an infringement, any over flight of the pit or spectator areas.

c) All officials on the race course and all competitors must wear a crash helmet with a chin strap.

d) The racecourse specification may be modified in the interest of safety.

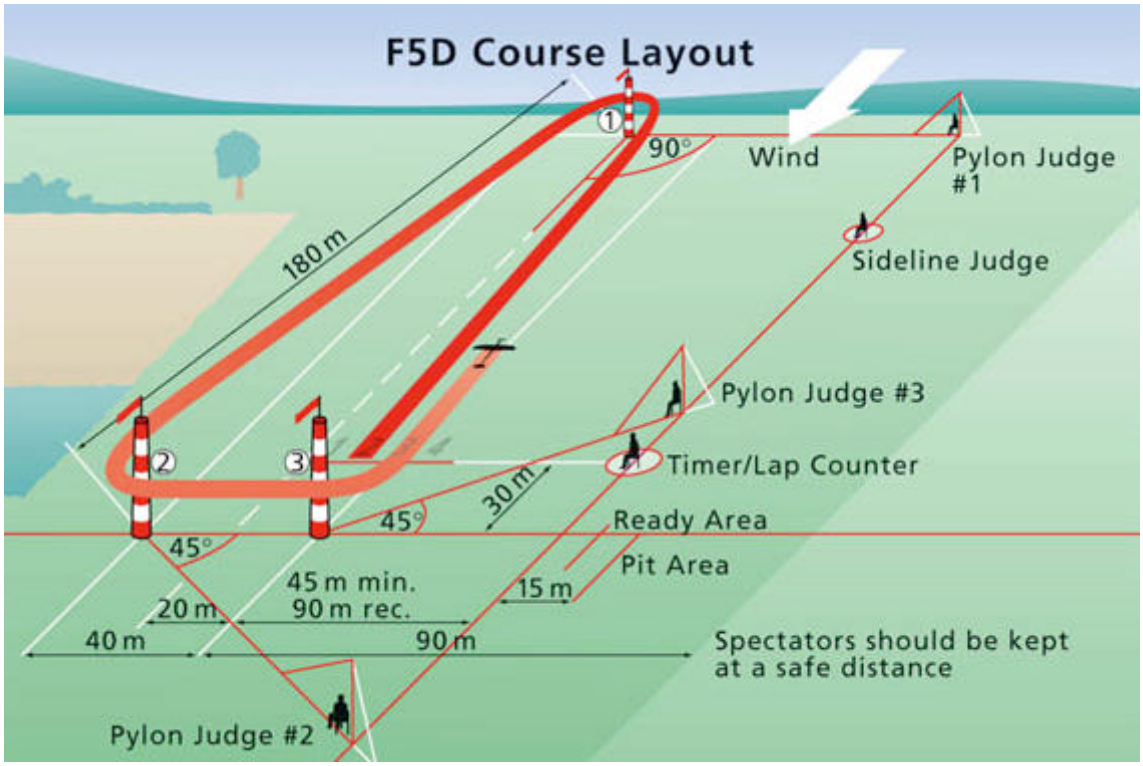
e) The contest director has the right to request any competitor to make a flight to demonstrate the airworthiness of his model aircraft and/or his ability to fly the airplane around the course. If during the race, the contest director considers any model aircraft to be flying erratically, dangerously or so low as to endanger the other competitors, callers and officials, he may disqualify the competitor from that heat or from all heats and require the model aircraft to be landed immediately. Persistent flying below the top of the pylons may be considered dangerous.

f) For transmitter and frequency control see Section 4b, Para. B.8.

Heats shall be arranged in accordance with the radio frequencies in use to permit simultaneous flights. Each competitor has to introduce two different frequencies, distant of a minimum of 20 kHz, which he must be able to use on all the model aircraft entered in the contest.

5.5.6.4 Racing Course Specification

The triangular course will be laid out as follows: the distance between pylon No. 1 and No. 2 is 180 m. The distance between pylon No.1 and No. 3 is also 180 m. The distance between pylon No. 2 and pylon No. 3 is 40 m. The start/finish line is some 30 m from No. 3 in the direction of No. 1. The course is ten (10) laps with individual length of 400 m. Total distance length is 4 km. The race starts at the start/finish line. All takeoffs will be hand launched; no mechanical device will be used. The race is terminated at the start/ finish line 10 full laps later. The pylons must have a minimum height of 4 m and maximum of 5 m.



Amended by the 2004 Plenary Meeting and unanimously approved:
<The wind direction in the drawing will be deleted>.
Effective 2005.

5.5.6.5 Helper/Caller

a) All competitors must be accompanied by only helper (caller/mechanic) for reasons of safety. The caller can be the team manager, another competitor from the same team, or a third party. The pilot or mechanic of one team may act as helper in one or more other teams.

b) He may release the model aircraft at the start and give the pilot verbal information regarding the flying course of his model aircraft and official signals.

c) In all cases the caller must be the holder of an FAI licence not necessarily issued by the NAC of the pilot and must have paid the entry fee.

5.5.6.6 Officials

a) Each competitor shall be assigned four (4) officials during each heat:

b) One official, the timekeeper/lap counter will time the competitor's aircraft for the required ten laps. In doing so, he will count the laps flown and advise the pilot by visual or audio system when he has completed the necessary ten laps. He will keep the recorded time on his timing device until he has entered the time on the score sheet.

c) At the No.1 pylon there will be one official as pylon judge and signaller for each competitor in the heat. The pylon judge/signaller will stand perpendicular to the direction of the course on the safety side of the course. Each pylon signaller will have a distinctive colour allocated, and the contest director will arrange for each model aircraft to be identified by one pylon judge - signaller before the start of every heat.

d) The pylon judge - signaller will have his flag in a ready position, or his light off as the aircraft reach midcourse between No. 3 and No. 1 pylons, or earlier. At the instant the model aircraft draws level with the No.1 pylon he will briskly lower his flag or switch his light on. There will be no pilot's helpers at any of the pylons.

e) Note: Signals may be coloured flags, lights or shutters.

f) Pylon judge No. 2 is placed behind the base of the triangle at a safe distance in a 45 degrees angel to the line between pylon 2 and 3.

g) Pylon judge No. 3 is placed at a safe distance in a 45 degrees angel to the line between pylon 2 and 3 in the direction of pylon No. 1.

h) The judges at the No. 2 and No. 3 pylons will record pylon cuts (infringement). At the end of each race the sideline and pylon Judges will inform the starter of any infringements by any competitor.

i) The starter is in charge of each heat. He will first ensure that all competitors and officials are ready to commence. Each signaller will have a flag or light of a distinctive colour. The starter will arrange for each model aircraft to be identified by one signaller before the start of any heat. A radio operation check from each competitor will be made prior to identification.

5.5.6.7 Starting procedure

a) Starting positions in all races will be determined by draw with number 1 position being closest to the number 2 pylon. Model aircraft will be flagged off the starting line at 1 second intervals with timing commencing ~~at the drop of the flag for that particular model aircraft~~ **when the model aircraft crosses the start-finish line.**
b) A maximum of one minute will be allowed after identification of all model aircraft of the heat at which point the race will commence. A competitor whose model aircraft is not ready to fly at the end of the one minute period, will be disqualified from the heat.
c) No competitor shall be permitted to launch once the first model aircraft has passed the start/finish line heading from No. 1 to No. 2 pylon on the first lap and no time shall be given him for that heat.
d) After the starting flag has dropped, any contact between two model aircraft shall be considered a collision and the model aircraft involved must land immediately. The Contest Director is required to give such competitors a second opportunity to record a score in that round, provided that in his opinion the aircraft is still airworthy or the competitor has an airworthy reserve model aircraft.
e) A penalty will be incurred if the competitor releases the model aircraft before the drop of the starter's flag, cuts a pylon or flies outside the sideline. Two infringements constitute disqualification for that flight.

5.5.6.8 Operation of the race

a) All laps are to be flown counter-clockwise with turns to the left.

b) At the completion of the ten laps, the lap counter/timekeeper must immediately instruct the competitor to remove his aircraft from the course.

c) In the event of a malfunction of the timing, lap counting, signalling or such equipment which is the responsibility of the organisers, the competitor(s) affected by such malfunction shall be given the opportunity to record a score for that round.

d) The loss of any part of the model aircraft after the drop of the flag and before the motor stops disqualifies the model aircraft for that flight except as a result of a collision when Para. 5.5.6.7, d applies.

5.5.6.9. Scoring

a) As many heats as practical will be flown but at least three.

b) The flight of each model aircraft shall be timed with electronic stopwatch or timing device measuring to at least 1/10 second by a lap counter/timekeeper. Timing shall start when ~~the starting signal is given to the individual competitor~~ **the model aircraft crosses the start-finish line.**

c) The lap counter/timekeeper stops his stopwatch or timing device after ten laps have been completed by the competitor. The elapsed time of each competitor will be transmitted, supervised by the starter, from the stopwatch or timing device into the competitor's score sheet.

d) At the completion of each heat, the pylon and side-line judges notify the starter as to which model aircraft have infringed. The starter then advises the person who is responsible for the score sheet of those who will record the total number of infringements for each competitor on the individual score sheet.

e) The score sheets are then processed by a scorer who will:

- if one infringement has incurred, add 10% of the flyer's time for ten laps to give the corrected time;
- if two or more or intentional infringements were incurred, cancel the flight;
- round the competitor's corrected time to the nearest 1/10 of a second.

f) Points shall be awarded after each race as follows:

- the competitor's score is his corrected time in seconds to the first decimal place;
- if a competitor fails to complete his flight or is disqualified the score shall be 300.

g) The winner of the event is the competitor who has accumulated the lowest score after the conclusion of all heats. If four or more rounds are flown, each competitor's worst score shall be discarded. If nine or more rounds are flown, each competitor's worst two scores shall be discarded.

h) If time permits, and there is no frequency conflict, ties for first, second and third place shall be resolved by a fly-off race. If not, the places are shared.