

Commercial ACS Maneuvers (Cessna 182T) 7/12/2023

SLOW FLIGHT	STEEP TURNS
Altitude > 3000 AGL Cowl flaps open Throt to 1800, then prop-full, then 18" Hold alt. while slowing and adding full flaps Add power on back side of curve Slow to stall horn, then +5 knot Power as needed to hold altitude -- w/flaps: 2000rpm, 55kts -- no/flaps: 1900rpm, 63kts <i>Altitude +/-50, Heading +/-10, Speed +5/0, Bank +/-5°</i>	Altitude > 3000 AGL; Pick heading reference Entry: 100kts (18", 2200, mix lean) Bank 50°, slight pitch up Add power to maintain speed Rudder - keep ball in center Roll out on heading (1/2 bank) Repeat, opposite direction <i>Altitude +/- 100, Speed +/- 10, Bank +/- 5°, Heading +/- 10 on rollout</i>
POWER ON STALL	ACCELERATED STALL
Altitude > 3000 AGL, Rich Mix, CFlaps-Open Entry: Slow Flight down to 55kts, 10° flaps Add power: 21" MP (67% power) Pitch up gradually for full-stall Acknowledge stall horn Continue pitch up until stall break Recover: pitch down, full power Climb Vy (80 KIAS) Cowl Flaps Open <i>Heading +/-10°, Bank max 20° +/-10°</i>	Altitude > 3000 AGL on recovery Prop-full, Mx Rich, NO flaps Entry: 85kts (prop-full, throttle to 2300) Turn w/ 45° bank Increase back pressure until stall horn Recover at stall horn! Lower pitch, Level wings Full Power, Climb 80 KIAS <i>climb Vx or Vy to original altitude</i>
POWER OFF STALL	8's on PYLON
Altitude > 3000 AGL, Rich Mix, CFlaps-Closed Entry: Slow flight to 65kts while holding altitude and adding full flaps Descend power-off at 65 kts Pitch up slowly for full-stall Acknowledge stall horn Continue pitch up for stall break Recover: pitch down, full power... ...Flaps 20°, 55 KIAS, Cowl Open Retract flaps slowly after 70 KIAS <i>Heading +/-10, Bank max 20° +/-5°</i>	Pick 2 "pylons", 1/2 mile apart Pylons should be perpendic. to wind Entry: 100kts (18", 2200) Enter 45° downwind, ~900' Pivotal Alt.(670' at 87, 1100' at 113 kts) If pylon gets AHEAD of ref line, descend! If pylon gets BEHIND ref line, climb! Fly S&L 3-5 seconds between pylons <i>Max bank 40°; Keep reference line on pylon</i>
	STEEP SPIRAL
	Pick reference point (low and close) Determine wind direc.; close cowl flaps Altitude - for 3 turns (>=4500') Entry: 80kts (idle) Bank - steepest < 60° Bank - steepest downwind of point <i>Speed +/-10, Bank max 60°, >1500' AGL</i>

SHORT FIELD TAKE OFF	SHORT FIELD LANDING
Use full runway length, flaps 20° Hold brakes, add full power Check Gauges, release brakes Climb @ 58 (12.5°) to agreed obstacle ht. Accelerate to Vy, flaps UP>70 <i>Speed +5/-5</i>	ID touchdown target Approach 60 kts (+ gust factor) Aiming point 100-200 feet short Touchdown at or beyond target Lower nose, brake, retract flaps <i>Speed +5/-5</i> <i>Land at or beyond, but within 100 ft.</i>
SOFT FIELD TAKE OFF	SOFT FIELD LANDING
taxi without stop, 20° flaps Slowly add full power Keep tail low, balance on mains After liftoff, pitch down Accelerate Vx or Vy in gnd effect (70kts) Climb at Vx or Vy, retract flaps (80kts) <i>Speed +5/-5</i>	Approach 65 kts(+ gust factor) Smooth roundout & flare Add power if necessary for soft ldg Hold nose high, minimal brakes <i>Speed +5/-5</i>
NORMAL LANDING	POWER-OFF 180 APPROACH
<i>200 ft. touchdown zone</i>	ID touchdown target
GO AROUND	
Full power, Flaps 20° Climb at 55 KIAS Offset to side of runway (if traffic) Open cowl flaps Retract Flaps slowly > 70 KIAS Radio - report going around <i>Speed Vy +5/-5</i>	Power - IDLE, downwind abeam Speed - best glide 70 KIAS Short final - 60 kts (+ gust factor) Aiming point 100-200 feet short Touchdown at or beyond target Brake heavily, Retract flaps <i>Land at or beyond, but within 200 ft.</i>
CHANDELLE	LAZY EIGHT
Pick Reference on wingtip, Mix Rich Cowl flaps open Entry: Prop-full, 16" MP Bank 30°, Power - FULL Pitch - slowly increase to max (17.5°) After 90°, Hold pitch, reduce bank After 180°, speed just above stall Hold altitude, accelerate to cruise <i>Rollout +/-10°, Speed near stall</i>	Pick Reference on wingtip Cowl flaps - Closed Entry: 100kts (18", 2200) Gentle Pitch and Bank changes! At 45°: Max pitch up (15°) , 15° bank At 90°: Zero pitch, 30° bank At 135°: Max pitch down (10°), 15° bank At 180°: pitch and bank level Repeat other direction <i>Speed at 90°, about 60 kts</i> <i>After 180°, +/-100 feet, +/- 10 kts</i>