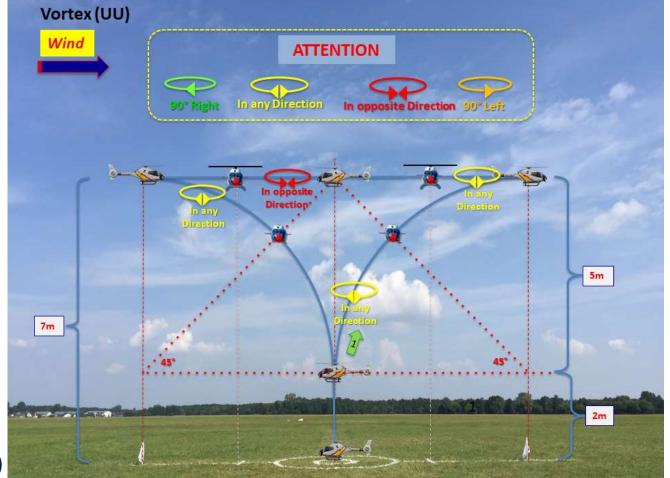
## **HELP FOR TRAINERS AND PILOTS**





P1: Vortex (UU)

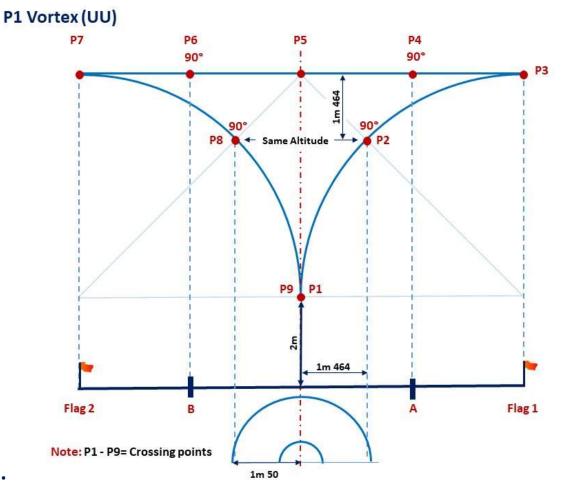
K=1.5

MA takes off vertically from the helipad and ascends to 2 m and hovers for a minimum of 2 seconds,

- ascends flying backwards describing the upper left (right) quarter of a circle with 5 m radius while simultaneously performing a 180° pirouette in any direction and stops over flag 1 (2), hovers for a minimum of 2 seconds,
- and then hovers to the other flag 2 (1) while simultaneously performing two 180° pirouettes that are in opposite direction, stops and hovers over the flag 2 (1) for at least 2 seconds,
- descends forward describing the upper right (left) quarter of a circle with 5 m radius while simultaneously performing a 180° pirouette in any direction, stops over the center line for at least 2 seconds,
- descends and lands into the helipad.

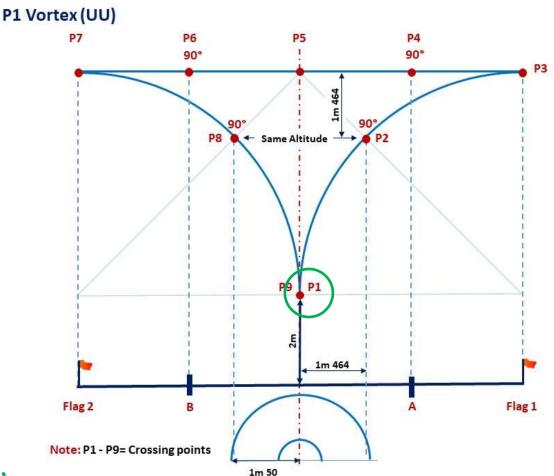
The note below does not appear in the official text.

Note: The change of the pirouettes direction must be done smoothly on the centre line.



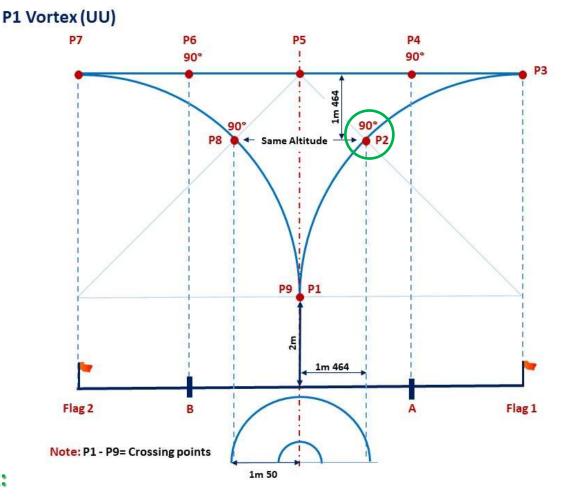
#### **Comments:**

For this figure, there are 9 checkpoints to check and I remind you that the coach must move on the line of the judges to check:



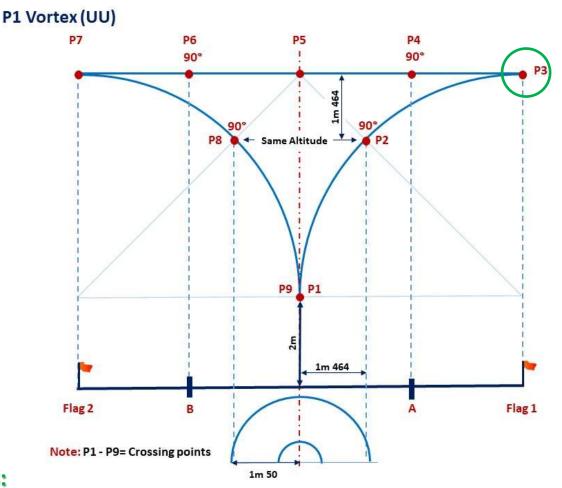
#### Waypoint 1:

- To begin and before the helicopter has taken off from the center circle, the trainer must position himself behind the "M1" mark on the line of the judges to check if the ascent is well done with a constant rate of ascent, if the helicopter stops at a height of 2m and the stationary lasts well for at least 2 seconds.



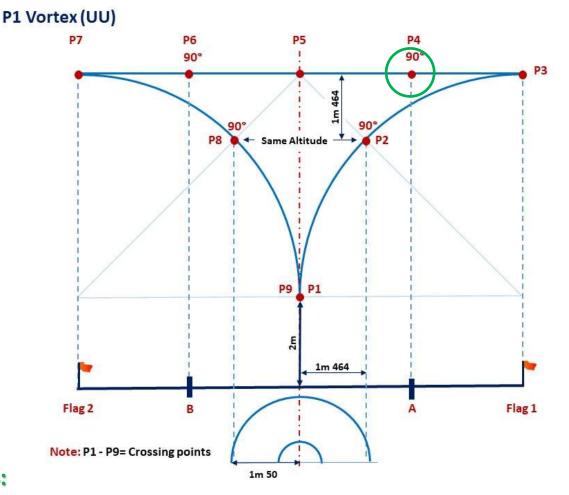
#### Waypoint 2:

- Then, that the helicopter is at the vertical of the edge of the circle of 3m when it has rotated 90°, so in front of him since it is behind the mark "M1", and check if the helicopter is at the right height.
- That the curve is well respected and not with an oblique ascent.
- While the helicopter performs the ¼ circle, the trainer must move to get behind the location of the judge "5".



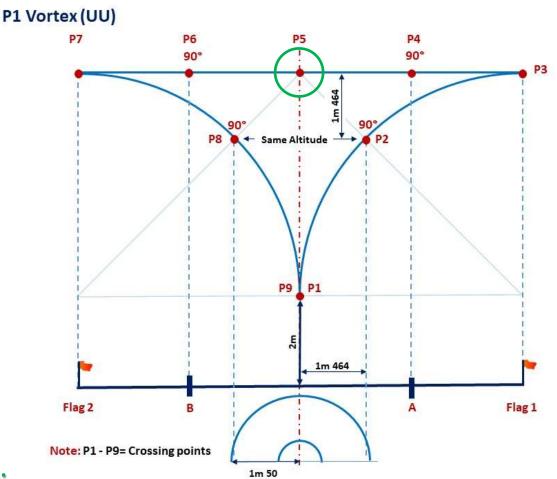
## Waypoint 3:

- To check if the ascent is at the right height (7m), that the stop is made vertically above the F1 flag and that the hovering takes 2 seconds minimum.



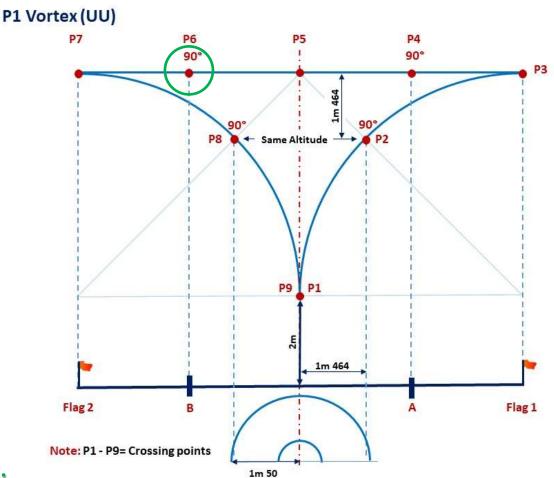
## Waypoint 4:

- Then, the trainer must move on the line of the judges at the same time as the helicopter carries out the rectilinear translation with 2 pirouettes 180°.
- The trainer must stop behind the "4" judge's location to verify that when the helicopter is vertical to the "A" mark, the helicopter must have completed 90° rotation (Of course, the helicopter does not stop).



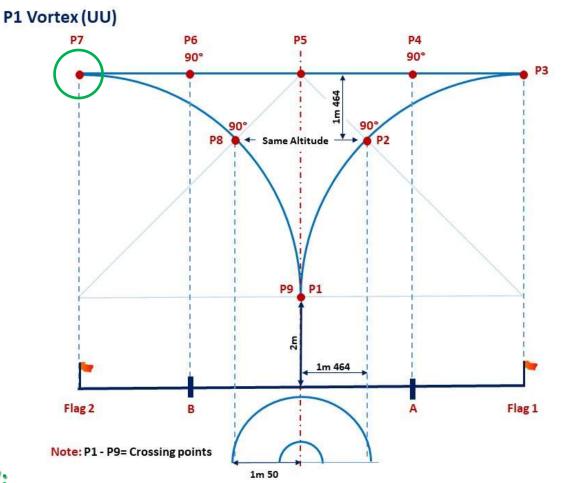
#### Waypoint 5:

- Continuous, the trainer must be placed behind the location of the central judge to verify that the first 180 ° rotation <u>is done in full</u>, that the change of direction is done well on the vertical of the central line, during this phase of change of rotation the speed of translation must be constant, <u>there must be no stop</u>.



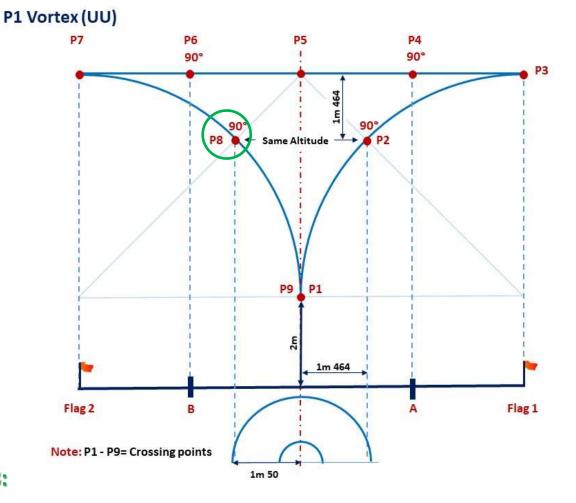
## Waypoint 6:

- Then, the trainer must stand behind the judge's "2" position to verify that when the helicopter is vertical to the "B" mark, the helicopter must have made 90 ° of rotation.



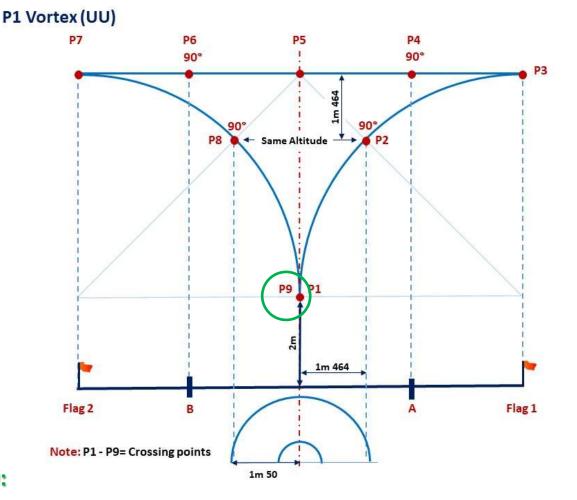
#### Waypoint 7:

- Then, the trainer must stand behind the location of the judge "1" to check if the stop is done on vertical of the flag F2, always at the same height (7m) and that the hovering takes 2 seconds minimum.
- Of course, the helicopter must remain at the same height during the horizontal translation with both 180 ° pirouettes and must also remain on the axis of the flight plan, that is to say do not go deep or closer to the line of judges.



### Waypoint 8:

- Then, the trainer must stand behind the "M2" mark to verify that the helicopter is vertically up to the edge of the 3m circle when it has made 90 ° of rotation, so in front of him since he isbehind the "M2" mark, and that the helicopter is at the correct height.
- That the curve is well respected and not with an oblique descent.



## Waypoint 9:

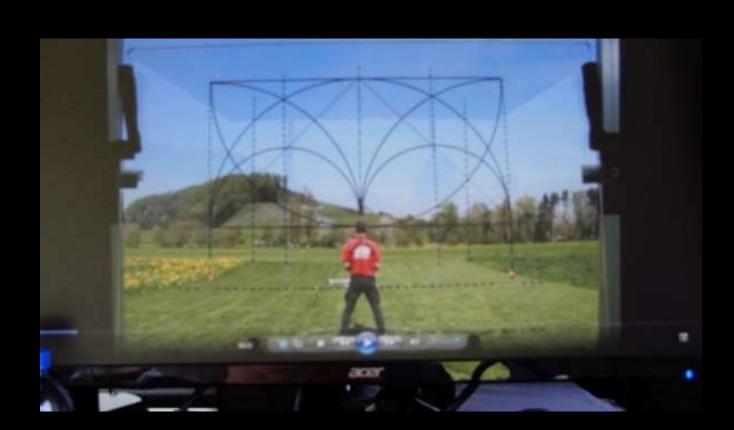
- That the helicopter stops well above the center circle and 2m at height and that the stationary lasts for at least 2 seconds.
- And of course, do not neglect the descent which must have a constant rate of descent.

• If you do not have the chance to have trainer and you train alone, Rolf MAEDER from Switzerland has a very ingenious system, I put a picture in attachments.

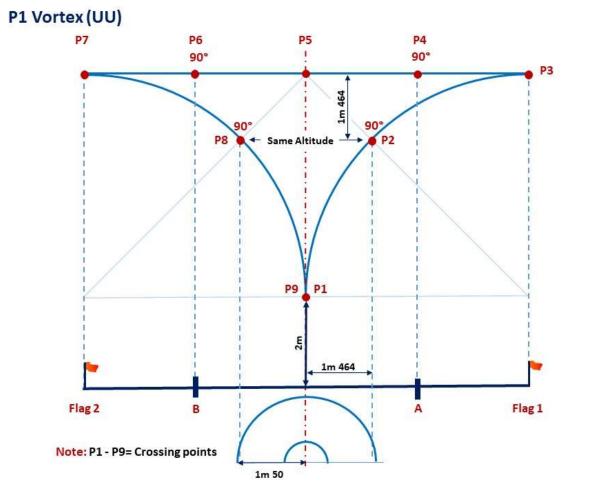
I used the term "trainer" and not "coach" to make the difference of a coach during a competition that does not have the same function at all.

# see the pictures below









## Thanks for your interest

Training by Roger Lacôme Power Point by Eladi Lozano For Subcommitte the F3CN CIAM-FAI