



## Task 14 Economy area rectangle and speed

With limited fuel fly a rectangle course with the objective of creating a rectangle of maximum possible area. The first leg will be score for speed.

A standard fueling operation will be performed. Each class will have a designated amount of fuel. A single start and finish point (SP/FP) will be given at the briefing.

No quarantine planning nor declaration is required. A standard take-off in open window will be performed, direction a location will be instructed by the marshal.

Pilots will fly a rectangle that starts and ends in the SP/FP point. The other three turn-points will be corners of the rectangle which the competitors may choose freely. These three free turn-points will be the points where the two consecutive sides of the rectangle intersect when a precision turn is flown, so the new leg crosses the previous leg.

The area within the rectangle created by SP/FP and the three free turn-points points will be calculated to determine the rectangle *area* score. The first leg, from SP/FP to the first intersection, will be scored for speed.

Timing will start at exiting from SP/FP cylinder and finish at the intersection of the first two legs before the start of the precision turn. Time taken will, therefore, exclude the turn itself. Landing will be performed inside the briefed airfield boundaries, on the runway. After landing pilots should be able to taxi 100 m with running engine before they proceed to the quarantine area.

### Scoring

A = Area of the rectangle created by the SP/FP point and the first three track intersections.

A<sub>max</sub> = Largest area in the class

$$Q_a = 700 * \sqrt{A} / A_{max}$$

### Speed

V = Speed measured from SP/FP to the first track intersection

V<sub>max</sub> = Fastest speed in the class

$$Q_t = 300 * V / V_{max}$$

Total

$$P = Q_a + Q_t$$