

Commercial Pilot Flight Maneuvers Briefing

Short and Soft Field Takeoffs and Landings

1. What flap setting should you use for a short-field takeoff? What setting should you use for a soft-field takeoff?
2. During a short-field approach and landing over a 50 foot obstacle, why is it necessary to establish a constant angle of descent over the obstacle?
3. Explain the effects of torque and P-factor on aircraft control during a short-field takeoff?
4. What climb speed should you use during the initial portion of the short-field takeoff? When should you transition to a different airspeed?
5. How can you increase braking effectiveness during the landing roll after a short-field approach and landing?
6. At approximately what airspeed will the aircraft become airborne during a soft-field takeoff?
7. At what point during the soft-field takeoff do you begin to climb?
8. At what point during the soft-field takeoff do you retract the flaps?
9. Do you use power during the landing flare and touchdown during a soft-field landing? Explain.
10. Explain the correct usage of the aileron and rudder controls during a crosswind takeoff.

11. Assume a left crosswind during a landing approach. Explain the correct use of controls during the approach, flare, and landing.
12. What is the maximum demonstrated crosswind component for the aircraft? Is this a limitation? Explain.
13. What effect does flap usage have on approach speed and decent angle?
14. If the aircraft is low and slow on final approach, what corrective action should you take?
15. Explain the procedures for executing a go-around in the aircraft?
16. What is the significance of the "key position" during landing?
17. During a short-field approach and landing, how accurately must you land the aircraft relative to a selected touchdown point?

Steep Turns and Chandelles

1. At what altitude should you perform steep turns and chandelles?
2. What is the correct entry airspeed for these maneuvers?
3. How do you perform a commercial pilot steep turn? What bank angle should you use?
4. If an aircraft weighs 2,500 pounds, how much weight must the wings support during a level turn with 60 degrees of bank?
5. Explain the changes in elevator pressure necessary to maintain level flight during the roll from a steep turn in one direction to a turn in the opposite direction.

6. If the aircraft is descending during a steep turn, what corrective action should you take to maintain altitude?
7. What is the maximum recommended angle of bank for the chandelle?
8. Explain the power adjustments you would use during performance of a chandelle.
9. What should your airspeed be at the completion of the chandelle?
10. Describe the differences in control pressures between the rollout from a chandelle to the right and one to the left?
11. Explain why the rudder pressure is required during performance of the chandelle?
12. Although the chandelle is considered a maximum performance maneuver, explain why altitude gain is not the basis for judging the quality of the maneuver?
13. Explain how you should recover from the chandelle.
14. What can you expect with regard to control pressures at the completion of a 180 degree change in direction during a chandelle? Explain.

Lazy Eights and Eights-on-Pylons

1. Compare and contrast turns around a point and eights-on-pylons. Which of these is considered to be a ground reference maneuver?
2. At what altitude should you enter eights-on-pylons? How do you determine the pivotal altitude?

3. What is the maximum angle of bank you should use for eight-on-pylons? Where will this bank occur?
4. How does wind direction affect the entry for eight-on-pylons?
5. Describe how you make changes in altitude during eight-on-pylons to hold the pylon relative to the wing.
6. Where do the highest and lowest altitudes occur during the performance of eights-on-pylons?
7. What reference points do you use during the performance of lazy eights?
8. Where do the highest and lowest altitudes occur during lazy eights?
9. Do you use pitch or power to control the altitude and symmetry of the loops during lazy eights?
10. What altitude and airspeed should you use to enter lazy eights?
11. At what point during lazy eights must you use the greatest control pressure?
12. What is the lowest altitude is an accelerated stall may be entered from?

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