Name:

This module is self study. When you have completed the checklist contact training@ramseymac.com and examiner(s) will be arranged with you.

Manouver	Complete 1	Completed 2	Completed 3	“B” Ready
Take off				
Circuit (overflying the takeoff area)				
Figure 8				
Inside Loop				
Outside Loop (Bunt)				
Consecutive rolls (left)				
Consecutive rolls (Right)				
Stall turn				
3 Turn spin				
Rectangular circuit				
Aborted Landing				
Rectangular circuit (reversed)				
Rectangular circuit (approach)				
Landing				

Takeoff

The takeoff should be a smooth ground run and climb out. Rocket launches are not recognised as takeoffs. The climb out heading should be the same as the ground run.Crosswinds should be dealt with using the rudder to maintain the correct heading. The climb should last until the aircraft has reached a safe height.

Circuit overflying the takeoff area

The circuit should be flown at a safe height. The circuit should be flown at a constant height with no deviation, the aircraft should pass directly over the takeoff area with a deviation of less than 15 meters.

Figure 8

The figure 8 manoeuvre should be flown at a constant height with no deviation.
Two perfectly symmetrical circles should be flown with the centre point being the pilot location. Taking into account winds is mandatory ensuring that the circles are fully symmetrical even in moderate winds.

Inside loop

The aircraft should start the manoeuvre with enough airspeed to complete the full loop. It consists of building up this energy using throttle or a shallow dive and completing a perfectly round loop, managing the throttle all the way around ensuring the aircraft does not overspeed or overstress on the exit. This is completed by pulling up from straight and level flight.

Outside loop (bunt)

The aircraft should start this manoeuvre with relatively low airspeed and at a safe height. The aircraft should pitch down from straight and level flight and return to the same height and location it started the manoeuvre to ensure a symmetrical loop. Again throttle management is key and the aircraft should hold enough energy to complete the loop without being overstressed or overspeeding.

Consecutive rolls (Left and Right)

The rolls should be started at a safe height. The rolls have to be straight and level with no height or heading deviation. The pilot location should be used as the point at which the aircraft is level between the two rolls. The rolls can not be twinkle rolls and the pilot must demonstrate the use of rudder and elevator in order to keep the height and heading constant.

The stall turn

The stall turn is a way of reversing the aircraft's direction utilising the vertical axis. The manoeuvre should start with enough energy for the aircraft to climb vertically, at the point of the stall the rudder should be applied in order to get the aircraft to slide over, past the knife edge and end up nose down. Chandells are not allowed, the aircraft must be at stalling point when the rudder is applied, power may be utilised to achieve the desired effect. The direction of the stall turn should always be away from the pilot.

Three turn spin

The three turn spin should begin with the aircraft at a safe height to complete the manoeuvre and recover from it should it go wrong. The aircraft should be flying along with little to no power on. The nose should be high and the speed noticeably bleeding off. At the point of the stall the rudder should be applied and the aircraft should complete three fully developed rotations; spiral dives are not accepted. The recovery from the spin and dive should be on the same heading that the aircraft entered. Most aircraft will spin easier to the left due to torque from the propeller however this is not always the case. If the pilot suspects the aircraft will not recover before colliding with the ground then the manoeuvre should be aborted early on and re attempted at a higher altitude. As with standard stall/spin recovery the pull out from the dive must be gentle to avoid inducing another stall.

Rectangular circuit (overshoot)

The rectangular circuit must be flown at a constant height to begin with and the turns must be 90 degrees with very little deviation. The final two turns the altitude may be lower as you must line up as if you are going to land. The approach should be flown as if you are intending to land, once the aircraft gets lower than 10 feet the examiner will call go around. Once again the power should be re-applied and the aircraft should climb out on the same heading as with a standard takeoff run.

Reversed rectangular circuit

The manoeuvre should be flown at a constant height. The turns should be exactly 90 degrees with little deviation.

Rectangular landing circuit

As with the overshoot start of the circuit must be flown at a constant height. The turns at 90 degrees with very little deviation. The final two turns the aircraft must descend as this is the final manoeuvre and you will land on this circuit.

The "B" test will be judged much harder than an "A". The manoeuvres are expected to be pretty much perfect with no deviation. The "B" is about precision flying in addition to safety hence the harsh judging. It will allow you to fly at public events such as the airshows and the club open day.