FLIGHT TRAINING SUPPLEMENT – SLOW FLIGHTt

At 3000 feet or more **do some clearing turns!!!**

Establish steady flight with a reference point straight ahead at.

Reduce power to idle, apply rudder as needed to compensate for loss of torque, raise the nose to slow down trade your airspeed to hold the altitude. As the speed drops below 70 apply full flap. As the speed drops to 60 apply power to 4000 RPM.

This should stabilize the airspeed at about 55 mph at 3000 feet.

If you need to turn the plane use no more than 10 Degrees of bank. Turns to the left will be easier due to the left turning tendencies you experience at high power and low airspeed. Just like on take off.

Returning to normal cruse flight is easy.. Apply full power. Retract the flaps to 0. Allow the speed to build by allowing the nose to come over slowly to a normal flight attitude. Reduce the throttle to a normal cruse power of about 4800 RPMs.

FLIGHT TRAINING SUPPLEMENT – TURN ABOUT A POINT

The object of this maneuver is to circle a point on the ground maintaining altitude and an equal distance from a ground reference point while traveling in a coordinated manner.

Establish Level flight at 800 to 1000 feet AGL

Find a reference point off one wing or the other about a quarter mile away. This is most often off your left side.

Enter the maneuver while going down wind.

Roll in to a turn when you are abeam the point.

The turn should be shallow enough that the wing tip stays over the point.

The easiest way to do this is to look at your distance to the point and find another point ahead of you at the same distance and fly over it. Then do it again and again all the way around the circle. This will force you to automatically correct for the wind.

FLIGHT TRAINING SUPPLEMENT – "S" TURN ALONG A ROAD

The object of this is like the Turnabout a point. You will maneuver your aircraft maintaining altitude and an equal distance from a ground reference points while traveling in a coordinated manner. This is basically a half a Turnabout a point one direction followed by half a Turnabout a point in the other direction.

Establish Level flight at 800 to 1000 feet AGL

Find a straight road or power line to use as a reference point. I like a power line myself

Enter the maneuver while going down wind.

Cross the line perpendicular.

As you cross the line, roll in a shallow turn.

Whatever your wing tip falls on becomes your reference point for your first half circle

Continue your slow lazy turn so as to cross the line perpendicular as you cross on the other side.

Roll from one side to the other and pick a new reference point on the other side of the plane at about the same distance as your first point.

The turn should be shallow enough that the wing tip stays over the point.

Cross the line again and roll out perpendicular at the same altitude as you started

The easiest way make your turns is to look at your distance to the point and find another point ahead of you at the same distance and fly over it. Then do it again and again all the way around the half circle. This will force you to automatically correct for the wind.

FLIGHT TRAINING SUPPLEMENT – STEEP TURNS

The object of this maneuver is to circle at a 45 degree bank maintaining altitude and bank angle through a 360 degree turn.

Look for Traffic.

Establish Level flight at 3000 feet AGL or above. Power should be 4800 to 5000 RPMs.

Find a reference point off the nose about 1 to 5 miles away.

Roll in to a turn when you are in stabilized flight. Be sure to maintain coordinated flight.

As the bank increases back pressure should be able to maintain the pitch on the horizon and a level altitude. It is much easier to keep the nose up then it is to get the nose back up.

Begin the roll out about 22 degrees (half your bank angle) of heading before your reference point.

Maintain heading and altitude.

Note: Common mistakes include raising the nose before the bank is applied enough. This will cause a climb before the bank is established. Also use of too little power will cause the nose to be too high creating a risk of an accelerated stall and a bad view over the nose as you begin the maneuver.

FLIGHT TRAINING SUPPLEMENT - STALL

The ALLEGRO(R) LSA is fully controllable when flying at a wide range of airspeeds, however if the lower speed limits exceeded, the aircraft will display very stable stall characteristics. If the airspeed is reduced by the pilot gradually pulling back on the control stick, aerodynamic buffet will occur, indicating that the aircraft is approaching the stall speed. Should the aircraft then be allowed to stall, the aircraft will remain controllable and the maneuver will result in a gentle and stable descent. The aircraft can be stalled both with flaps extended or retracted.

Conducting a stall maneuver does not require a special skill, nevertheless, if not yet familiar with the aircraft we recommend to do this exercise only when accompanied by an experienced flight instructor for the first time.

FLIGHT TRAINING SUPPLEMENT - SLIP

The slip is a very stable flight condition and is also very easy to perform. This maneuver is used to increase aerodynamic drag to enable a high rate of descent.

Before establishing a slip you have to ensure that the airspeed is within the required limits, the maximum permissible indicated airspeed of 86 mph (75 kts) (VA) should not be exceeded and if performing a slip with flaps extended, a maximum indicated airspeed of 70 mph (63 kts) (VFE) must be maintained. You will achieve the maximum descent rate at an indicated airspeed of 63 mph (55 kts) with flaps extended fully.

Conducting a slip will not require special skills, nevertheless, if not yet familiar with the aircraft, we recommend to do this exercise only when accompanied by an experienced flight instructor for the first time.

FLIGHT TRAINING SUPPLEMENT – FORWARD SLIP

Pick a Reference point straight ahead. I.e. A Water tower or the far end of the Runway

Establish a glide below 70 with flap your desecration. For maximum effect, use full flap.

Apply full Rudder moving the nose approximately 20 to 25 Degrees

Maintain full rudder as a constant throughout the maneuver

Apply opposite Aileron to drive the direction of the aircraft toward the reference point.

Recovery

Remove all Rudder input

Remove all Aileron input

Return the Aircraft to coordinated flight with the nose directly pointed at the reference point.