

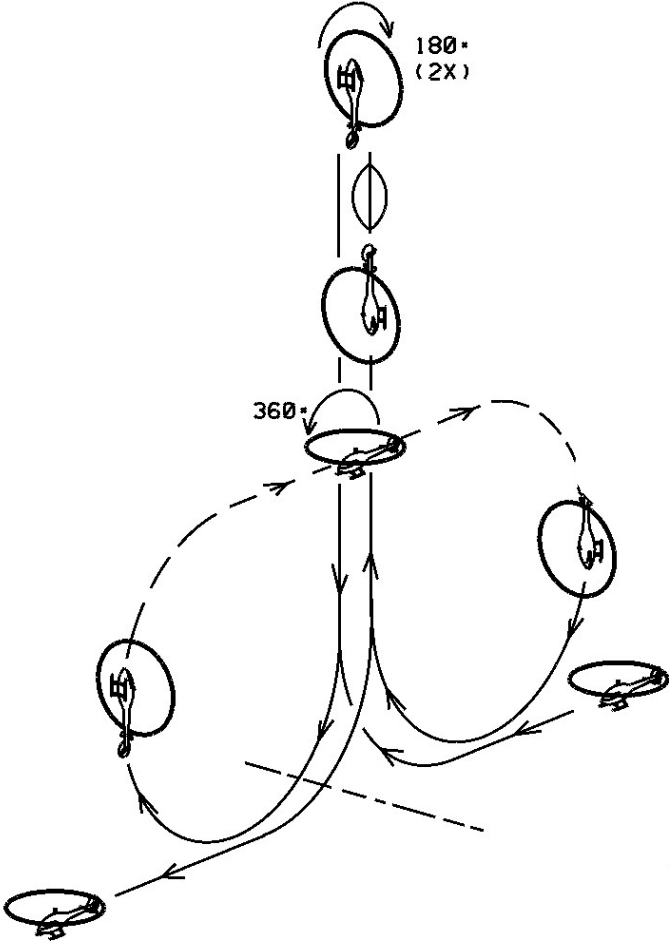
HELP FOR TRAINERS AND PILOTS

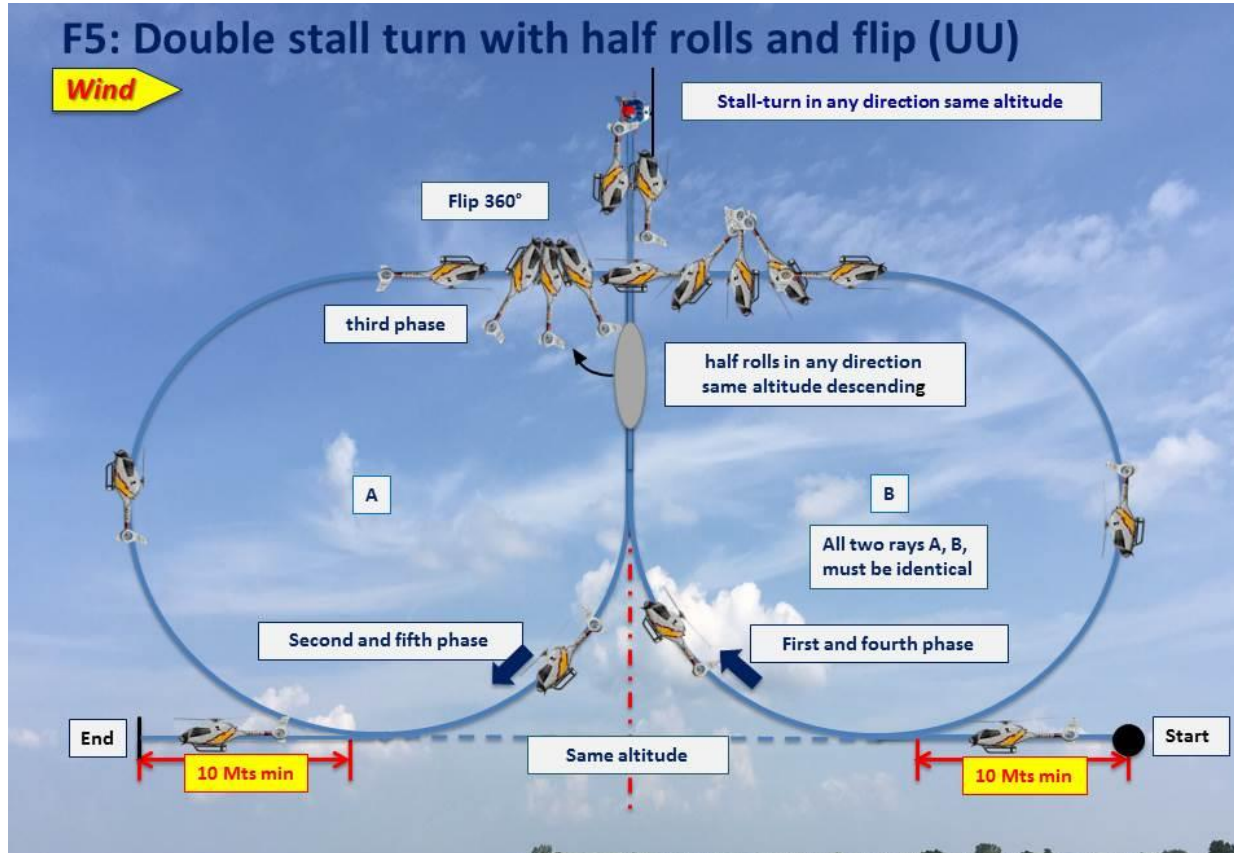
F5-Double stall turn with half rolls and flip

By Roger Lacôme



F5. DOUBLE STALL TURNS WITH
HALF ROLLS AND FLIP





MA flies straight and level for a minimum of 10m and pulls up into vertical ascent on center line by doing a quarter loop.

- At the end of the ascent MA performs a 180° stall turn followed by a half roll in any direction.
- MA perform a $\frac{3}{4}$ inside loop followed by a travelling 360° centered pushed flip and another $\frac{3}{4}$ inside loop.
- MA ascent vertically and performs a second 180° stall turn at the end of the ascent followed by a half roll in any direction.
- MA pulls with a quarter looping into horizontal straight and level flight for a minimum of 10m at the same altitude as when entering the figure.

Note 1 : Before and after the half rolls straight vertical lines are allowed, but that must all be of equal length.

Note 2 : Before and after the 360° flip straight horizontal lines are allowed, but they must all be of equal length.

Unofficial note: *The end of vertical ascents must end at the same altitude.*

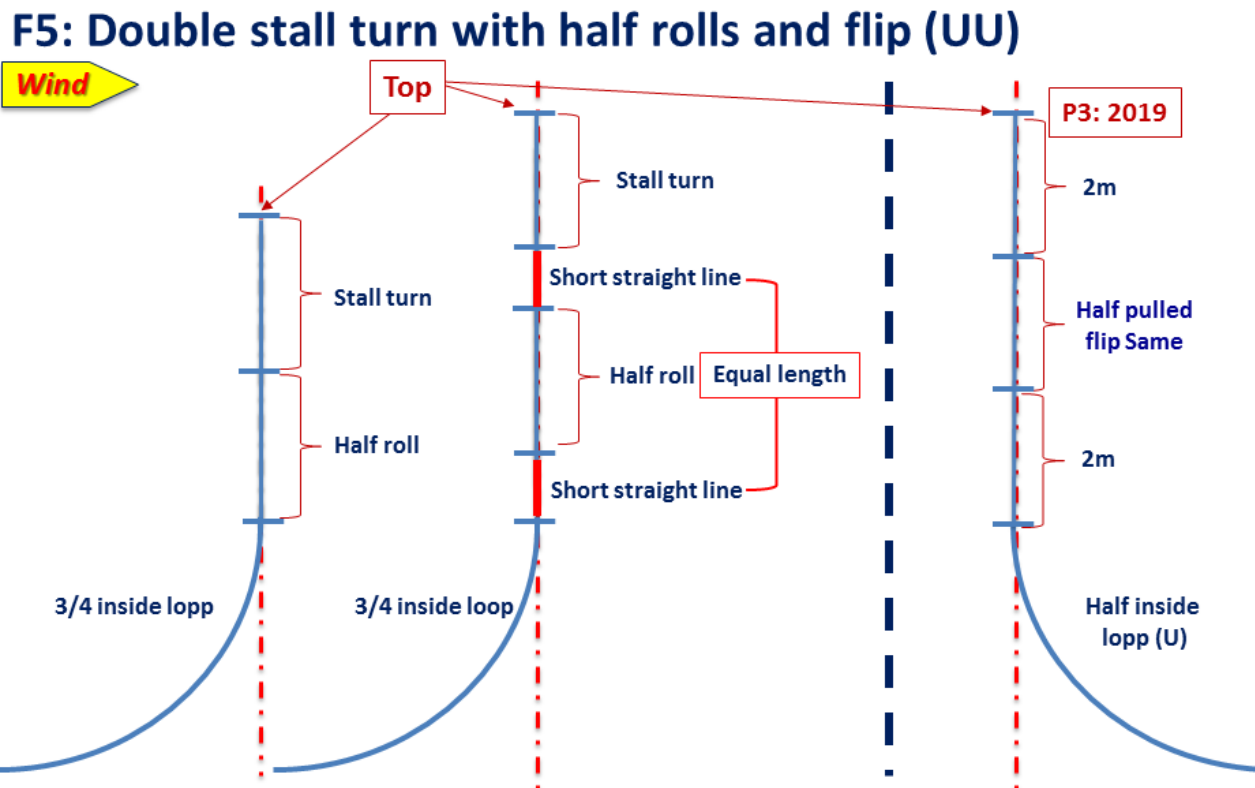
Comments:

I proposed this figure which comes from the 2015 program (F5), by modifying the location of the half-rolls. This figure is diversified with stall turns, half rolls, flip, inverted flights which makes it a very selective figure for a final program.

Once the ascent is completed, the stall turn must be performed during the descent, the trainer must check if the ascent and descent trajectory are well superimposed and in the same flight plan.

Then there are two possibilities:

- Either the stall turn / half roll and the $\frac{3}{4}$ of the loop are linked, so without a descending straight line.
- Either there is a straight line before and after the execution of the half roll, in this case they will have to be the same length, but even if the straight lines are short it will require to climb higher in order to be able to place all the maneuvers during the descent.



We can clearly see on the left drawing that if there is no line before and after the half roll, it will not be necessary to climb very high to execute the stall turn.

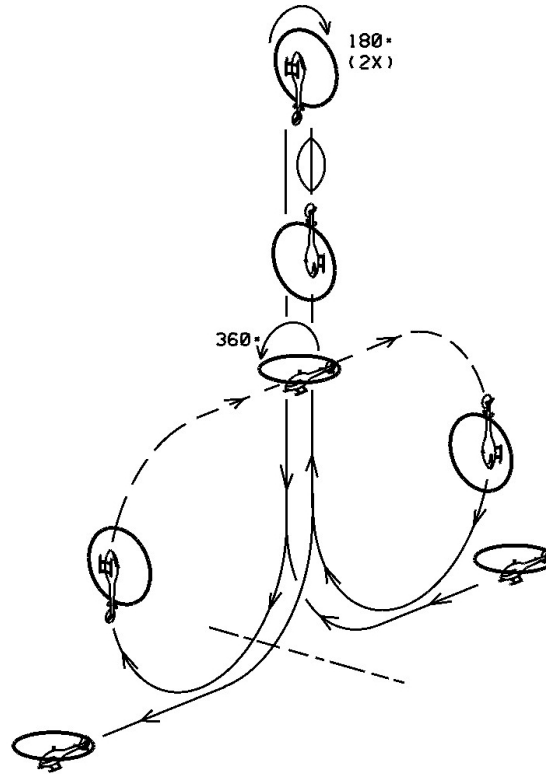
Whereas if there are straight lines it will have to be mounted very high as in the P3 of 2019.

Concerning the translated and centered flip, the helicopter must be in flat flight at the crossing of the center line.

There may be straight lines in inverted flight before and after the flip, if this is the case the two straight lines must be the same length.

Afterwards, the ascend must stop at the same altitude as the first, then the same comments for the stall turn and the half roll which also must be carried out at the same altitude as the first.

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Thanks for your interest

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