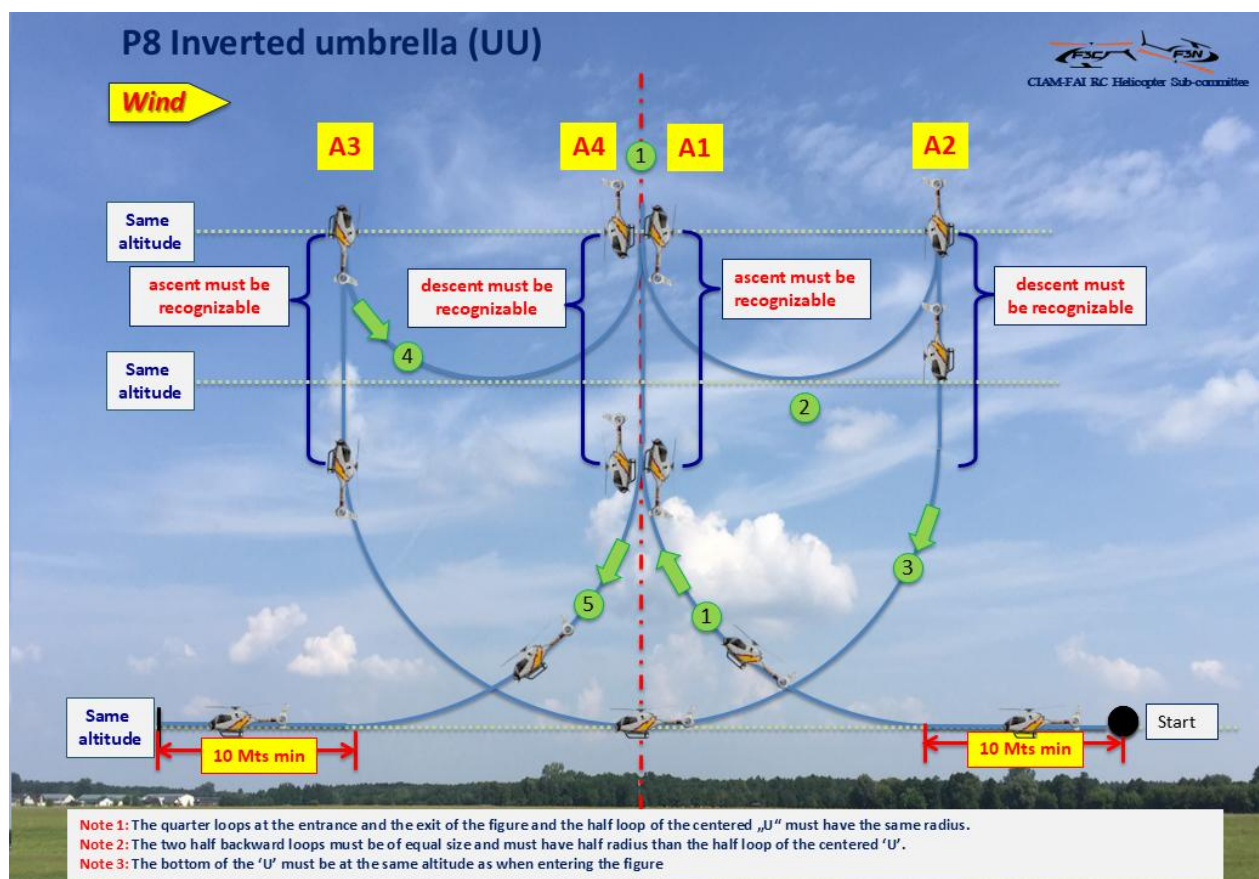




Presentation created by Eladi LOZANO and LACÔME Roger

P8 : Inverted Umbrella (UU)

K=1.0

MA flies straight and level for a minimum of 10 m and pulls up into a vertical ascent at centre line.

After a nose up stop MA performs a half backward loop.

After MA stops it performs a centred « U ».

After a nose up stop MA performs a second half backward loop.

After a nose down stop MA descends forward vertically on centre line followed by a quarter loop and exit after a 10 m straight line followed by at the same altitude as when entering the figure.

Note 1 : The quarter loops at the entrance and the exit of the figure and the half loop of the centered 'U' must have the same radius.

Note 2 : The two half backward loops must be of equal size and must have half radius than the half loop of the centred 'U'.

Note 3 : The bottom of the 'U' must be at the same altitude as when entering the figure.

Comments :

I love this figure, it's very difficult but when it's performed perfectly it's a real treat for the eyes.

As for the figure **P3 : Double candle** it is necessary to make a vertical ascent as high as possible, for this figure this is not necessary, quite the contrary.

Regarding speed, it's the opposite of P3 ; this figure doesn't need it, it must be done very smoothly, it should look as if the helicopter is dancing a waltz.

I continue, the more compact the figure is (without exaggerating) the easier it will be to perform it, especially with regard to stopping the half-loops and the ascent of the "U" which must be at the same altitude.

Finally, it is also not necessary to do it too far from the judges' line; a distance of 70 to 80 m from the judges' line is more than sufficient.

Summary :

- Not too high.
- Not too much speed.
- A rather compact manoeuvre (*figure*).
- Relatively close to the pilot.

The main difficulty is that stops A1, A2, A3 and A4 must be made at the same altitude and in the same flight plan.

Penalties :

- **The first penalty** starts with the first half-loop.
 - Very often the helicopter descends vertically before starting the half-loop and/or at the end with a vertical ascent. The larger the manoeuvre (*figure*), the more visible this fault is.
 - Then the radius is not constant, it is smaller when the helicopter is at the bottom of the half-loop. The larger the manoeuvre (*figure*), the more visible this fault is.
- **The second penalty** concerns the stopping of the half-loop which is not carried out at the same altitude as the start. The bigger the manoeuvre (*figure*), the more significant this difference is, not to mention the change of plane.
- **We arrive at the "U"**, whose two vertical branches must be of the same length. If the stop is higher at the end of the half-loop than at the start, there is a good chance that the second half-loop will start at a higher altitude than the start of the first.

But as usual, everyone does as they want!

Summary of the main key points :

- Work on the first half-loop in backwards so that it is round and the stop is at the same altitude as at the start, this represents a lot of practice but it is the first key to the success of the figure.
- The second key is the ascent of the "U" which must be at the same distance from the centre line as that of the descent.
- The ascent stops at the same altitude as the first ascent in "A1".

If these last two points are correct, the second half-loop should go well.

Thanks for your interest