

# **R** Navigation with unknown legs

## Key information

Task sheet. Edition 2

This is as task 3.A6 in the task catalogue

Task type: Navigation; flight recorders required, electronic devices check required.

Complete task brief: This task sheet, task information sheet, electronic devices check procedure, flight recorder check procedure.

#### Information which will be provided before the briefing

Briefing time & location.

Task information publish time.

Task window open and close times.

IP and FP gate locations. leg & gate descriptions.

No-fly zones.

Takeoff and landing deck assignments.

Flight recorder and electronic equipment return deadline.

### Information provided immediately before takeoff

Photo sheet of hidden turnpoints.

Emergency turnpoint envelope.

#### Objective

Follow a series of headings or known lines, finding markers and identifying ground features from photographs, and locating their positions on a map and crossing hidden gates.

#### Description

Pilots must have completed the electrical equipment check procedure **before** they declare they are ready to receive the task information.

Aircraft are placed on the edge of the takeoff deck and pilots declare to a marshal they are ready to receive the final task information which is a photo sheet of ground features and an emergency envelope containing the location of one of them.

While in possession of a photo sheet Pilots will NOT communicate with other pilots or team members without the express permission of a marshal.

When ready, pilots enter the deck and take off. Free take-off within the time window.

Pilot flies the course, changing direction when the turnpoints are found and passing through hidden gates along the course.

During the task pilots must not back track along the track line against the direction of the task. If there is a need to backtrack they must leave the track line and fly back well clear of it before rejoining the track line at an earlier point.

From FP pilots fly the landing deck.

Upon landing, all pilots must proceed immediately to the electrical equipment, flight recorder and emergency envelope checks.

#### Penalties

20% task score

- Failure to meet the electrical equipment or flight recorder return deadline.
- Opening the emergency envelope, or failure to return it still sealed.
- Landing inside the airfield but outside the deck.

Zero task score

- Failure to fly through the IP or FP gates in the correct direction.
- Takeoff, or return through the FP gate outside the task window.
- Land out.

- Flight in a no-fly zone.
- Failing to provide a flight recorder track
- Failing to retrieve the electronic devices declaration sheet.

## Scoring

Q = Vh + Vt

 $Pilot \ score = 1000 \ \times \frac{Q}{Qmax}$ 

Where:

Vh = the total value of the turnpoints correctly passed by the pilot.

Vt = The total value of all the hidden gates passed by the pilot.

## Example

## The following information will be given in advance of the briefing:

Locations of IP, 124, X147, X148, X149, X150 and FP.

ROUTE	From	Turnpoint	То
Leg 1	IP [Vh = 1]	None	124 [Vh = 1]
Leg 2	124	091 [Vh = 1]	X147 [Vh = 0]
Leg 3	091	085 [Vh = 1]	X148 [Vh = 0]
Leg 4	085	127 [Vh = 1]	X149 [Vh = 0]
Leg 5	127	100 [Vh = 1]	X150 [Vh = 0]
Leg 6	100	None	FP [Vh = 1]
Hidden gates from IP to FP each score Vt = 1			

The following information will be given immediately before takeoff: An aerial photo sheet showing turnpoints 091, 085, 127 and 100.

Emergency envelope containing the location of 085.

## Pilot flies the course thus:

Pilot takes off and flies Leg 1 from IP1 to 124

Pilot flies Leg 2 from 124 in the direction of X147. Somewhere along that leg he will identify turnpoint 091 from the photo. Pilot flies Leg 3 from 091 in the direction of X148. Somewhere along that leg he will identify turnpoint 085 from the photo. Pilot flies Leg 4 from 085 in the direction of X149. Somewhere along that leg he will identify turnpoint 127 from the photo. Pilot flies Leg 5 from 127 in the direction of X150. Somewhere along that leg he will identify turnpoint 100 from the photo. Pilot flies Leg 6 from 100 to FP1 and lands in the deck.

There are hidden gates along the entire route IP - 124 - 091 - 085 - 127 - 100 - FP.

In the event a pilot gets completely lost, he may open the emergency envelope which will reveal the location of 085.