## FAI Sporting Code

## Section 4 - Aeromodelling

# Volume F5 <br> Radio Control Electric Powered Model Aircraft 

## Annexes 5A - 5E

2010 Edition
Effective 1st January 2010
No change to 2009 Edition

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#### Abstract

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## ANNEX 5A (Refers to rule 5.5.3.5)

F5A Manoeuvre drawings

| No. | Basic Manoeuvre | Option 1 | Option 2 | Option 3 |
| :--- | :--- | :--- | :--- | :--- |

3

| 6 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 7 |  |  |  |  |
| 7a |  |  |  |  |
| 8 |  |  |  |  |
| 9 |  |  |  |  |
| 10 |  |  |  |  |
| 11 |  |  |  |  |



## ANNEX 5 B (Refers to rule 5.5.5.13)

## F5C Manoeuvre drawings

## 5F. 3 Pictures of manoeuvres

## 11: Hovering



12: Lateral hovering


13: Tail-in Circle


14: Hovering $M$


## 15: Vertical Triangle



16: Circles


## 17: Pirouette



## 18: 4-Point Pirouette



19: Nose-in circle


- 15 -

( ${ }_{2}^{2}$ 2


## 22: Horizontal circle



## 23: Looping


( ${ }^{2} 21$

- 16 -


## 24: Landing with 180 Degree Turn



25: Pushover


## 26: Split-S


(P2i)

27: Autorotation


28: Roll


29: Autorotation with 180 Degree Turn


- 18 -


## ANNEX 5 C (Refers to rule 5.5.5.15)

## F5C MANOEUVRE DESCRIPTIONS

## 5 B. 1 GENERAL

The following descriptions apply to all manoeuvres. If they are not executed as described, the score must be downgraded. If a manoeuvre is unrecognisable the score shall be zero (0) points. The hovering manoeuvres must be started with the nose of the model aircraft facing left or right and must be flown as a unit (the starting heading must be the same for each hovering manoeuvre). The competitor must stand in the 1,5 metre diameter circle assigned to the manoeuvre and stay there until the manoeuvre is finished. If the competitor does stand somewhere else than in the circle assigned to the manoeuvre he is executing, the score is downgraded by two (2) points for this manoeuvre. If a competitor quits his place during a manoeuvre (that is, follows the model aircraft) the score of the corresponding manoeuvre is divided by two (2). The competitor may change his position and switch engine power off while moving between every manoeuvre without being downgraded. The flight time clock is not stopped during the repositioning of the pilot.

One (1) point shall be deducted from the maximum score of ten (10) for each of the following criteria if not true:

General criteria for hovering manoeuvres:

- Ascents from and descends to, the central helipad must be vertical and continuous.
- Landings must be smooth and centred on the helipad.
- During all aerobatic manoeuvres the competitor must maintain his model aircraft above a minimum altitude of 10 metres.
- Aerobatic manoeuvres must be centred within the 120 degree horizontal field of view.
- Aerobatic manoeuvres must be executed in parallel to the judges' lines.
- Aerobatic manoeuvres flown at a distance greater than 100 metres from the judges' line will be downgraded.
The F3C Judges' Guide provided in Annex 5E is applied for Class F5C as well.


## 5 B. 2 Description of manoeuvres

In case of a dispute the following text takes precedence over the pictorial form of the figures in 5F.3. The scoring of the manoeuvres is based on the description below. To reach the maximum score, the pilot must fulfil the general criteria in 5 F .1 for each manoeuvre as well.

## 11: Hovering, 10 Seconds, $K=1$

Position of pilot: Point P1. Model aircraft takes off from central helipad, climbs vertically to eye level and stops. Model aircraft hovers for ten seconds and then descends to a smooth landing on the central helipad.

Points will be subtracted for the following reasons:

1) The model aircraft hovers for less than 10 seconds.
2) The model aircraft quits its position while hovering.
3). Tail does not stand still or not point at the competitor.

## 12: Lateral hovering, $\mathrm{K}=2$

Position of pilot: Point P1. Model aircraft takes off from the central helipad, climbs vertically to eye level and stops. It then hovers laterally 5 metres until it reaches the line of the $10 \times 10$ metres square being nearest the judges. There it stops and hovers for 2 seconds. The model aircraft then hovers laterally until it is above the central helipad where it stops and hovers for 2 seconds. It will then descend and land smoothly on the central helipad.

Points will be subtracted for the following reasons:

1) Model aircraft is not always parallel to the judges' line.
2) Stop is not positioned exactly above the line of the $10 \times 10$ metre square.

## 13: Tail-in Circle, K = 3

Position of pilot: Point P1. Model aircraft takes off from central helipad, climbs vertically and stops. Then it begins hovering to the left or to the right, performing a circle with a radius of 5 m . When it reaches the central helipad, the model aircraft stops before descending and landing smoothly on the central helipad.

Points will be subtracted for the following reasons:

1) The tail of the model aircraft does not always point to the pilot.
2) The radius of the circle is not constant.
3) Speed and/or height is not constant while performing the circle.

## 14: Hovering M, K = 3

Position of pilot: Point P1. Model aircraft takes off from central helipad, climbs vertically to eye level and stops. Then it begins hovering to flag 4 (or 3) where it stops. The model aircraft then hovers forward following the line of the $10 \times 10$ metre square until it reaches flag 1 (or 2) and stops. It hovers laterally to flag 2 (or 1) and stops, before hovering backward to flag 3 (or 4) and stopping. The model aircraft then hovers to the central helipad where it stops before descending and landing smoothly on the central helipad.

Points will be subtracted for the following reasons:

1) The model aircraft is not parallel to the judges' line during the whole manoeuvre.
2) The stops are not performed exactly over the flags.
3) Hovering speed and/or height is not constant during the manoeuvre.

## 15: Vertical Triangle, $\mathrm{K}=4$

Position of pilot: Point P2. The model aircraft takes off from the central helipad and climbs vertically to eye level and stops. Model aircraft then flies backwards from the central helipad to the line of the $10 \times 10$ metres square and stops. Model aircraft then climbs forward at 45 degrees to an altitude 5 m above eye level directly over the central helipad and stops. Model aircraft then descends forward at 45 degrees to eye level directly over the opposite line of the $10 \times 10$ metres square and stops. Model aircraft then flies backwards to central helipad, stops and descends to a smooth landing on the central helipad.

Points will be subtracted for the following reasons:

1) Ascent and/or descent was not at 45 degrees.
2) The model aircraft did not maintain lateral position during the manoeuvre.
3) The stops are not exactly above the lines of the $10 \times 10$ Metres square or above the central helipad.
4) The model aircraft was not parallel to the judges' line during the manoeuvre.

16: Circles. $K=4$
Position of pilot: Point P2. The model aircraft takes off from the central helipad, constantly ascending while describing a 180 degree circle with a diameter of 5 metres. When it reaches the middle of a line between flags 2 and 3 , it is at a height of 5 metres. The model aircraft now starts a 360 degree circle with a diameter of maximum 10 metres, staying at 5 metres height. When this circle is completed, a 180 degree circle with radius 5 metres is performed while descending to the central helipad where it lands smoothly.

Points will be subtracted for the following reasons:

1) Model aircraft does not ascend or descend constantly while performing the 180 degree circles.
2) Model aircraft is too fast (this is a hovering manoeuvre).
3) Nose does not always point into flight direction.
4) Radius of 360 degree circle is more than 10 metres.

## 17: $\quad$ Pirouette, $\mathrm{K}=4$

Position of pilot: Point: P1. The model aircraft's tail must point to the pilot's position. Model aircraft takes off from the central helipad, climbs vertically to eye level and stops. It then performs a pirouette that lasts at least 5 seconds. The model aircraft then stops before descending and landing smoothly on the central helipad.

Points will be subtracted for the following reasons:

1) The model aircraft does not keep its position directly over the central helipad while performing the pirouette.
2) The pirouette is terminated in less than 5 seconds.
3) The pirouette is not performed at a constant speed and/or height.

## 18: 4-Point Pirouette, K = 5

Position of pilot: Point P1. The model aircraft's nose must point to the pilot's position. Model aircraft takes off from the central helipad, climbs vertically to eye level and stops. It then performs a 4-point pirouette, stopping for two seconds after each 90 degrees. When pointing with the nose to the pilot again, it stops before descending and landing smoothly on the central helipad.

Points will be subtracted for the following reasons:

1) The model aircraft does not keep its position directly over the central helipad.
2) The pirouette is not interrupted for at least two seconds after each 90 degrees.
3) The pirouette is not performed at a constant speed and/or height.

19: Nose-in circle, $K=6$
Position of pilot: Point P3. The model aircraft nose must point to the pilot's position. Model aircraft takes off from the central helipad, climbs vertically to eye level and stops. Then it begins hovering to the left or right, performing a nose-in circle with a radius of 5 m . When it reaches the central helipad, the model aircraft stops before descending and landing smoothly on the central helipad.
Points will be subtracted for the following reasons:

1) The nose of the model aircraft does not always point to the pilot.
2) The radius of the circle is not constant.
3) Speed and/or height are not constant while performing the circle.

## 21: Horizontal flight, $K=1$

Position of pilot: Point P2. The model aircraft flies straight and level in at least 10 metres above ground for a minimum of 5 seconds with a speed requiring less collective pitch than hovering would.

Points will be subtracted for the following reasons:

1) Model aircraft does not fly a constant parallel line to the judges.
2) Height of model aircraft is not constant and/or less than 10 metres.
3) Speed of model aircraft is not constant and/or too slow.

22: Horizontal circle, Radius $\mathbf{2 5} \mathbf{~ m , ~ K = 2}$
Position of pilot: Point P2. The model aircraft flies straight and level for at least 10 metres with a speed requiring less collective pitch than hovering would. It then performs a horizontal circle with a radius of 25 metres.

Points will be subtracted for the following reasons:

1) Height of the model aircraft is not constant and/or less than 10 metres.
2) Speed of the model aircraft is not constant and/or too slow.
3) Circle is not round.

23: Looping, $\mathrm{K}=3$
Position of pilot: Point P2. Model aircraft flies straight and level for a minimum of 10 metres. It then climbs for a loop while maintaining direction of flight. The model aircraft ends the loop and flies straight and level again for about ten metres on the same heading and altitude as at the start of the manoeuvre.

Points will be subtracted for the following reasons:

1) Loop is not round.
2) The finish of the loop ends on a different altitude or heading than the start.
3) Speed is not constant during the loop.
4) The model aircraft drifted toward or away from the judges.

## 24: Landing with 180 Degree Turn, $\mathrm{K}=3$

Position of pilot: Point P2. Model aircraft flies at an altitude of no less than 20 meters. Manoeuvre begins when the model aircraft, crosses an imaginary plane that extends vertically upward from a line drawn from the centre judge out through the central helipad. The model aircraft must be descending at this point and the 180 degree turn must start. The turning and descending rate must be constant from this point to a point just before touchdown on the helipad. The flight path of the model aircraft must appear as a semicircle of any radius when viewed from above, starting at the vertical plane and ending at a line drawn from the centre judge through the central helipad. The scoring criteria are the same as for figure 29 (Autorotation with 180 degree turn).

Points will be subtracted for the following reasons:

1) Model aircraft made a hard landing.
2) Model aircraft landed while it still had forward speed.
3) Model aircraft did not perform an exact 180 degree turn
4) Model aircraft did not maintain a constant rate of descent during the 180 degree turn.
5) Model aircraft did not maintain a constant turning rate during the 180 degree turn.
6) The flight path was stretched visibly to reach the helipad or the square (2 points deduction).
7) Model aircraft hovers more than briefly prior to landing.

25: Pushover, $\mathrm{K}=4$
Position of pilot: Point P2. Model aircraft flies straight and level for a minimum of 10 metres, and then climbs vertically with a smooth 90 degree curve. When it comes to a stop a push over to hovering position should be made. After a brief hover, the model aircraft performs a new pushover to a vertical descent followed by a smooth 90 degree curve and a 10 metres straight flight at the same altitude as the start.

Points will be subtracted for the following reasons:

1) Climb and descent are not vertical.
2) The model aircraft does not hover on top of the manoeuvre.
3) Entry and exit of the manoeuvre are not at the same level.
4) The manoeuvre is not positioned at the middle of the line of the $10 \times 10$ metres square.

## 26: Split-S, K = 4

Position of pilot: Point P2. Model aircraft flies straight and level for a maximum of 10 metres, executes a half roll to the inverted position while maintaining the nose in the direction of flight. After a short straight flight segment, it performs a half inside loop and flies straight and level for a minimum of 10 metres.

Points will be subtracted for the following reasons:

1) No straight segment after half roll.
2) Exit heading is not opposite of entry heading.
3) Half loop did not start at the midline of the $10 \times 10$ metres square.

## 27: Autorotation, $\mathrm{K}=4$

Position of pilot: Point P2. The model aircraft flies at an altitude of no less than 20 metres and on a heading parallel to the flight line. The engine is powered off and the model aircraft performs an autorotation with a smooth constant rate of descent directly to the central helipad. The manoeuvre must be entered from forward flight. The descent path and the orientation of the model aircraft must be parallel to the flight line (including landing and the final stopped position). The scoring criteria are the same as for Figure 29 (Autorotation with 180 degree turn).

Points will be subtracted for the following reasons:

1) Model aircraft made a hard landing.
2) Model aircraft landed while it still had forward speed.
3) Flight path was stretched visibly to reach helipad or square (2 points deduction).
4) Model aircraft hovers more than briefly prior to landing.
5) Engine was still running during manoeuvre (zero score).

## 28: Roll, $\mathrm{K}=5$

Position of pilot: Point P2. Model aircraft flies straight and level for a minimum of 10 metres. Model aircraft executes a roll in either direction around an axis which coincides with the line of flight.
Points will be subtracted for the following reasons:

1) Model aircraft drifted toward or away from the judges.
2) Roll and/or flight speed is not constant.
3) The model aircraft loses altitude during the roll.
4) Inverted position during the roll is not centred in front of the judges.

## 29: Autorotation with 180 Degree Turn, K = 6

Model aircraft flies at a minimum altitude of 50 metres. Manoeuvre begins when the model aircraft crosses an imaginary plane that extends vertically upward from a line drawn from the centre judge out through the central helipad. Model aircraft must be in the autorotative state when it cuts this plane; the engine must be off at this point and the model aircraft must be descending. The 180 degree turn must be started at this point and the turning and descending rate must be constant from this point to a point just before touchdown on the helipad. The flight path of the model aircraft must appear as a semicircle of any radius when viewed from above, starting at the vertical plane and ending at a line drawn from the centre judge through the central helipad.

## Scoring criteria:

The maximum score of 10 points can be achieved only when the model aircraft makes a smooth touchdown on the central helipad with the skids or landing gear completely inside the $1,5 \mathrm{~m}$ circle and parallel to the judges' line. A maximum score of 9 points can be obtained with a perfect landing inside the $1,5 \mathrm{~m}$ circle but with part of the landing gear touching the circle (rotor shaft must point to inside of the circle when viewed from above). If the model aircraft makes a perfect landing inside the 10 m square, the manoeuvre can achieve a maximum score of 8 points. If a model aircraft makes a perfect landing outside the 10 m square, a maximum score of 5 points can be awarded. If the flight path is stretched (flying parallel to the ground and/or the judges' line) to reach the square, line or helipad, the manoeuvre will be downgraded by two points.
Points will be subtracted for the following reasons:

1) Model aircraft made a hard landing.
2) Model aircraft landed while it still had forward speed.
3) Model aircraft did not perform an exact 180 degree turn.
4) Model aircraft did not maintain a constant rate of descent during the 180 degree turn.
5) Model aircraft did not maintain a constant turning rate during the 180 degree turn.
6) Flight path was stretched visibly to reach helipad or square (2 points deduction).
7) Model aircraft hovers more than briefly prior to landing.
8) Motor was still running during the manoeuvre

## ANNEX 5D (Refers to rule 5.5.5.16)

## F5C JUDGES' GUIDE

General rules for the F5C elemental manoeuvres
At the beginning of each flight, when the pilot or his helper has prepared the model aircraft on the central helipad, the judges are informed of the manoeuvre numbers and names in the order the pilot plans to fly them. The order announced at the beginning of the flight is determined by the pilot respecting the following rules:

1. All hovering manoeuvres must be in one sequence.
2. All aerobatics manoeuvres must be in another sequence.
3. The order of the two sequences is determined by the pilot.
4. Once the order of the manoeuvres is announced to the judges and the flight has started, it may not be changed.
5. The pilot may select different manoeuvres for every round.

For any of the manoeuvres, the competitor must stand in the 1.5 meter circle (labelled P1-P3 in Figure 5.4.A - F5C Contest Area Layout) assigned to the corresponding manoeuvre (see description of manoeuvres in annex 5F). The pilot may choose to stand somewhere else (2 (two) points downgrade) and he may also follow the model aircraft (score divided by 2 (two)).

## SCORING HOVERING MANOEUVRES

11. Hovering, 10 Seconds $(K=1)$

| $\#$ | Element | Max. Score |
| :--- | :--- | :--- |
| 1 | Lift off to eye level | 2 |
| 2 | Model aircraft does not hover 10 seconds over pad | 2 |
| 3 | Model aircraft does quit the position while hovering | 2 |
| 4 | Descend to pad | 2 |
| 5 | Overall impression | 2 |

12: Lateral hovering ( $\mathrm{K}=2$ )

| $\#$ | Element | Max. Score |
| :--- | :--- | :--- |
| 1 | Lift off to eye level, 2 seconds stop over pad | 2 |
| 2 | Laterally hover to the line of the $10 \times 10 \mathrm{~m}$ square (near the <br> judges) | 2 |
| 3 | 2 seconds hover over line, laterally hover to the pad | 2 |
| 4 | 2 seconds hover over pad, descend to pad | 2 |
| 5 | Overall impression | 2 |

13: Tail-in circle ( $\mathrm{K}=3$ )

| $\#$ | Element | Max. Score |
| :--- | :--- | :--- |
| 1 | Lift off to eye level, 2 seconds stop over pad | 2 |
| 2 | Performing the circle with 5m radius | 2 |
| 3 | The model aircraft's tail does not always point to the pilot | 1.5 |
| 4 | Model aircraft speed and/or height is not constant while <br> performing the circle | 1.5 |
| 5 | 2 seconds stop over pad, descend to pad | 2 |
| 6 | Overall impression | 1 |

14: Hovering $M(K=3)$

| $\#$ | Element | Max. Score |
| :--- | :--- | :--- |
| 1 | Lift off to eye level, 2 seconds hover over pad | 1 |
| 2 | Hover to the flag 4 (or 3), 2 seconds stop | 1 |
| 3 | Hover to flag 1, 2, 3 (or 4), 2 seconds stop at each flag | 3 |
| 4 | 2 seconds stop over pad, descend to pad | 1 |
| 5 | Hovering speed and height is not constant | 1 |
| 6 | Model aircraft is not parallel to the judge's line during the whole <br> manoeuvre | 1 |
| 7 | Overall impression | 2 |

15: Vertical Triangle ( $\mathrm{K}=4$ )

| $\#$ | Element | Max. Score |
| :--- | :--- | :--- |
| 1 | Lift off to eye level, 2 seconds hover over pad | 2 |
| 2 | Backward hover, 2 seconds stop over P1 | 1 |
| 3 | 45 Degree ascend, 2 seconds hover over pad | 1.5 |
| 4 | 45 degree descend, 2 seconds hover over P2 | 1.5 |
| 5 | Backward hover, 2 seconds hover over pad | 1 |
| 6 | Descend to pad | 1 |
| 7 | Overall impression | 2 |

16: Circles ( $K=4$ )

| $\#$ | Element | Max. Score |
| :--- | :--- | :--- |
| 1 | Ascend with 180 degree circle to eye level over flag 2 | 2 |
| 2 | 360 degree circle over flag 3, centre pad and flag 2 | 2 |
| 3 | Descend with 180 degree circle to the centre pad | 2 |
| 4 | Ascend and descend is not constant during 180 degree circle | 1.5 |
| 5 | Speed during 360 circle is not slow and constant | 1.5 |
| 6 | Overall impression | 1 |

17: Pirouette (K=4)

| $\#$ | Element | Max. Score |
| :--- | :--- | :--- |
| 1 | Lift off to eye level, 2 seconds hover over pad | 1.5 |
| 2 | 360 degree pirouette | 1 |
| 3 | 2 seconds hover over pad and descend to pad | 1.5 |
| 4 | Pirouette is terminated in less than 5 seconds | 2 |
| 5 | Pirouette is not performed in a constant speed and/or height | 1.5 |
| 6 | Model aircraft is moving around during the pirouette | 1.5 |
| 7 | Overall impression | 1 |

18: 4-Point Pirouette (K=5)

| $\#$ | Element | Max. Score |
| :--- | :--- | :--- |
| 1 | Lift off to eye level, 2 second hover over pad | 1.5 |
| 2 | $4 \times 90$ degree pirouette with 2 second stop | 3 |
| 3 | 2 second hover over pad and descend to pad | 1.5 |
| 4 | Model aircraft does not keep it's position over pad | 1 |
| 5 | Pirouettes are not performed in a constant speed and/or height | 1 |
| 6 | Model aircraft is moving around during the whole manoeuvre | 1 |
|  | Overall impression | 1 |

19: Nose-in circle (K=6)

| $\#$ | Element | Max. Score |
| :--- | :--- | :--- |
| 1 | Lift off to eye level, 2 seconds hover over pad | 2 |
| 2 | Performing the nose-in circle | 2 |
| 3 | Model aircraft's nose does not always point to the pilot | 1.5 |
| 4 | Model aircraft's speed and/or height is not constant while <br> performing the circle | 1.5 |


| 5 | 2 seconds hover over pad and descend to pad | 2 |
| :--- | :--- | :--- |
| 6 | Overall impression | 1 |

21: Horizontal flight ( $\mathrm{K}=1$ )

| $\#$ | Element | Max. Score |
| :--- | :--- | :--- |
| 1 | Model aircraft does not fly a constant, parallel line to the judges | 3 |
| 2 | Height of the model aircraft is not constant or less than 10 m | 3 |
| 3 | Speed of the model aircraft is not constant and/or too slow | 1 |
| 4 | Straight flight is less than 5 s | 1 |
| 5 | Overall impression | 2 |

22: Horizontal circle, radius $20 \mathrm{~m}(\mathrm{~K}=2)$

| $\#$ | Element | Max. Score |
| :--- | :--- | :--- |
| 1 | 10 meter level entry | 1 |
| 2 | Circle with 20m diameter | 3 |
| 3 | 10 m level exit | 1 |
| 4 | Height of the mode is not constant and less than 10m | 1 |
| 5 | Speed of the model aircraft is not constant or too slow | 1 |
| 6 | Position of the performed circle is not on the centreline of the 10 <br> $\times 10 \mathrm{~m}$ helipad | 1 |
| 7 | Overall impression | 2 |

23: Looping ( $\mathrm{K}=3$ )

| $\#$ | Element | Max. Score |
| :--- | :--- | :--- |
| 1 | 10 meter level entry | 1 |
| 2 | Loop | 2 |
| 3 | 10 m level exit | 1 |
| 4 | The loop ends at a different point than it started | 1.5 |
| 5 | Speed is not constant during loop | 1 |
| 6 | Model aircraft drifted toward or away from the judges | 1.5 |
| 7 | Overall impression | 2 |

24: Landing with 180 degree turn $(\mathrm{K}=3)$

| $\#$ | Element | Max. Score |
| :---: | :--- | :--- |
| 1 | 180 degree descend to the centre pad | 3 |
| 2 | Landing $^{*}$ | 5 |
| 3 | Overall impression** $^{*}$ | 2 |

* Includes:

Maximum score $=5 \ldots$. landing inside 1.5 meter circle
Maximum score $=4 \ldots$. landing with skids/landing gear touching inside circle
Maximum score $=3 \ldots$. landing inside $10 \times 10 \mathrm{~m}$ square
Maximum score $=0 \ldots$. landing outside $10 \times 10 \mathrm{~m}$ square
** Includes:
Constant rate of descent, constant turning rate

25: Pushover ( $\mathrm{K}=4$ )

| $\#$ | Element | Max. Score |
| :--- | :--- | :--- |
| 1 | 10 meter level entry | 1 |
| 2 | Vertical climb | 1.5 |
| 3 | Stall/pushover/2 second stop | 3 |
| 4 | Vertical dive | 1.6 |
| 5 | 10 meter level exit | 1 |
| 6 | Overall impression | 2 |

26: Split-S $(K=4)$

| $\#$ | Element | Max. Score |
| :---: | :--- | :--- |
| 1 | 10 meter level entry | 1 |
| 2 | Half roll | 1 |
| 3 | Recognisable inverted flight | 2 |
| 4 | Inside half loop | 2 |
| 5 | 10 meter level exit | 1 |
| 6 | Half loop did not start at the midline of the $10 \times 10 \mathrm{~m}$ square | 1 |
| 7 | Overall impression | 2 |

27: Autorotation ( $\mathrm{K}=4$ )

| $\#$ | Element | Max. Score |
| :--- | :--- | :--- |
| 1 | Straight constant descent to the centre pad | 2 |
| 2 | Landing | 3 |
| 3 | Model aircraft landed while it still had forward speed | 1 |
| 4 | Model aircraft hovers more than briefly prior to landing | 1 |
| 5 | Model aircraft is not descending parallel to the judge's line | 1 |
| 6 | Overall impression | 2 |

28: Roll (K=5)

| $\#$ | Element | Max. Score |
| :--- | :--- | :--- |
| 1 | 10 meter level entry | 1 |
| 2 | Roll | 2 |
| 3 | 10 meter level exit | 1 |
| 4 | Model aircraft drifter toward or away from the judges | 1.5 |
| 5 | The model aircraft loses altitude during the whole manoeuvre | 1.5 |
| 6 | Inverted position during roll is not centred in front of the judges | 1 |
| 7 | Overall impression | 2 |

29: Autorotation with 180 degree turn ( $\mathrm{K}=6$ )

| $\#$ | Element | Max. Score |
| :---: | :--- | :--- |
| 1 | 180 degree descending autorotation turn | 3 |
| 2 | Landing $^{\star}$ | 5 |
| 3 | Overall impression** | 2 |

*Includes:
Maximum score = 5 ...landing inside 1.5 meter circle
Maximum score -4 ...landing with skids/landing gear touching inside circle
Maximum score $=3 \ldots$...landing inside $10 \times 10 \mathrm{~m}$ square
Maximum score $=0$...landing outside $10 \times 10 \mathrm{~m}$ square
**Includes:
Constant rate of descent, constant turning rate.

## ANNEX 5 E

## RULES FOR ELECTRIC FLIGHT (F5B, F5D) WORLD CUP EVENTS

## 5E.1. General Rules

5E.1.1. The General Rules for FAI World Cup with all the principle points concerning the responsibility and the organisation of World Cup are written in the FAI Sporting Code, Section 4b, B.2.5.

5E.1.2. The Open International Contest that could be nominated by the F5 Subcommittee as a World Cup contest are described in the FAI Sporting Code Section 4a (A.9) and 4b (B.2.1.).

5E. 2. Procedure for nomination of World Cup Contests
5E. 2.1 The Electric Flight World Cup will be organised in classes F5B (gliders) and F5D (pylon racing model aircraft) during the years in which there are no World Championships.

5E. 2.2. Requests for open international contests that are planned as World Cup contests must be checked by the Subcommittee Chairman before they will be published in the FAI International Contest Calendar.

5E. 2.3. Contests that are not published in the Contest Calendar could not be World Cup contests.

5E. 2.4. The Subcommittee Chairman collects results of each competition, produces and distributes the World Cup positions.

5E. 2.5. Both World Cups will be awarded at the CIAM Plenary meeting to winners or delegates of their NACs.

5E. 3. Classification
5E. 3.1. During a year, a maximum of three (3) contests will be counted. If a competitor flies in more than three contests, his three (3) best results will be allocated.

5E. 3.2. Not more than two (2) contests could be counted in the same country.
5E. 3.3. Points awarded at a World Cup Contest
1st place $=100$ points,
2nd place = 75 points
3rd place $=60$ points
4th place $=50$ points
5 th place $=49$ points
6 th place $=48$ points, etc.
54 points $-\mathrm{R}=$ World Cup points ( $\mathrm{R}=$ individual ranking)


[^0]:    1 FAI Statutes, Chapter 1, para. 1.6
    2 FAI Sporting Code, General Section, Chapter 3, para 3.1.3
    3 FAI Statutes, Chapter 1, para 1.8.1
    4 FAI Statutes, Chapter 2, para 2.1.1; 2.4.2; 2.5.2; 2.7.2
    5 FAI Bylaws, Chapter 1, para 1.2.1
    6 FAI Statutes, Chapter 2, para 2.4.2.2.5
    7 FAI Bylaws, Chapter 1, para 1.2.3
    8 FAI Statutes, Chapter 5, para 5.1.1; 5.5; 5.6
    9 FAI Sporting Code, General Section, Chapter 3, para 3.1.7
    10 FAI Sporting Code, General Section, Chapter 1, paras 1.2. and 1.4
    11 FAI Statutes, Chapter 5, para 5.6.3
    12 FAI Bylaws, Chapter 1, para 1.2.2

