



# WMC 2025 – CHAMBLEY France

## **TASK 08 A5 : Navigation with unknown legs** **Geared-up PACMAN**

### **Goal :**

The goal is to navigate precisely around two concentric circles, passing from one to the other at certain photos, and at the same time keeping the speed declared.

### **Description :**

Once in quarantine, the competitors will be given a map and this task sheet. They will push their machine on the taxiway where they will take off at the marshal's orders after a 1h preparation (including taxiing)

Once airborne, the competitors will maintain a max altitude of 1000ft/ground until they reach the start point SP that they will pass in 5 minutes, then proceed to join the outer circle that they will start to follow **anticlockwise** until they find a photo. This photo will indicate the radial path to be followed until the inner circle is reached. From there, they will fly **anticlockwise** around the inner circle until they locate another photo, which will direct them back to the outer circle. This sequence will then be repeated until they reach the finish point. After that point, they will join Chambley at an altitude of min 1500ft until they perform the landing circuit as previously instructed.

Once landed, they will taxi to their designed quarantine area using the taxiway, secure their machine, then start reporting their photos for 15 minutes under supervision of a marshal that will start their quarantine time, and get their reporting sheet before the end of the 15 minutes.

Each time a photo is found, the competitors will fly a procedural turn (270°), maximum 2 min, that will allow them time to report the photo, trace the radial line to the centre that will bring them to the other circle, and align with the drawn route. No timing or hidden gate will be placed less than 1km away from any turnpoint.

If at one point of the navigation, they encounter a Stop Point, this will mean they reached the end of the route and must proceed as directly as possible to the airfield to close their task.

All along the route, they can encounter hidden gates but also speed sampling gates. They will have to maintain their declared speed.

### **Overview :**

Expected task distance : approx. 225km

Take-off : At the allocated time, every 3 minutes, from deck 1

Runway : As briefed by the marshals

Start point : SP – To be reached at **1000ft** in 5 minutes from the given take-off time

Finish point : FP – Airfield to overfly at **1500ft** 5 min from passing FP

Times gates : Yes, sampling

Hidden gates : Yes

Photos : 10 (some of them may be false), but all constitute turnpoints.

## Turnpoints description



SP



Centre of circle



Stop Point Outer



Stop point inner

## Scoring :

Description	Points value
SP	100
Hidden track gate	100
Photo, ground marker (in the 2mm tolerance)	100
Photo, ground marker (tolerance : > 2mm and < 5mm)	0
Photo, ground marker (outside 5mm tolerance)	-100
Sampling speed controls (5 sec tolerance)	180
Each second outside the 5 sec tolerance	-3

## Penalties :

Description	value
Late quarantine	-20%
Late Take-off	-20%
Late for scoring	-20%
Engine on inside quarantine stand	-20%
Backtracking against the direction of the route	-50%
Failure to Take off on the deck length	-20%
Failing to pass SP	-30% per gate not crossed
Outlanding	-100%
Flying into a <b>Prohibited area</b> (PFZ) (marked on the task map)	-100%
Quarantine breach	-100%
For minor penalties and infringements : a 2 warning system will be in place before any penalty is issued for : <ul style="list-style-type: none"> <li>- Poor circuit discipline</li> <li>- Infringing <b>No fly zone</b> (NFZ) which are briefed</li> <li>- Ignoring marshals</li> <li>- Any other behaviour with causes concern or impacts upon the safety of others</li> </ul> Resulting in : <ul style="list-style-type: none"> <li>- 1<sup>st</sup> warning</li> <li>- 2<sup>nd</sup> warning</li> <li>- Penalty issue 20%,50% 100%, disqualification: at the discretion of the competition director. Depending upon minor or major offence/s</li> </ul>	- 20% => -100%