

## **TASK E06 A8 : Navigation corridor (Mario Kart)**

### **Goal :**

Fly within one or several corridors as precisely as possible, from SP (Start Point) to a given turnpoint, where you will enter a slalom course that the competitor must complete in the minimum time, with no possibility to miss one of the gates.

### **Description :**

After 45min preparation time in the quarantine area, the competitors will taxi to the starting area where he will follow the marshals to deck 1. A few seconds before the given take off time, the aircraft will enter the deck, following the starter orders, and will then have 1 min to take off

The take-off will be a deck take-off.

Once on flight, the crew will join SP and start its navigation through a 33.5km long and 500m wide corridor, following the path given. Additionally, his speed will be sampled at a number of time gates placed within the corridor.

Exiting this first corridor the aircraft will rejoin a second corridor 56.5km long and 400m wide that the competitors will have to fly in the minimum time between entrance and exit of the corridor.

After this second corridor, the competitors will join FP, then the airfield after 5 min, as usual.

From the take off to SP, and from FP to the landing area, the crew will make sure not to cross the corridor track, and will proceed on a direct route, altogether maintaining a high level of safety abording the airfield.

### Overview :

Expected task distance corridor n°1 : 33,3km

Expected task distance corridor n°2 : 56.5km

Quarantine time : 45min, including taxiing

Take-off : Every 3 minutes, in the order of the start list given. 8 min to enter the first corridor.

Runway from deck 1, direction as directed by the marshals

Landing : Deck 2 Grass

Start point :SP

Finish point= FP

Times gates : Yes

Hidden gates : No (corridor)

Photos: No

Task Time limits :

## Scoring :

### Scoring of the corridors :

SCmax will be calculated based on the best distance performance inside the corridor. Each segment distance outside the corridor will be taken out of the ideal distance. The other competitors will be scored SC as pro rata. The best time on each corridor will be credited 300 points, the other competitors pro rata. That leads to a total 600 points for the corridor score.

### Speed score :

On the first corridor, we will measure the speed of the aircraft on several points and compare it to the declared speed. The best result will score 200 points, the others pro rata.

On the second corridor, the fastest competitor will score 200 points, the others pro rata.

Description	Points value
Time gate (5 sec tolerance) for joining the first corridor	100
Each second outside the 5 sec tolerance	-2 (Max 100 points)

So the total score for the task will be :

**SCMax1(300) + SCMax2(300) + SampleSpeedCorr1(200) + BestperformanceCorr2(200) + TimeStart(100)**

Leading to a total of max 1100 points.

The best overall competitor will be set to 1000 points, the others scored pro rata.

## Penalties :

Description	value
Late quarantine	-20%
Late Take-off	-20%
Engine on inside quarantine stand (on the grass)	-20%
Backtracking against the direction of the track	-50%
Failure to Take off on the deck length	-20%
Outlanding	-100%
Flying into a Prohibited Flying Zone (PFZ) or prohibited area (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%