

# EMC2010 Task 4 - Navigation with unknown track 2.2d – Sutton / Sywell Pipeline

## Objective:

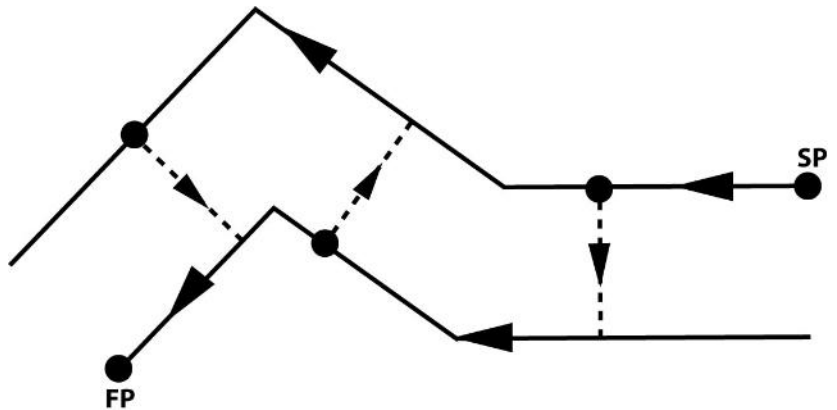
To fly an accurate track and groundspeed, spot the position of photo features, – some of which will determine when to switch from one given track-line to the next.

## Description:

**Starting procedure :** A, and departure procedure as briefed

### Before flight, in Quarantine crews will be given:

Task map  
Declaration sheet  
Photo sheets



## Detail description

The given course consists of two parallel lines - 'the pipe'. From SP the crews follow the first line until a photo feature is found. From this point crews construct a line at 90 degrees and cross to the other side of the pipe and continue, repeating every time a photo feature is found on the 'pipe lines'. This continues until crews reach the end of one of the 'pipe lines' which forms an FP.

Additionally there may be photo features to spot on the cross over legs – These are not turnpoints, only the photo features found on the 'pipe lines' are turnpoints.

The entire course should be flown at a pre-declared groundspeed. SP and the correct FP will be timing gates, and a number of additional unknown timing and tracking gates will be on the course. No timing gate will be within 1km of a turnpoint photo feature.

After crossing FP crews must proceed directly to Sywell using **standard arrival procedure 2 from the North**.

**Standard after landing Navigation task quarantine procedure will apply.**

## Scoring

Crossing SP and subsequent timing / tracking gates on time = 100 points – 2 points per second +/- from calculated time.

Each correctly identified photo feature marked within 3mm on official scoring map = 50 points. If greater than 3mm but less than 5mm = 0 points. If greater than 5mm = -50 points.

Competitor's score =  $Q/Q_{max} \times 1000$  where:

Q = Competitor's individual accumulated score  
Q<sub>max</sub> = best individual accumulated score in task/class

**Generic navigation task penalties apply.**

Procedure turns at turnpoints are allowed.