**Cessna 172 CFI Maneuver Setup:** Clearing Turns, Mixture RICH, Fuel Selector BOTH, Carb Heat on if lower than the RPM Green Arc

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| **Slow Flight**   * 1500RPM * Flaps to 20deg, then 2100RPM * Slow to just above stall +5/-0kts * Adjust power to maintain altitude +/- \_\_\_\_ ft * Climb and descend at constant airspeed   **Power Off Stall**   * From Slow Flight, descent at 500ft/min * Throttle to idle, recover at first buffet * Private would be to full stall * Pitch, Power, Clean-Up * Maintain Heading +/-10degs   **Power ON Stall (Gear up & down)**   * 1500RPM * Flaps zero * Slow to 65kts, Throttle to 2100 * Slowly increase pitch to first buffet * Pitch, Power, Clean up * One while maintaining heading +/-10degs * One while in a 20deg turn. | **Accelerated Stall**   * 1600rpm * Bank 45deg * Maintain or Increase altitude * Recover on first buffet * Level wings, Pitch, Power, Clean up   **~~Trim Stall~~**   * ~~1400RPM~~ * ~~Trim all the way back~~ * ~~Throttle to idle~~ * ~~Establish 65kts without resetting trim~~ * ~~Full throttle, release pressure on yoke~~ * ~~Nose will rise~~ * ~~Recover first buffet~~ * ~~Pitch, Power, Clean up, Adjust trim~~   **~~Secondary Stall~~**   * ~~Set up for trim stall~~ * ~~When recovering from trim stall let a second stall happen by pitching up after first recovery.~~ * ~~Recover first buffet~~ * ~~Pitch, Power, Clean up, Adjust trim~~ | **~~Cross Controlled Stall~~**   * ~~1400RPM~~ * ~~Flaps Up, trim for 65kts~~ * ~~Left turn for Final (use a road)~~ * ~~Apply left rudder as in overshoot~~ * ~~Don’t let bank exceed 20deg~~ * ~~Left Rudder, 20 deg bank, pitch up~~ * ~~Recover on first buffet~~ * ~~Wings level, pitch, power, cleanup~~   **Steep Turn**   * 2200RPM * Must be below VA 97Kts * Bank 50 deg +/- \_\_\_\_ * Maintain Altitude +/-\_\_\_\_ ft   Rollout +/- \_\_\_\_ degs  **Lazy Eights**   * 2200RPM * Turn 5deg left, slowly increase pitch * 45deg pt: Max pitch up and 15deg bank,, 75MPH * 90deg pt: Pitch level, 30 deg bank * 135deg pt: Max pitch down, 15deg bank * 180deg pt: Level pitch and bank, * starting altitude +/- \_\_\_\_ ft * Heading +/-\_\_\_\_deg * Repeat to the right. |

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| **Emergency Descent**   * Throttle idle * Bank 45 deg bank * Pitch down for just below Va * Recover at \_\_\_\_\_\_ ft   **Chandelles**   * Full throttle * Bank 30deg * Power FULL * Slowly increase pitch * Max Pitch \_\_\_\_ deg at 90deg Pt then * Hold Pitch to 180 deg pt while * Slowly decreasing bank   **Remember:** Half pitch up at 45deg pt and 15 deg bank at 135 deg pt  **Simulated Engine Out**   * Climb to 3000ft AGL or above * Throttle to Idle * **A**irspeed Best Glide * **B**est Place to Land (in 15 seconds) * **C**hecklist * Verify best place to land into the wind * Recover before 500ft AGL if not over a runway | **Sturns**   * Throttle to 2200RPM * Enter on downwind * Radius 1/2mile * Tailwind: Steeper bank * Headwind: Shallower bank * Pick five points on the Sturn to help maintain correct radius * Maintain Altitude \_\_\_\_\_ ft   **Turns Around a Point**   * Throttle to 2200RPM * Enter on downwind * Radius 1/2mile * Tailwind: Steeper bank * Headwind: Shallower bank * Pick four points on the Turn to help maintain correct radius * Maintain Altitude \_\_\_\_\_ ft   **Checklist for Simulated Engine Out**   * Fuel Selector BOTH * Mixture Rich * Carb Heat ON * Check Mags * Squawk \_\_\_00 * Call ATC, use 121.5 if needed. | **Steep Spiral**   * Throttle to idle * Airspeed best glide * Spiral over the landing point with a bank angle from zero to 45deg * Shoot for abeam the landing point 1000ft agl   **Eights on Pylons**   * Throttle to 2200RPM * Calculate Pivotal Altitude \_\_\_\_\_ft * Enter on downwind * Tailwind: Rising altitude * Headwind: Decreasing altitude * Maintain Pylon on rivet line   **180deg pwr off accuracy landing**   * Throttle 2200rpm on downwind * Abeam landing pt: * Throttle to idle, best glide speed * Use flaps as needed to land on the landing point -0/+\_\_\_\_\_ft   **Short Field Landing**   * On Final, Airspeed 55-60kts * Flaps 40deg * Power for altitude, Pitch for airspeed |

**Cessna 172N Before Landing:** Mixture Rich, Fuel on both, carb heat ON midfield downwind, seatbelts on.

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| **Short Field Takeoff**   * Flaps 10degs, Full Brakes, Full Power, Release brakes * Climb at Vx, * Gear up at positive climb rate * Once clear of obstacle, Flaps up * Climb at Vy   **Soft Field Takeoff**   * Flaps 10degs, * Yoke back during taxi * Add Full Power on runway * Hold nose so shock absorber is fully extended * Rotate at the bottom of the green arc * Stay in ground effect until Vx * Climb at Vx, Gear up at positive rate * Once clear of obstacle, Flaps up slowly * Climb at Vy   **Soft Field Landing**  On Final   * Airspeed 60-65kts * Flaps 30deg * Power for altitude, Pitch for airspeed * Hold nose up as long as possible * Yoke back full until cleared from runway | **Loss of Oil Pressure**   * Is it the gauge? * Does the engine run fine? Cool? * Climb as you determine what to do. * Land at nearest airport. * Prepare for an off airport landing if engine quits or vibrates excessively.   **Alternator Failure**   * Reduce Electrical Load * Check Alternator CB’s * ALT switch OFF for 10 seconds, then ON * If Ammeter still zero, turn off ALT sw * Maintain minimum elec load * Land as soon as practical at an airport   **High Oil Temp**   * Increase Mixture * Increase speed without power increase * Land at nearest airport   **Spins**   * Throttle IDLE, Ailerons neutral * Rudder OPPOSITE of rotation * Yoke Forward * Rudder neutral when rotation stops * Yoke adjusted for level flight | **Open Door**   * Close below 70kts * Cabin Vents Closed * Window open * Open door and try to re-close * Best option is probably to land and close door   **Engine Fire**   * Fuel Selector OFF * Throttle Closed, Mixture Cut Off * Heater/Defroster OFF * Emergency descent * Land Immediately   **Electrical Fire**   * Master sw OFF * Vents OPEN * Heat OFF * Land at nearest airport * Prepare for off field landing if needed   **Airspeeds**  Vrot: \_\_\_\_\_\_kts  Vx: \_\_\_\_\_\_kts  Vy: \_\_\_\_\_\_kts  Va: \_\_\_\_\_\_kts  Vfe: \_\_\_\_\_\_kts |