Practice Plan for B-Certificate

This is a very simple framework to use in practicing for the B cert. Details of the manoeuvres are not included, just the framework.

The idea is to get the circuits and alignment to be 'second-nature', then the manoeuvres will be easier, because they will start in the right way and in the right place (and hopefully finish in the right place to continue with the aligned path). It will also improve your flying by providing a basic framework from which you can introduce personal variations but return to at any time.

The idea is to practice the alignment onto the 'Display Line', which is the line from which all manoeuvres start and finish. This will typically be about 50m from the pilot (the far edge of the strip) and about 100ft up. These are not rigid figures, but you should find the best line for each model, depending on size and speed, and stick to that line. Consistency is very important.

- 1. A circuit with the into-wind leg along the display line.
 - a. The downwind leg should be far enough away to give plenty of room for the crosswind legs.
 - b. The length of the into-wind and downwind legs should be the same and should be long enough to line up for manoeuvres, but not too long.
 - c. The circuit should be symmetrical (equal to the left and to the right of the pilot).
 - d. The cross-wind parts can have straight bits or be continuous curves, but you must have straight bits for the required 'rectangular circuits' and for the landing circuit.
 - e. It is worth reversing the circuits a couple of times during the flight, just to practice, but warn other pilots that you are flying reverse circuits.
- 2. Flight back and forth along the Display Line with a reversal at each end.
 - a. Start with the following turn-around at each end: A $1/8^{th}$ loop, a 45 degree short climb, a half-roll and a $5/8^{th}$ loop back to join the Display Line at the right height and distance. Ideally the whole turn-around is done at the same distance out as the Display Line (quite hard actually).
 - b. Make the part-loops and the short climb such as to reach a height of about twice that of the Display Line (or perhaps a little more).
 - c. The wings should be level throughout, except for the actual half-roll. However, they should be level when entering and exiting the roll. (This is an ideal to aim for.)
 - d. If a fore/aft correction (ie north/south at our field) is required, due to a poor entry line or due to a cross wind, this should ideally be performed with rudder. An alternative, but not so good, is to enter the manoeuvre with a slight bank to left or right.
 - e. These turnarounds would not be judged in the B-Test, but do contribute to a tidy flight and an overall impression of competence.
- 3. When the Display Line is pretty reliable (or when you get bored with the above) work in one of the manoeuvres from the B-Test in the centre of the Display Line, first from the Circuit, then from the turn-around. When you are happy with this, routinely do some from a circuit and some from a turn-around.
 - a. Try and make the manoeuvres centre right in front of you. (Not the Stall-Turn, which is done at the end of the Display Line, usually the upwind end.)
 - b. Try and enter and exit on the same height and line (the Display Line).
 - c. Don't repeat the manoeuvre on the same pass. Always start from the straight run-in.

- 4. When you are comfortable with all of this, replace the turn-around at one end of the display line with an Immelmann (a half loop and a half roll). This will take you up to your 'High Line' from which you will do your Bunt and your Spin.
 - a. The High Line should be about double the height of the Display line, but the same distance in front of you.
 - b. You may want to make it higher to start with (especially for the spin), to give you a good safety margin for the Bunt and Spin, but aim to get it down to double the Display Line when you have become proficient at the manoeuvres.

- End -

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