

<i>Remember: 2x90° / GUMPS</i>	<i>Speed (unless noted) +10/-5kts</i>	C172S - PPL - v1.2
Nav Log for Dead Reckoning	Normal Flap Cleanup	Go-Around
After takeoff clearance, start timer or write down time	1st notch immediately	Full power, Flap 20
	2nd notch at positive rate	Climb Vy, Normal Flap Cleanup
<i>w/in 3nm of route & 5min of ETA; ±200'; ±15°</i>	Rest of flaps up at climb speed	"Power Up, Pitch Up, Clean Up"
Slow Flight	Normal Takeoff	Forward Slip to Landing
Power -> 1500 RPM	Verbalize eng/instruments good	Full rudder opposite wind
Hold Altitude While Slowing	Climb at Vy	Bank for centerline
Set config (cruise or landing)	Normal Landing	<i>Gnd trk along extended cntrlne</i>
Power ~> 2000 RPM to hold	Approach 65kts (+1/2 gust fctr)	Normal Landing after glidepath
<i>+10/-0kts;±100';±10hdg;±10bank</i>	<i>Land w/in 400' of specified point; parallel, cntrlin, nose up, no drift</i>	Ground Reference Maneuvers
Power Off (Landing) Stall	Soft-Field Takeoff	Set power~>2100 RPM; leave it
Slow Flight 65kts; lndg config	Taxi w/o stop, yoke back, 10 flap	600'-1000' AGL, ~1/4 mile away
Descend 65kts w/ 1500 RPM	Liftoff early; accel in ground effect	Rect Fld: Enter 45 of downwind
Power OFF; Pitch stall attitude	At Vx or Vy, start climb; flaps up	Turns...Point: Enter downwind
Verbalize first indication of stall	Soft-Field Landing	S-Turns: Enter perpendicular and downwind
Hold to full break	Approach 65kts (+gust factor)	ID ground points to fly between
Recover: pitch below horizon;	Smooth roundout & flare	<i>±100'; ±10kts; constant radius</i>
Normal Flap Cleanup. Climb Vy	Add power if needed for soft ldg	Emergency Descent
<i>hdg±10° or bank (<20°) ±10°</i>	Nose high, minimal braking	<i>Bank 30°-45° (+ G's)</i>
Power On (Takeoff) Stall	<i>Min. sink, parallel, cntrlin, nose up, no drift; elevtr back thru exit</i>	Airspeed >= 100 to put out fire
Slow Flight 55kts; t/o config	Short-Field Takeoff	Execute Forced Lndg (ABCDE)
Pitch to stall attitude	Use full rwy length, flap 10	<i>+0/-10kts; specified alt ±100'</i>
Add power (2400 RPM)	Hold brakes, add full power	Engine Failure in Flight
Verbalize first indication of stall	Check gauges, release brakes	Airspeed: 68kts
Hold to full break	Climb 56kts to agreed obst hgt	Best field - Turn to it!
Recover: pitch ~Vy attitude to recover; full power. Climb Vy.	After obst, accel to Vy, flaps up	Checklist - Flow, then Check
<i>hdg±10° or bank (<20°) ±10°</i>	Short-Field Landing	Forced Landing
Steep Turns	ID touchdown target	Declare: MAYDAY, squawk 7700
Crisp roll to 45° bank; add power	Approach 61kts (+gust factor)	Execute:
Aft pressure for altitude	Aiming point 100-200 feet short	Glide to key position
Rollout on entry heading	Touchdown at or beyond target	Circle over touchdown point
Reduce power to initial setting	Lower nose, apply brakes & aerodynamic braking, raise flaps	Secure fuel+electrical (aftr flaps)
<i>±100'; ±10kts; bank±5°; hdg±10°</i>		Unlatch doors; Protect bodies
	<i>Land w/in 200' of specified point; parallel, cntrlin, nose up, no drift</i>	