

Pre-Maneuver

- 1) Clearing Turns 2x 90°
- 2) Altitude Adequate
- 3) Fuel Both
- 4) Mixture Rich
- 5) Carb Heat Off In Green Arc

Slow Flight

- 1) Clearing turn +1500 feet AGL
- 2) Carb heat on: Power to 1500: Flaps 10°
- 3) Increase pitch to maintain ALT as airspeed decreases
- 4) Flaps 30°
- 5) (65mph/ 55kts) increase power to maintain level flt
- 6) TRIM
- 7) Perform straight and level, and turns (20° or less)
- 8) Pitch Airspeed- Power Altitude

Recovery

- 9) Apply full power, flaps 20°, pitch level flight
- 10) Flaps to 10° accelerating through (70/60)
- 11) Flaps to 0° accelerating through (80/70)- TRIM
- 12) Accelerate to normal cruise

Power Off Stall (Landing Stall)

- 1) Clearing turn +1500 feet AGL
- 2) Carb heat on: Power to 1500
- 3) Flaps 30°
- 4) Establish (70mph/60kt) descent
- 5) Power idle
- 6) Apply back pressure to maintain altitude

Recovery

- 7) Release back pressure to reduce pitch
- 8) Full power, wings level with coordinated rudder and aileron
- 9) Flaps to 20° immediately, nose to horizon
- 10) Positive VSI, Flaps to 10°
- 11) Positive VSI, Flaps to 0°
- 12) Stabilize climb out at Vy (80mph/70kts)- TRIM

Power On Stall (Departure Stall)

- 1) Clearing turn +1500 feet AGL
- 2) Carb heat on: Power to 1500
- 3) Slow to (65mph/ 56kts) level flight
- 4) Full Power
- 5) Smoothly increase the pitch to induce stall (20°)

Recovery

- 6) Release back pressure to reduce pitch
- 7) Wings level with coordinated rudder and aileron
- 8) Establish Vy pitch attitude
- 9) Stabilize climb out at Vy (80mph/70kts)- TRIM

Steep Turns

- 1) Clearing turn +1500 feet AGL
- 2) Note heading (outside reference point) and altitude
- 3) Power 2500, cruise airspeed below Va
- 4) Roll into a 45° bank turn, add power
- 5) Back pressure and power to maintain altitude and airspeed
- 6) Continuous scan (out front, altimeter, AS indicator)
- 7) Lead rollout for heading by 20°
- 8) Power to 2500

V Speeds (MPH/Kts)

Vso: 48/42

Vs1: 54/48

Vr: 55/50

Vx: 70/60

Vy: 78/68

B Glide: 70/60

Vfe: 100/86

Va: 109/97

Vno: 120/111

Vne: 162/141

Max X-wind: 15kts

Turns Around a Point

- 1) Clearing turn, 600'-1,000' AGL
- 2) Enter downwind at (~104mph/ 90 kts)
- 3) When point is under wing, begin left turn of approx. 30° (steepest bank)
- 4) Two circuits Alt +/-100' A/S +10 Kts. Hdg. +10°

S Turns

- 1) Clearing turns, 600'-1,000' AGL
- 2) Enter downwind trimmed at (~104mph/ 90 kts)
- 3) When reference line is under wing, roll into left turn (steepest bank)
- 4) As you turn past the 90° point, reduce bank to track a symmetric half circle
- 5) Cross the 180° point with wings level and parallel with reference line
- 6) Repeat 2-5 but in a right turn.
- 7) Altitude +100' A/S +10 Kts.

Short Field Takeoff (0° Flaps)

- 1) Use all available runway
- 2) Hold brakes
- 3) Full power
- 4) Announce (engine instruments in green)
- 5) Release brakes
- 6) Announce "airspeed alive"
- 7) Accelerate to Vx (70/60) and rotate
- 8) Climb at Vx (70/60) until obstacle is cleared
- 9) Announce "obstacles cleared" pitch for Vy (80/70)

Short Field Landing (30° Flaps)

- 1) Select runway touchdown point
- 2) Abeam touchdown point (power 1700rpm, 10° flaps)
- 3) Pitch for (80mph/ 70kts).
- 4) When touchdown point is 45° off shoulder turn base
- 5) 20° flaps and pitch (75mph/ 65kts).
- 6) Turn final, 30° flaps, pitch (70mph/ 60kts).
- 7) Smoothly reduce power so as to land on the selected point on the runway +200 feet
- 8) Upon landing, simulate max braking

Soft Field Takeoff (10° Flaps)

- 1) Taxi onto runway centerline with yoke full aft
- 2) No brakes, keep rolling and smoothly apply full power
- 3) Announce (engine instruments checked)
- 4) Reduce back pressure to allow nose wheel to remain off ground
- 5) Announce "airspeed alive"
- 6) When airborne, lower nose in order to remain in ground effect
- 7) Accelerate to Vx (70mph/ 60kts).
- 8) Retract flaps
- 9) Continue climb at Vy (80mph/ 70kts).

Soft Field Landing (30° Flaps)

- 1) Abeam touchdown point (power 1700rpm, 10° flaps)
- 2) Pitch for (80mph/ 70kts).
- 3) When touchdown point is 45° off shoulder turn base
- 4) 20° flaps and pitch for (75mph/ 65kts).
- 5) Turn final, 30° flaps, pitch for (70mph/ 60kts).
- 6) Approaching touchdown, begin flare, using power to minimize sink rate and touchdown as gently as possible
- 7) Apply full back pressure on yoke to keep weight off nosewheel. Aerodynamic braking only