POWER-OFF 180° ACCURACY APPROACH AND LANDING

OBJECTIVE

To teach the commercial student the knowledge of the elements related to a power-off 180° accuracy approach and landing.

COMPLETION STANDARDS

1. Considers the wind conditions, landing surface and obstructions, and selects an appropriate touchdown point.
2. Positions airplane on downwind leg, parallel to landing runway, and not more than 1000 feet AGL.
3. Abeam the specified touchdown point, closes throttle and establishes appropriate glide speed.
4. Completes final airplane configuration.
5. Touches down in an normal landing attitude, at or within 200 feet (60 meters) beyond the specified touchdown point.
6. Completes the appropriate checklist.

DESCRIPTION

A 180° power off is a maneuver to practice approach and landing accuracy with the engine at idle while simulating an engine failure.

PROCEDURE

1. Determine a suitable touchdown point.
2. Maneuver the airplane to the downwind key position, a position abeam the landing point, at the normal traffic pattern altitude appropriate to the landing site. (1000 to 1200 feet above ground.)
3. When abeam the landing point, carburetor heat on.
4. Throttle to idle.
5. Maintain altitude and slow to recommended glide speed or 1.4 V_{S0}.
6. Turn base at the appropriate position to maintain proper glide path to reach desired landing point.
7. Lower landing gear at appropriate altitude.

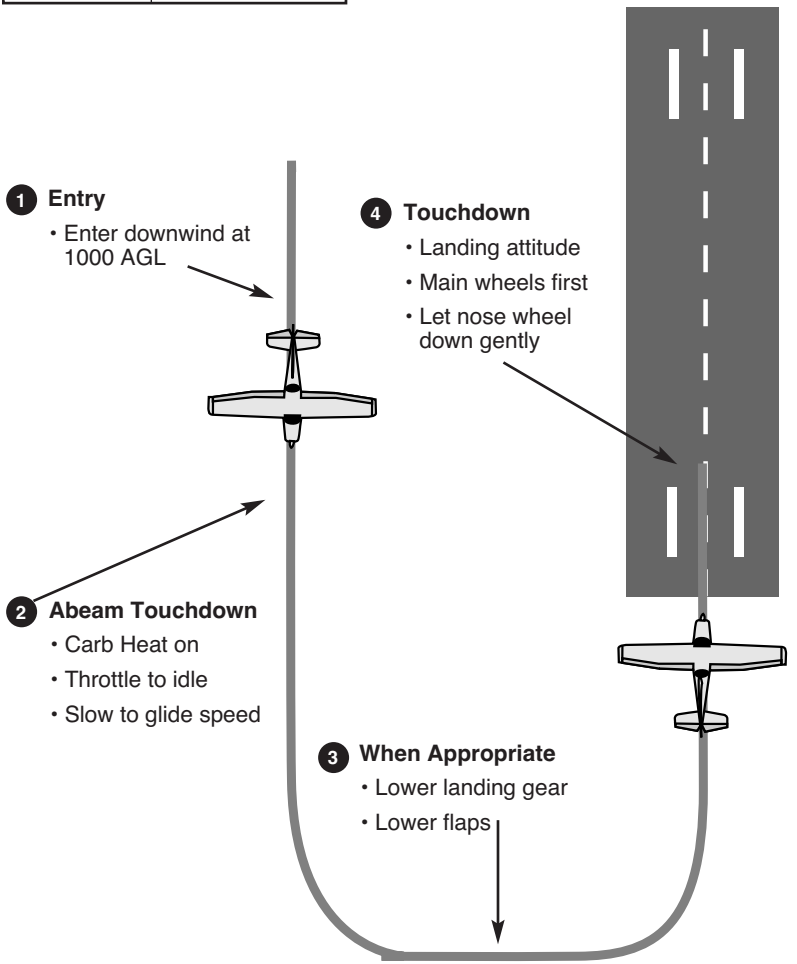
8. At a point when a safe landing is assured, begin to lower flaps as required. Normally, lower partial flaps on base and then final flaps when on final and landing is assured.
9. Adjust base and/or slip the airplane on final to assure a safe landing at the selected point of touchdown.
10. Execute normal/crosswind landing and roll out.

References

Commercial Pilot Practical Test Standards FAA-S-8081-12B, pg. 1-21.
Airplane Flying Handbook FAA-H-8083-3, pg. 8-23, 8-24.

POWER-OFF 180° ACCURACY APPROACH AND LANDING

AIRCRAFT	SPEED
C172	65



Limitations — Lands within 200 feet of specified point.

GO-AROUND/REJECTED LANDING

OBJECTIVE

To teach the commercial student the knowledge of the elements related to a go-around/rejected landing.

COMPLETION STANDARDS

1. Makes a timely decision to discontinue the approach to landing.
2. Applies takeoff power immediately and transitions to the climb pitch attitude for V_Y, and maintains V_Y ±5 knots.
3. Retracts the flaps as appropriate.
4. Retracts the landing gear if appropriate after a positive rate of climb has been established.
5. Maneuvers to the side of the runway/landing area to clear and avoid conflicting traffic.
6. Maintains takeoff power and V_Y ±5 knots to a safe maneuvering altitude.
7. Maintains directional control and proper wind-drift correction throughout the climb.
8. Completes the appropriate checklist.

DESCRIPTION

The landing approach is abandoned and the airplane is transitioned into the climb attitude and configuration.

PROCEDURE

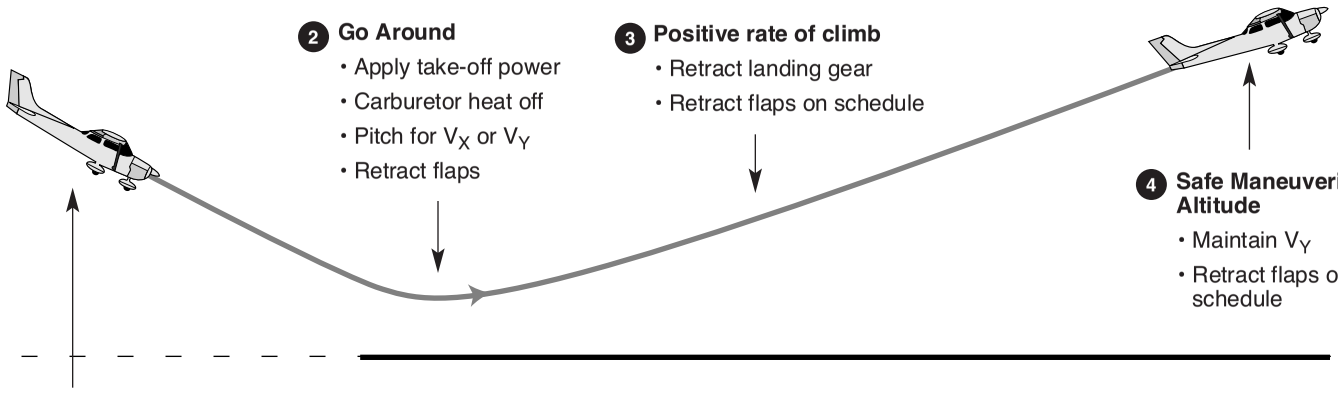
1. Apply take-off power.
2. Carburetor heat cold.
3. Establish V_Y attitude as appropriate to attain V_Y airspeed.
4. Retract flaps in accordance with the POH.
5. As airspeed increases, retract the flaps on schedule as recommended in the POH.
6. Adjust pitch attitude for V_Y and when the safe flap retraction speed is reached, retract to flaps zero.
7. Retract landing gear, if retractable, after a positive rate of climb has been established.

8. If go-around was caused by another airplane, offset and pass to the right unless it will conflict with other traffic (a non-standard pattern), or tower directs otherwise.
9. Radio intentions.

References

Commercial Pilot Practical Test Standards FAA-S-8081-12B, pg. 1-22.
Airplane Flying Handbook FAA-H-8083-3, pg. 8-11 ⇒ 8-13.
Pilot Operating Handbook/Approved Flight Manual.

GO-AROUND/REJECTED LANDING



AIRCRAFT	APPROACH SPEED	V_X	V_Y
C172	65	56	76

Limitations — Maintains V_Y ±5 Knots