**PA28R-200 CFI Maneuver Setup:** Clearing Turns, Mixture RICH, Fuel Pump ON, Fuel Selector SET, Gear Override locked UP

|  |  |  |
| --- | --- | --- |
| **Slow Flight*** 15”MP, Prop Forward, Gear Down
* Flaps to 25deg
* 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)*** 15”MP, Prop Forward, Gear Down
* (One stall Gear down, one Gear Up)
* Flaps zero
* Slow to 90MPH, Throttle to 21”
* Slowly increase pitch to first buffet
* Pitch, Power, Clean up
* One while maintaining heading +/-10degs
* One while in a 20deg turn.
* May need to do one with gear up
 | **Accelerated Stall*** 15”MP, Prop Forward, Gear Down
* Bank 45deg
* Maintain or Increase altitude
* Recover on first buffet
* Level wings, Pitch, Power, Clean up

**~~Trim Stall~~*** ~~15” MP, Prop Forward, Gear Down~~
* ~~Trim all the way back~~
* ~~Throttle to idle~~
* ~~Establish 90mph without 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~~*** ~~10” MP, Prop forward, Gear down~~
* ~~Flaps Up, trim for 85mph~~
* ~~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*** 18-20” MP, Prop 2400RPM, Gear UP
* Must be below VA 129mph
* Bank 50 deg +/- \_\_\_\_
* Maintain Altitude +/-\_\_\_\_ ft

Rollout +/- \_\_\_\_ degs**Lazy Eights*** 20”MP, Prop 2400RPM, Gear Up
* 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.
 |

**PA28R-200 CFI Maneuver Setup:** Clearing Turns, Mixture RICH, Fuel Pump ON, Fuel Selector SET, Gear Override locked UP

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| --- | --- | --- |
| **Emergency Descent*** Throttle idle, Prop forward, Gear down
* Bank 45 deg bank
* Pitch down for just below Va
* Recover at \_\_\_\_\_\_ ft

**Chandelles*** 20”MP, Prop 2600RPM, Gear UP
* 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, Prop forward, Gear UP
* Airspeed Best Glide
* Best Place to Land (in 15 seconds)
* Checklist
* Verify best place to land into the wind
* Recover before 500ft AGL
 | **Sturns*** Throttle to 20”, Prop 2400RPM, Gear UP
* 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 20”, Prop 2400RPM, Gear UP
* 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 FULLEST
* Fuel Pump ON, Mixture Rich
* Alternate Air ON
* Check Mags
 | **Steep Spiral*** Throttle to idle, prop forward, Gear up
* Airspeed best glide
* Spiral over the landing point with a bank angle from zero to 45deg
* Shoot for abeam the landing point 1200ft agl

**Eights on Pylons*** Throttle to 20”, Prop 2400RPM, Gear UP
* Calculate Pivotal Altitude \_\_\_\_\_ft
* Enter on downwind
* Tailwind: Rising altitude
* Headwind: Decreasing altitude
* Maintain Pylon on rivet line

**180deg pwr off accuracy landing*** Throttle 20”, 2400RPM, Gear UP
* Abeam landing pt:
* Throttle to idle, prop forward
* On base Gear Down
* Use flaps as needed to land on the landing point -0/+\_\_\_\_\_ft

**Short Field Landing*** On Final, Airspeed 80-85mph
* Flaps 40deg
* Power for altitude, Pitch for airspeed
 |

**PA28R-200 Before Landing:** Fuel Pump ON, Mixture Rich, Fuel on Fullest Tank, Gear Down Abeam the numbers, Prop forward on final.

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| --- | --- | --- |
| **Short Field Takeoff*** Flaps 25degs, Full Brakes, Full Power, Release brakes
* Climb at Vx,
* Gear up at positive climb rate
* Once clear of obstacle, Flaps up slowly, 25 to 10, then 10 to zero
* Climb at Vy

**Soft Field Takeoff*** Flaps 25degs,
* 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 90mph
* Flaps 25deg
* Power for altitude, Pitch for airspeed
* Hold nose up as long as possible
* Yoke back full until cleared from runway
 | **Propeller Overspeed*** Throttle to idle
* Check oil pressure
* Propeller forward
* Adjust throttle to keep prop rpm below redline

**Loss of Oil Pressure*** Is it the gauge?
* Does the engine run fine? Cool?
* Does the propeller control work?
* Climb as you determine what to do.
* Land at nearest airport.
* Prepare for an off airport landing if engine quits.

**Alternator Failure*** Reduce Electrical Load
* Check Alternator CB’s
* ALT switch OFF for 1 second, then ON
* If Ameter 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
 | **Loss of Fuel Pressure*** Elec Fuel Pump ON
* Mixture Forward
* Fuel Selector Fullest Tank
* Land at nearest airport

**Open Door*** Close to 100mph
* Cabin Vents Closed
* Storm 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 as at nearest airport
 |

**PA28R-200**

|  |  |  |
| --- | --- | --- |
| **Emergency Gear Extension*** Verify Master Sw ON
* Verify CB’s
* Verify panel lights aren’t ON
* Gear Indicator Bulbs CHECK

If still not working* Reduce Speed to 100mph
* Move Gear Selector DOWN
* Override Selector ENGAGED (UP)
* If gear still up, then move emergency gear lever to DOWN
* Yaw airplane abruptly side to side if gear still not locked down.

**Spins*** Throttle IDLE, Ailerons neutral
* Rudder OPPOSITE of rotation
* Yoke Forward
* Rudder neutral when rotation stops
* Yoke adjusted for level flight

**Checklist for Simulated Engine Out*** Fuel Selector FULLEST
* Fuel Pump ON, Mixture Rich
* Alternate Air ON
* Check Mags
 | **Notes:** | **Airspeeds**Vrot: \_\_\_\_\_\_mphVx: \_\_\_\_\_\_mphVy: \_\_\_\_\_\_mphVa: \_\_\_\_\_\_mphVfe: \_\_\_\_\_\_mphVgear extended: \_\_\_\_\_\_mphVgear retract: \_\_\_\_\_\_mph |