



STEEP TURNS, SLOW FLIGHT, & STALLS

By Betsy

DISCLAIMER: All maneuvers, speeds, and settings are for CFTAR's N8926V C172M.

Before Doing Any Maneuvers:

1. Conduct 90 degree cleaning turns either to the left or to the right.
 - a. Once cleared, call out: "No obstructions, no weather, no clouds, no airplanes" & indicate a spot chosen in case of engine failure during flight.
2. Select and call out: heading & altitude.
 - a. Never below 1,500'
3. Landing lights on, mixture rich, fuel selector valve on both.

Steep Turns to the Right:

1. RPM 2,200 with airspeed below maneuvering speed ($V_a = 111$), ~104 MPH.
2. Pick reference to aid when rolling out, start turning to the right
3. Once 30 degrees of banking is achieved add ~100 RPM, gradual back pressure, and right rudder.
4. Once 45 degree banking angle is achieved maintain 45 degree bank angle until reference point is reached.
5. Commence roll out ~ 20 degrees prior to reaching reference aid/ previously picked heading.
6. Pull back power to 2,200 RPM, let go of back pressure, and let go of right rudder.

Steep Turns to the Left:

1. RPM 2,200 with airspeed below maneuvering speed ($V_a = 111$), ~104 MPH.
2. Pick reference to aid when rolling out, start turning to the left
3. Once 30 degrees of banking is achieved add gradual back pressure and a little bit of left rudder.
4. Once 45 degree banking angle is achieved maintain 45 degree bank angle until reference point is reached.
5. Commence roll out ~ 20 degrees prior to reaching reference aid/ previously picked heading.

Slow Flight Without Flaps:

1. Carb heat out, RPM 1,500
2. Airspeed 65-70 MPH
3. Add power to 1,700 RPM while maintaining airspeed.

Slow Flight With Flaps:

1. Carb heat out, pull power back to 2,000 RPM.
2. Once airspeed is below 100 MPH add 10 degrees of flaps.
3. Carb heat out, pull power back to 1,500 RPM and add 40 degrees of flaps.
4. Airspeed should 60 MPH.
5. Add power to 2,000 RPM while maintaining airspeed.

Power Off Stalls:

1. Carb heat out, pull power back to 2,000 RPM.
2. Once airspeed is below 100 MPH add 10 degrees of flaps.
3. Carb heat out, pull power back to 1,500 RPM and add 40 degrees of flaps.
4. Airspeed should 60 MPH.
5. Pull power back to idle and descend ~100-200' at 60 MPH.
6. Apply back pressure until stall is obtained.
7. Once stall is obtained pitch below the horizon, put carb heat in, add full power, and add right rudder (to prevent spin from occurring), & retract flaps to 20 degrees.
8. Begin to climb at 68 MPH and work retracting the remaining 20 degrees of flaps once positive rate of climb is obtained.
9. Continue climbing until reaching original altitude.

Power On Stalls:

1. Carb heat out, pull power back to 1,500 RPM
2. Obtain Vr of 60 MPH
3. Carb heat in, full throttle, and add right rudder (to prevent spin from occurring).
4. Apply back pressure until stall is obtained ~ 20 degrees pitch up.
5. Once stalled, pitch below the horizon and then towards the horizon once recovered.