

## **6.12. CLASS F4K - RADIO CONTROLLED FLYING SCALE MODEL HELICOPTERS**

### **6.12.1. General Characteristics**

This is a rotary wings motorized scale model class.

The requirement for the competitor to have constructed his own model in F4L (rule 6.1.9.4.e) only apply to the fuselage and the main and tail rotors, not to the mechanical but he must do the ensamble of all mechanical items in the model. All the other static evaluation like 6.1.9, 6.1.10 and 6.1.11. Maximum weight of the complete model aircraft with fuel in flying condition including any dummy pilot: 23 kg (≈230 Newton)

Model aircraft using electric motors as a power source shall be weighed without batteries used for those motors.

The Scale Model weight must be take in the helipad just before the take off

Note: For all other scale model aircraft specifications see Volume ABR, Section 4C, Part One, paragraph 1.2. General Characteristics of Model Aircraft.

### **6.12.2. Noise**

As 6.3.2

### **6.12.3. Documentation:**

As 6.1.9

### **6.12.4. Official Flights**

a) Each competitor will be called to fly three rounds, and must execute an official flight within the required time limit on each occasion to be eligible for flight points for that flight.

In the case of two flightlines (see 6.1.4) each competitor will fly four rounds, two in front of each panel of judges and two on each flight line and the lower score from each panel will be deleted.

b) If a competitor is unable to start or complete a flight and, in the opinion of the Contest/Flightline Director, the cause is outside the control of the competitor, the Contest/Flightline Director may, at his discretion, award the competitor a reflight. The Contest Director shall decide when the reflight shall take place.

c) An official flight commences at the earliest of the following:

i) The competitor signals to the timekeeper that he is commencing to start his engine(s).

ii) Three minutes after the competitor is instructed to start his flight.

iii) An official flight is terminated when the model aircraft lands and stops,

### **6.12.5 Flying Time**

a) A competitor will be advised that he will be required to start his flight not less than 5 minutes before the instruction to start.

b) The competitor will then be instructed to start his flight.

c) Timing of the flight will commence when the official flight commences (see 6.3.3.c.).

d) The competitor will be allowed 10 minutes to complete his flight.

f) No points will be awarded for any manoeuvre that is not completed at the end of the time allowed.

### **6.12.6. Starting Time**

a) If the model aircraft is not airborne within 5 minutes, after the official flight and timing commence, the official flight will end and no points will be awarded for the flight.

b) If the engine(s) stops after the take-off has commenced, but before the model aircraft start the secon manoeuvre ( the firs one is the take-off), the engine(s) may be restarted.

There is only one attempt allowed to repeat the whole procedure. In the case of a repeated attempt, no points will be assigned for the interrupted manoeuvre.

Note: In this case rule 6.12.5(a) still applies

### 6.12.7. Flight

6.3.6.1. Take-off .....	K =14
6.3.6.2. Option 1 .....	K =10
6.3.6.3. Option 2 .....	K =10
6.3.6.4. Option 3 .....	K =10
6.3.6.5. Option 4 .....	K =10
6.3.6.6. Option 5 .....	K =10
6.3.6.10. Approach and Landing .....	K =14
6.3.6.11. Realism in flight	
a) Engine sound (realistic tone & tuning) .....	K =4
b) Speed of the model aircraft .....	K =9
c) Smoothness of flight.....	K =9
Total K Factor .....	K =100

Notes: The flight schedule must include the two manoeuvres 10 (ten) second hover with clearing turns ( take off) and 45° climb out to a minimum of 8 (eight) meters, to be accepted as complete.

The scale of the model aircraft and the cruising or maximum speed of the prototype must be stated on the example Flight Score Sheet (Annex 6E.2.)

Only one attempt is permitted for each manoeuvre, the only exception is the procedure of getting a model aircraft airborne, as defined in 6.3.5.b.

### 6.12.10. Optional Demonstrations

The two manoeuvres, 10(ten) second hover clearing turns ( take off) and 45° climb out at a minimum of 8 meters eight are mandatory manoeuvres to be included in each flight and positioned in the flight schedule at the competitor's discretion

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

Selection must be indicated on the score sheet and given to judges before commencing the flight. The options may be flown in any order.

The order in which all manoeuvres are to be flown must be marked on the score sheet and any manoeuvre flown out of order will be marked zero.

A Chandelle.....	K = 7
B Flight in a straight line at constant height.....	K = 7
C Figure Eight.....	K = 7
D Side flight to left or right .....	K = 7
E Flight in triangular circuit.....	K = 7
F Flight in rectangular circuit .....	K = 7
G 180° Descending turn.....	K = 7
H 360 °Descending circle.....	K = 7
I Lazy Eight .....	K = 7
J 90 ° Procedure to the right and 180 ° Circle.....	K = 7
K One loop .....	K = 7
L Inverted flight.....	K = 7
M Figure Backward.....	K=7

### 6.12.11. Marking (flight points)

As 6.3.9.

### 6.12.12. Flight Score

As 6.3.10

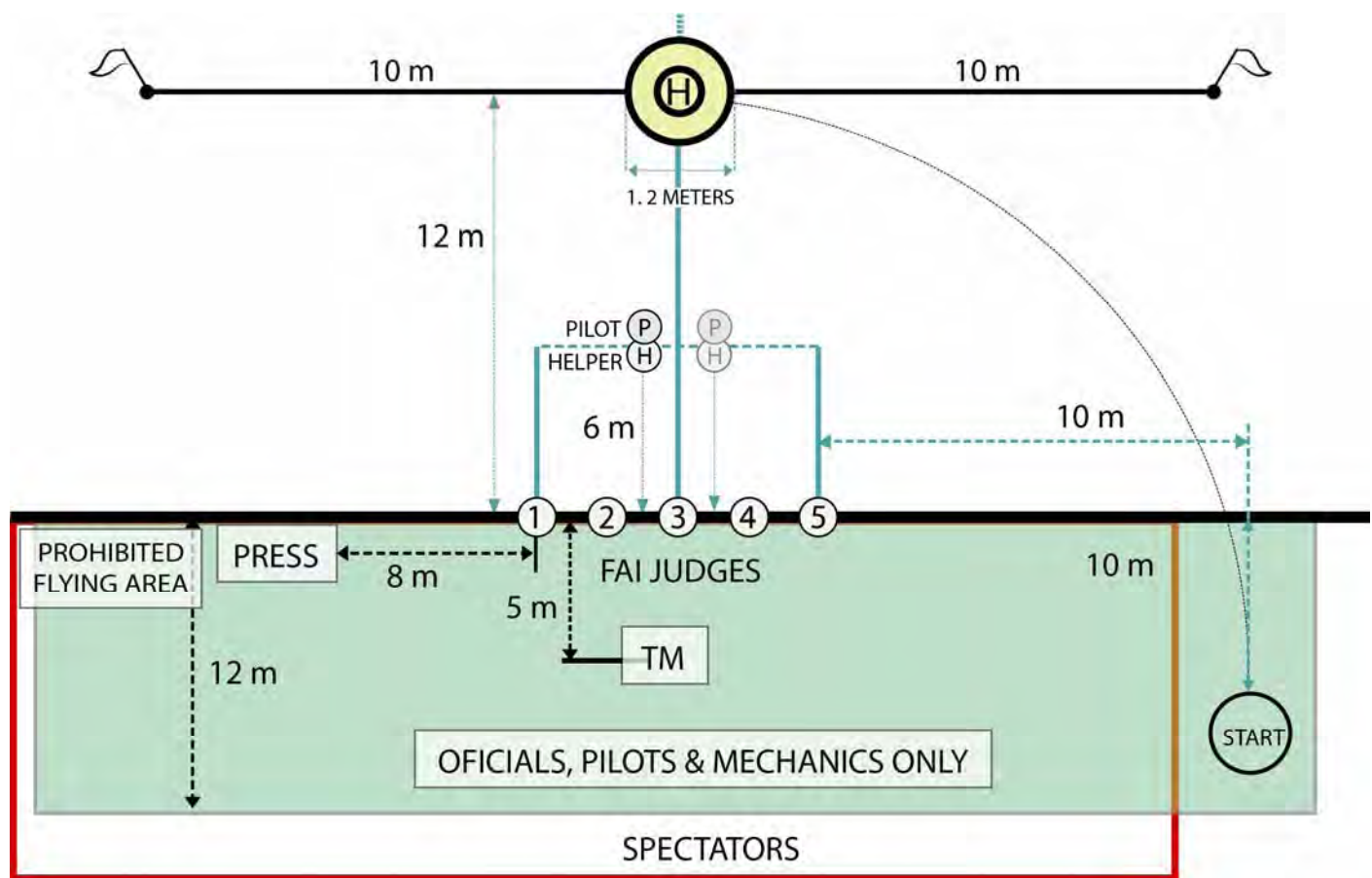
### 6.12.13. Final Scoring:

As 6.3.11

### 6.12.14. Safety:

- 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.
- 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 Chief Judge or Flightline Director unsafe, or being flown in an unsafe manner, he may instruct the pilot to land.

## F4K CONTEST AREA LAYOUT



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