8.ter _ HOW TO STUDY A PROGRAM

_ 1 /   **Check where there is a risk** of grey or black out or G-Loc (Loss of Consciousness).

_ 2 /   **Analyse the energy management and decide** your key points for the program (like 4 per programme on top of the ones for each manoeuvre of course).

_ 3 /   **Check where there is a risk to exceed the limits** of the flight envelope (like a flick roll after an 8X8 for example, or horizontal rolls for VA after a downward loop).

_ 4 /   **Check where there is a risk of confusion** when there are similar basic manoeuvres with different rotations but with the same situation like into wind for example.

_ 5 /   **Draw a specific signal on the program whether you are** (into wind highlight in green and downwind highlight in ed for example). It also makes easier to know when to wait if necessary, into wind at high speed rather than downwind at high speed.

_ 6 /   **Check where to accelerate the rhythm downwind** to prevent long useless lines into wind to reposition.

_ 7 /   **Find all loops or parts of loops into wind** to remind you to decrease the amount of G's of about 1 G's less for say 10 to 15 knots of headwind.

_ 8 /   **And all loops or parts of loops into wind at slow speed** where you need to float sometimes a lot once again to respect the roundness and help the positioning.

_ 9 /   **On top of all the cross-box manoeuvres**, check where you can, if necessary, relocate while flicking or spinning in one direction rather than the other one due to lateral translation.

_ 10 /   **Check all the 45° uplines downwind** to remind you to increase slightly the 45° attitude while the speed is decreasing.

_ 11 /   **Find the highest K in the program to decide** to put them if possible close to the centre especially when they have 45° lines (much easier to judge in front of the judges and potential off axis less visible).

_ 12 /   **Decide where to go on purpose far into wind** to have less risk to go too far downwind, or to make positioning easier into wind.

_ 13 /   **Anticipate all the possible perspective corrections** while taking in account the direction of flick roll

_ 14 /   **Anticipate the lateral translation** mostly during half flicks especially if you don't manage to flick both directions and that you can't flick rudder into the wind (more translation during an half flick with rotations after for example, compared to a full flick since it's easier to end up in the axis for a full flick).

_ 15 /   **Find the spots in the program** where you can breathe and « relax » a bit (there are often a few places where you can do it, but if you don't prepare it you may be tensed during the 3 and half minutes of your program).

_ 16 /   **Anticipate when you have a flick roll showing** the AOA on the perpendicular axis to exaggerate the AOA since it's less visible. For the « crossover »flicks you also need to delay more the rudder when you initiate the flick in order to make sure the judges will see the AOA since the plane wants to flick as soon as you use little rudder.

_ 17 /   **If you don't have enough time after a rolling turn to centre the rudder**, and if right after you have hesitation rolls especially with 8th you may over rotate the first one if you roll same direction as the rudder input you still have.

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Non exhaustive list !

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FEW MORE TRICKS:

_ A /   The more you use stick deflection when you initiate a half flick, the more you will need to use elevator deflection for the stop to come back to your initial vertical upline, so there is then more risk not to stop the flick since you need also to have same rudder input for the stop as you had when you initiate. To prevent this, lift a bit your left wing if you flick to the left then, you will need less rudder on the stop, and accelerate very soon the flick in order for the plane to come back on the original vertical upline as soon as the flick starts.

_ B /   Try also to train the "8 point roll" to the right at very slow speeds like on top of a P.Loop since the stops of the 8th might be slightly crisper.

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