

FLIGHT 2: PF and PL CLASSES

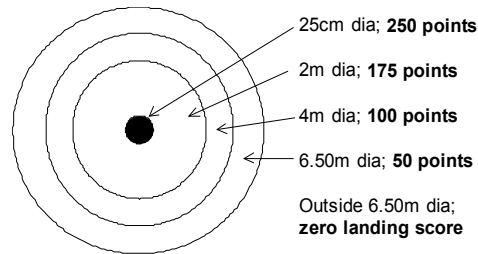
OVERVIEW

Begin with a Precision Takeoff (first half of Task 3), proceed immediately to the Slow / Fast Speed task (Task 4), and complete a Precision Landing (second half of Task 3) upon return to the airport.

PRECISION TAKEOFF AND LANDING

Objective

To make a clean take off at the first attempt in the deck, and subsequently land as near as possible to a point.



Description

The pilot is permitted four takeoff attempts, climbs to 500ft overhead the target, cuts the engine before passing through a gate and tries to make a first touch as near as possible to the centre of a target consisting of a series of concentric circles.

Special rules

- The pilot scores 250 points for a clean take off at the first attempt, 170 for the second, 90 for the third, zero for the fourth.
- The circuit to be flown will be detailed at briefing.
- The first touch of the ground by the pilot's foot is the point from which the pilot's score will be derived. A first touch on the line scores the higher value.
- Contestants will be awarded a zero score if the pilot or any part of the aircraft touching the ground outside the deck while undertaking the task.
- Contestants will be awarded a zero landing score for:
 - Engine not stopped before the gate.
 - Gate not passed correctly.
 - Falling over as a result of the landing.

Scoring

Pilot score = (Bto + Bld)

Where:

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Bto = Takeoff points

Bld = Landing points

SLOW / FAST SPEED

Objective

To fly a course as fast as possible and then return along the course as slow as possible.

Description

A straight course between 250m and 500m long and 25m wide is laid out with gates at each end. The pilot makes a timed pass along the course as fast as possible, returns to the start, and makes a second timed pass in the same direction as slow as possible.

Special rules

- For each leg, the clock starts the moment the pilot passes the first gate and stops the moment he passes the second.
- If the pilot or any part of his PPG touches the ground during the first leg: VP1 = zero and EP = zero
- If the pilot or any part of his PPG touches the ground during the second leg: VP2 = zero and EP = zero
- If the pilot zigzags or if the body of the pilot overflies a side of the course or exceeds 2m above ground: Score zero.
- The maximum time allowed for a pilot to complete each leg of the course is 5 minutes.

Scoring

$$\text{Pilot score} = \left(125 \times \frac{Vp_1}{V_{\max}} \right) + \left(125 \times \frac{V_{\min}}{Vp_2} \right) + \left(250 \times \frac{Ep}{EMax} \right)$$

Where:

Vmax = The highest speed achieved in the task, in Km/H

Vp1 = The speed of the pilot in Km/H in the first leg of the task

Vmin = The lowest speed achieved in the task, in Km/H

Vp2 = The speed of the pilot in Km/H in the second leg of the task

Ep = The difference between the pilot's slowest and fastest speeds, in Km/H

Emax = The maximum difference between slowest and fastest speeds, in Km/H