

Flight Instructor Airplane Single-Engine

Ground Reference Maneuvers, Short and Soft Takeoffs and Landings

Scenario:

Your student comes to you and asks if you could help him scout out an area for a middle-school science project. Your student has a child in middle-school and the class is doing some studies on the environment surrounding the community. They would like to get some photographs of a series of fields about 20 minutes flying time from the airport. Because the intended area is fairly close to another airport with a grass runway, you decide this would be a good opportunity to practice ground reference maneuvers and maximum performance and soft-field takeoff and landings. Your student's child will be riding along in the back seat to take the photographs. The child had never flown before.

Lesson Objectives:

The purpose of this lesson is for the student instructor learn to effectively perform and analyze the performance elements involved in maneuvers and procedures appropriate for ground reference maneuvers and short-field and soft-field takeoffs and landings.

Pre-Briefing:

The student instructor will review the desired outcomes, discuss the scenario for the flight, and discuss the key elements of each maneuver to be flown. The student instructor will develop a maneuver lesson that describes and utilizes the scenario prescribed for this lesson. During the preflight briefing, the instructor will play the role of the student being trained and respond accordingly.

The student instructor should be able to explain the risks associated with a new student learning how to fly ground reference maneuvers and while doing takeoffs and landings on a grass runway. Discuss how the grass runway will be simulated at the other airport. Also discuss how to how having a rear seat passenger who has never flown might impact the flight.

Completion Standards:

This lesson will be complete when the student instructor can perform, teach and analyze each maneuver to the level shown on the desired outcome table

De-Briefing:

The debriefing will be led by the student instructor using the Learner-Centered Grading method. The student instructor will critique the instructor about the instructor's "simulated student" performance. Then the student instructor will critique his/her own performance using the Desired Outcomes Grading sheet as a guide. The instructor and student instructor will discuss any discrepancies in their respective evaluations.

Notes to the Instructor:

The student instructor is learning how to prepare and to present effective scenario-based instruction. The student instructor may not have received scenario-based instruction and may need to review the information provided on the FAA/FITS website to gain a full understanding of the instructional process and its value.

The student instructor should develop a lesson plan that incorporates this scenario and conduct the flight in accordance with that plan. You should review this lesson plan during the preflight briefing and make any suggestions for improvement at that time.

During the preflight briefing, insure the student instructor can effectively present the elements associated with ground reference maneuvers while you play the role of the "student."

When departing on the flight, the student instructor should demonstrate a maximum performance or soft-field takeoff can climb out. While enroute to the area where the fields to be photographed are located, the student instructor should demonstrate how wind affects the ground track by following a road or other straight line. Upon reaching the fields, the student instructor should demonstrate each of the ground reference maneuvers. Then the student instructor should ask you, in the role of the "student" to perform each of the maneuvers while analyzing and critiquing your performance.

After a few ground reference maneuvers have been done, mention to the student instructor that "your child" seems to be getting sick in the back seat and that maybe you should land at the nearby airport. You can ask the student instructor for advice about how to deal with "your child's" airsickness. You can mention symptoms of hyperventilation and ask what does that mean and how to deal with it.

If the airport you are going to practice the takeoffs and landings does not have an actual grass runway, denote a certain part of the actual runway and simulate a short grass runway. After conducting the landings, you can return to the home airport and repeat any maneuver that the student instructor suggests.

