



The “Pre-Maneuver Checklist” must be completed before beginning any maneuvers.

Power Off Stall:

(Approach to Landing Stall)
Select your heading and altitude

Verbalize
Bug it

Clearing turns (90° each way; be precise)

Throttle 3400 rpm

Pitch nose to maintain alt (check heading)

Verify N_{FE} (75 knots or less)

First notch flaps

Right rudder (check heading, inclinometer)

Full flaps

Power to idle

Initiate descent

Flare to land

Hold until stall

Recovery:

Full power

Relax back pressure

Flaps to $\frac{1}{2}$

Pitch to V_X (56 kts)

Flaps to 0°

Maintain V_X to 3000 ft

Power On Stall:

(Departure Stall)

Select your heading and altitude

Verbalize
Bug it

Clearing turn (90° each way; be precise)

Power to idle

Slow to 55 kts (maintain heading & altitude)

Full power (maintain heading & altitude)

Increase pitch to stall (increase right rudder)

Recovery:

Decrease back pressure to break stall

Pitch to V_X (56 kts)

Resume climb

3 Reasons for More Right Rudder

High pitch attitude

Low airspeed

High power setting

Slow Flight:

Select your heading and altitude

Verbalize
Bug it

Clearing turns (90° each way; be precise)

Throttle 3400 rpm

Pitch nose to maintain alt (check heading)

Verify N_{FE} (75 knots or less)

First notch flaps

Slight power increase (approx. 200 rpm)

Right rudder (check heading, inclinometer)

Full flaps

Slow to 40 kts (+5, -0 kts, $\pm 10^\circ$ heading)

Power for Altitude

Pitch for Speed

Steep Turns:

Select your heading and altitude

Verbalize
Bug it

Clearing turn (90° be precise)

Power to 4500 rpm

Maintain V_A (88 kts (± 5 kts))

Simultaneously roll in, power to 4700-4800 rpm

If high, overbank to 50°

If low, decrease bank to 40°

Roll out briskly 15° prior to heading

Bring power back to 4500 rpm

Normal Takeoff:

Flaps Zero

Nose Wheel straight and on Centerline

Full Power anticipate Right Rudder addition

Use Rudder to hold centerline

Verify "airspeed alive"

Apply back pressure at 50kts

Allow the airplane to fly off the runway, rather than "pulling it off the ground"

Release back pressure when nose wheel leaves the ground

Pitch for 65kts

Establish visual picture consistent with 65kts

Verify that aircraft is tracking straight out from Runway – check crosswind correction

Upon reaching 200 feet and clear all obstacles lower nose to Pitch for 70kts

S-Turns Across a Road:

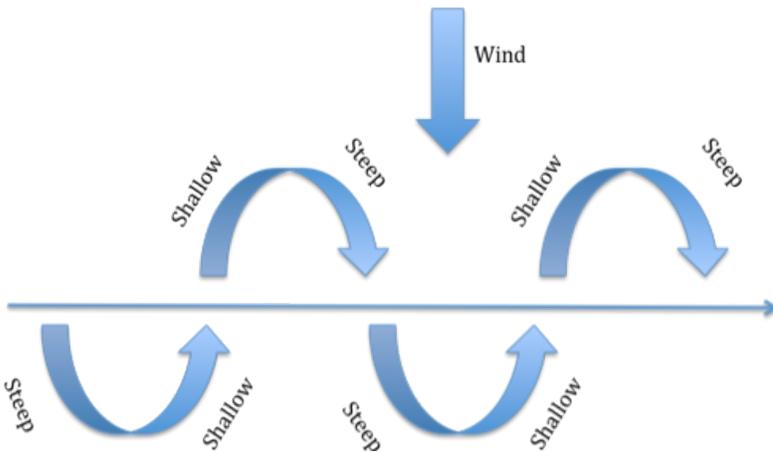
Power to 4800 rpm
Airspeed to 88 kts
Altitude 1000 ft. AGL (ACS: 600-1000 ft AGL)

Verbalize selected altitude
Select a ground reference 90° to the wind

Enter downwind (with the wind)

During maneuvering:

Maintain altitude ± 100 ft
Maintain airspeed ± 5 kts
Maintain direction $\pm 10^\circ$



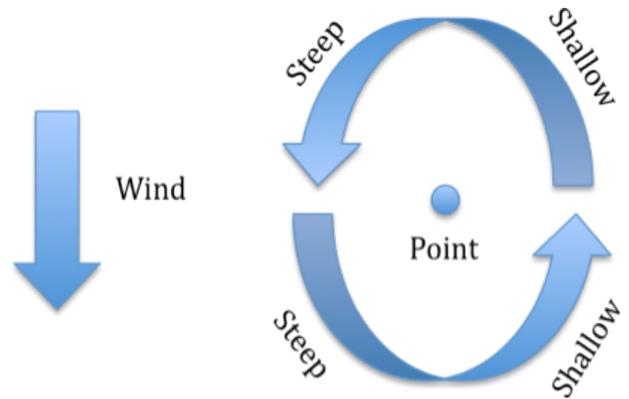
Downwind turns are steeper.
Upwind turns are shallower.

Turns Around a Point:

Power to 4800 rpm
Airspeed to 88 kts
Altitude 1000 ft. AGL (ACS: 600-1000 ft AGL)

Verbalize selected altitude
Enter downwind
During maneuvering:

Maintain altitude ± 100 ft
Maintain airspeed ± 5 kts
Maintain direction $\pm 10^\circ$



Downwind turns are steeper.
Upwind turns are shallower.

Soft Field Takeoff:

Flaps 12 degrees

Taxi onto runway with full back elevator pressure applied and minimal or no braking

Full Power

Slight release of back pressure

Verify "airspeed alive"

Use Rudder to hold centerline

Allow the airplane to fly off the runway, rather than "pulling it off the ground" this should occur 45kts or less

Level off in ground effect

Accelerate to Vy 62kts

Climb out at Vy 62kts

At 200 feet AGL and clear all obstacles raise flaps to 0 degrees

Pitch to hold Vy 62kts until turning crosswind

Short Field Takeoff:

Flaps 12 degrees

Hold Brakes and add Full Power

Check all engine gauges green then release brakes

Use Rudder to hold centerline

Verify "airspeed alive"

Apply back pressure at 45kts

Allow the airplane to fly off the runway, rather than "pulling it off the ground"

Climb at Vx 55kts

Upon reaching 50ft AGL pitch for Vy 62kts

At 200 feet and clear all obstacles raise flaps to 0 degrees

Pitch to hold Vy 62kts until turning crosswind

Steep Spiral:

Select your heading and altitude
Verbalize
Bug it

Clearing turns (90° each way; be precise)

Select point

Align into the wind

When abeam selected point reduce throttle to idle

Bank to ~45 degrees to begin

Slow to 70kts and maintain using pitch (± 10 kts)

Adjust bank as you turn to stay over the same point on the ground(not to exceed 60 degrees)

Pitch nose to maintain airspeed

Upon returning to initial HDG

Increase power to 4000RPMs momentarily to clear engine

Repeat process for 2 more turns, clearing the engine each time initial heading is reached.

At conclusion of 3rd 360 degree turn - add power to normal cruise setting and depart on entry HDG (± 10 degrees)

Complete cruise checklist

*recovery must be performed above 1500ft AGL

Accelerated Stall:

Select your altitude & Verbalize
Clearing turns (90° each way; be precise)

Throttle 3000 rpm

Pitch nose to maintain alt

Slow to 70 knots or less

Bank to 45 degrees

Abruptly pull back on the elevator

Correct for overbanking tendency (apply opposite aileron as needed)

Hold until 1st indication of stall

Recovery:

Relax back pressure and simultaneously level wings
Full power

Lazy Eights:

Select heading and altitude

Verbalize

Bug it

Clearing turns (90° each way; be precise)

Begin at 88kts set power 4800RPM to maintain V_a

Select 45°, 90°, 135° references

Increase pitch & bank 1-2° per second (up to ~17° and speed should be near 50kts)

45°: 15° bank & max pitch up

Begin to decrease the pitch attitude and increase the bank angle

90°: 30° bank, level pitch

Begin slowly decreasing the bank angle

135°: 15° bank & max pitch down

Level off at 180° from start at entry altitude, airspeed and reciprocal heading

Repeat steps above to the right

Chandelle:

Select heading and altitude
Verbalize
Bug it
Clearing turns (90° each way; be precise)
Begin at 88kts set power 4800RPM to maintain V_a
Select 90° reference
Bank smoothly to 30°
Increase power smoothly to full
Slowly increase pitch to 15-17°
Should reach max pitch and hold at 90° point

Maintain the pitch and slowly decrease bank angle to 0° at 180° point

Hold pitch and airspeed for a few seconds

Slowly decrease pitch without losing altitude and regain speed

Practice in both directions

Eights on Pylons:

Fly 45° from the downwind leg
Bug this heading
Power 5000RPM/normal cruise
Determine & establish pivotal altitude
Verbalize
Bug it
Select ground reference point
Select Emergency Landing spot

Begin bank when point is abeam wing (no more than 40°)

Use pitch to maintain point on reference line (pitch smoothly)

If point appears ahead of wing
Pitch the nose down to increase Ground Speed

If point appears behind wing
Pitch the nose up to decrease Ground Speed

Exit the first turn 90° prior to the entry heading (45° to the downwind in the other leg)

After 5-7 seconds select pylon off the right wing and begin turn

Exit the maneuver on the original entry heading