

Objectives: Power-off 180 landing

Upon completion of this lesson the student will:

- Be able to perform an 180 power-off accuracy approach and landings.

Equipment:

- POH and/or appropriate checklists for aircraft to be flown.
- Chalkboard or model for demonstration of techniques.

Elements:

1. Ground - Pre-flight briefing
 - Review LDmax (best glide) speed, and what going above or below that speed will do.
 - Explain airspeeds to be used on downwind, base and final.
 - Review stall speeds for aircraft (in level flight).
 - Stress normal as possible (GUMPS, stabilized, etc) just no power.
 - Review slipping and crabbing approaches (chalkboard or model).
2. Flight - Power-off 180 and Pattern Procedures
 - Use proper course to fly in the pattern and proper altitude.
 - Use of pre-landing (GUMPS) check.
 - How to determine that the aircraft is flying at an appropriate distance from the runway on downwind and how to determine the appropriate points at which to make the base and final turns.
 - Demo the maneuver.
 - Smoothly reduce power to idle abeam touchdown point specified, not more than 1000agl.
 - Establish appropriate glide speed.
 - Turning towards runway (getting there more important than a square pattern).
 - Account for wind, obstructions, surface conditions.
 - Use of flaps during the approach (when landing assured).
 - Use of slip or crab on final, and transition from crab to slip just before touchdown.
 - Touch down is at or within 200' of specified point, in normal landing attitude.

Completion Standards:

This lesson is complete when the student is able to perform a safe landings 180 power-off, within 200'.

Common Errors:

- Concentrating on instruments too much.
- Coordination in all maneuvers.
- Not turning soon enough.
- Pulling back too hard or not enough in turns to maintain necessary glide speed.
- Not slowing at end for a normal landing (and landing long due to float from additional airspeed).
- Trying to fly a normal square pattern.
- Forgetting checklist (GUMPS).

References:

POH For airplane used.

Airplane Flying Handbook FAA-H-8083-3

Comm-ASEL PTS Areas of Operation IV Task K

Possible Review Questions:

1. The normal approach speed for the airplane (being used) is _____.
2. Best glide (LDmax) for the airplane (being used) is _____.