

## Rules for F1D

### International Indoor Fly In

Version: 2017



**Nijmegen, Netherlands**

## 3.4. CLASS F1D – FF INDOOR AIRCRAFT

### 3.4.1. Definition

Model aircraft which can only be flown in an enclosed space and which are powered by extensible motors and in which lift is generated by aerodynamic forces acting on surfaces remaining fixed in flight, except for changes of camber or incidence.

### 3.4.2. Characteristics of Indoor Model Aircraft F1D

Maximum wingspan of the monoplane model.....550 mm,  
Maximum chord of the lifting surfaces .....200 mm  
Maximum tail span .....450 mm,  
Minimum weight without rubber motor .....1.4 g,  
Maximum weight of the lubricated rubber motor .....0.4 g.  
The competitor must be the builder of the models entered.

### 3.4.3. Number of Flights

The competitor shall be allowed 6 flights of which the best 2 flights will be taken for classification. If the organisers specify rounds for the competition then the competitor is entitled to one official flight in each round. The duration of rounds must be announced in advance.

### 3.4.4. Definition of an Official Flight

Only flights of 60 seconds or more will be considered as official. A flight may be terminated by any physical means within the first 60 seconds. A flight of less than 60 seconds duration will be considered an attempt and there will be one attempt flight allowed for each of the six official flights; the attempts will not be accumulative.

### 3.4.5. Number of Model

There is no limit to the number of model that a competitor may use at an indoor contest.

### 3.4.6. Collision Rule

In the event of a collision between two models in flight, each competitor must choose, in the time span between the collision and two minutes following the termination of his flight, either to retain the time of flight as an official time, or to have a reflight. A competitor has the right to a reflight even if the round time has expired when the collision occurs. The reflight must be flown before his next official flight. In the case of the last round of the competition, when there are no more official flights, the launch of a reflight should take place within one hour of the end of the round.

### 3.4.7. Steering

a) A balloon(s) with its line attached, or a rod, may be used to alter the course of the model, or to reposition it in another part of the flying space. There will be no time limit or restriction to the number of steering attempts, except that all steering shall be done from the front end of the model and never from behind.

b) Steering must only be used to avert collision with the structure of the building, its contents or other models. Movements of the model must be primarily in a horizontal plane

**Note:** If, in a timekeeper's opinion, a model's altitude change is approaching one half metre, or one metre for each 25 m of altitude (whichever is larger) he will warn the competitor. Continued disregard of the timekeeper's warning will result in a terminated flight.

c) During steering the propeller may get caught by the line/balloon(s)/rod and stop revolving. As soon as the propeller stops, a third watch should be used (preferably a double button watch, that records accumulative time) to determine the total of propeller stopped time, which is deducted from the running total time shown on the other two watches. If the steerer cannot disengage the propeller after steering, all three watches are to be stopped together, and the total prop-stopped time deducted as is detailed above.

d) No reflight is allowed other than if fouled by another model during steering.

e) The decision to steer is the responsibility of the competitor and must be done by him. A physically handicapped competitor must arrange for a substitute with the contest officials. In the case of poor sight, a medical doctor's affidavit certifying that the competitor's vision is inadequate can be submitted under the following conditions:

i) The better eye's vision is no less than 6/12 (metres). or

ii) The results of a binocular vision test show that the competitor's binocular vision is either medium or non-existent. Submission of this affidavit to the contest organiser or event director will permit the competitor to appoint a substitute steerer.

f) It is the timekeeper's responsibility to observe the use of the steering equipment, and to warn the competitor if he is likely to endanger other models. If other models are fouled by the steerer, the fouled competitor has the choice of a reflight, which, if taken, is his score for that round. He must exercise his choice to the timekeepers no later than two minutes after termination of his flight. If he chooses to restart, he must do so before his next official flight.

### 3.4.8. Classification

The total of two best flights of each competitor shall be taken for final classification. In the case of a tie the third best flight decides and so on in the case of a further tie.

### 3.4.9. Timing of Flights

The flights must be timed by two timekeepers with electronic stopwatches with digital readout recording at least 1/100 of a second.

From F1.2, only F1.2.1, F1.2.2, and F1.2.6. apply to class F1D.

The timing of each flight shall commence when the model is released. Timing will terminate when:

- a) the model touches the floor of the building.
- b) jettisoning occurs.
- c) the model comes into contact with any part of the building or its contents other than the floor and translational movement ceases.

**Note:** In this case, the timekeepers shall continue to time for ten seconds after translational movement has ceased. Should the model remain in contact with the building or its contents after 10 seconds, timing will cease and the 10 seconds will be subtracted from the flight time. Should the model release itself from contact with the building in less than 10 seconds, timing will continue normally.

#### **3.4.10. Number of Helpers**

The competitor is entitled to have one helper.

#### **3.4.11. Launching**

- a) Launching is by hand, the competitor standing on the ground.
- b) Winding of rubber motors must be done by the competitor himself.

#### **3.4.12. Ceiling Height Categories**

The following ceiling height categories are recognised for contests and records:

- I. - less than 8 metres.
- II. - between 8 and 15 metres.
- III. - between 15 and 30 metres.
- IV. - higher than 30 metres.

The height of the ceiling is defined as the vertical distance from the floor to the highest point at which a circle of 15 metres diameter can be inscribed, below the primary structure of the building.