

## Changes to Sportsman schedule

The Helicopter Technical committee has decided to make a couple of changes to the Sportsman class schedule in order to make it more accessible to potential competitors.

The changes are to the **VERTICAL RECTANGLE** and also the **AUTOROTATION**. The pirouettes have been removed from the rectangle, and the autorotation is now either a straight line auto (out of 8 points), or a 180 autorotation (out of 10 points).

The following descriptions for these two maneuvers will now apply. All other maneuvers will remain as is.

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### **VERTICAL RECTANGLE**

Model aircraft takes off vertically from the helipad and ascends to eye level and stops. It then flies backwards to one of the centre flags (2 or 5) and stops. Model aircraft then climbs vertically 4 m and stops.

Model aircraft then flies forward 10 m to opposite centre flag and stops. Model aircraft then descends 4 m and stops

Model aircraft then flies backward to the centre helipad, makes a stop before it lands on the helipad.

Points will be subtracted for the following reasons:

1. Vertical ascent and descents were not centred over flags.

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### **AUTO LANDING – STRAIGHT LINE OR 180 DEGREE. OPTIONS APPLY HERE.**

A straight-line auto is performed from down wind into the centre circle.

(Out of 8).

A 180-degree auto is performed from up wind into the centre circle.

(Out of 10).

#### **Straight-line auto (downwind):**

Model flies at a minimum altitude of 20m. Once the model reaches a position, 45 degrees from the circle, the manoeuvre must be called and the model must be in the autorotative state when it cuts this plane, the engine must be at idle at this point and the model must be descending. The descent must be at a constant rate.

#### Scoring criteria:

The maximum score of 8 points can only be achieved when the model aircraft makes a smooth touchdown on the helipad with the skids or landing gear completely inside the 1,2m circle and parallel to the judge's line.

A maximum score of 7 points can be obtained with a perfect landing inside the 1,2m circle but with part of the landing gear touching the circle (rotor shaft must point to inside of circle when viewed from above).

If the model aircraft makes a perfect landing inside the 10m square the manoeuvre can achieve a maximum score of 6 points.

If the model aircraft makes a perfect landing outside the 10m square a maximum score of 4 points can be awarded. If the flight path is stretched (flying parallel to the ground and/or judge's line) to reach the square, line or helipad, the manoeuvre will be severely downgraded.

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 maintain a constant rate of descent at 45 degrees..
4. Flight path was stretched to reach helipad or square.
5. If engine was still running (above idle) after crossing plane, score will be zero.

#### **180 Auto (upwind/downwind):**

Model flies at a minimum altitude of 20m. Manoeuvre begins when model crosses an imaginary plane that extends vertically upward from a line drawn from the centre judge out through the central helipad. Model must be in the autorotative state when it cuts this plane, the engine must be at idle at this point and the model must be descending.

The 180° turn must start 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 must appear as a semi-circle when viewed from above, starting at the vertical plane and ending at a line drawn from the centre judge through the central helipad. The model's flight path must never be parallel to the ground or judge's line.

Scoring criteria:

The maximum score of 10 points can only be achieved when the model aircraft makes a smooth touchdown on the helipad with the skids or landing gear completely inside the 1,2m circle and parallel to the judge's line.

A maximum score of 9 points can be obtained with a perfect landing inside the 1,2m circle but with part of the landing gear touching the circle (rotor shaft must point to inside of circle when viewed from above).

If the model aircraft makes a perfect landing inside the 10m square the manoeuvre can achieve a maximum score of 8 points.

If the model aircraft makes a perfect landing outside the 10m square a maximum score of 5 points can be awarded. If the flight path is stretched (flying parallel to the ground and/or judge's line) to reach the square, line or helipad, the manoeuvre will be severely downgraded. If the 180° turn is completed outside the 10m square the maximum score can only be 5 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° turn.
4. Model aircraft did not maintain a constant rate of descent during 180° turn.
5. Model aircraft did not maintain a constant turning rate during 180° turn.
6. Flight path was stretched to reach helipad or square.
7. If engine was still running (above idle) after crossing plane, score will be zero.