

## **Flight Instructor Airplane Single-Engine**

### **Basic Attitude Instruments**

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#### **Scenario:**

Your student has expressed concerns about what happens if a pilot inadvertently encounters instrument meteorological conditions while on a VFR flight. You decide this is a good opportunity to introduce your student to basic attitude instrument flying. You are going to do this while taking a flight to a nearby airport to check on the maintenance status of another airplane from your flight school.

#### **Lesson Objectives:**

The purpose of this lesson is for the student instructor to learn to effectively perform and analyze the listed preflight operations, basic attitude instrument maneuvers, normal takeoffs and landings and traffic pattern procedures.

#### **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 simulated instrument flight using view limiting devices.

#### **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 and within the tolerances specified by the Flight Instructor Practical Test Standard for Airplane, Single-Engine.

FI- ASE- Fundamentals of Flight, Takeoffs and Landings, Traffic Pattern <b>Desired Outcome Grade Sheet</b>			Task Grades					SRM Grades	
			Not Observed	Describe	Explain	Practice	Perform	Explain	Practice
Scenario Activities	Task	Desired Performance							
Preflight Lesson on a Maneuver to be Performed in Flight.	Maneuver Lesson								
	SRM								
Preflight Procedures	Preflight Inspection								
	Engine Starting								
	Taxiing								
	Before Takeoff Check								
	SRM								
Airport Operations	Radio Communications and ATC Light Signals								
	Traffic Patterns								
	Airport, Runway, and Taxiway Signs, Markings, and Lighting								
	SRM								
Takeoffs and Departure	Normal and Crosswind Takeoff and Climb								
	Airport Departure Procedures								
	SRM								
Basic Attitude Instruments	Straight-and-Level Flight								
	Constant Airspeed Climbs								
	Constant Airspeed Descents								
	Turns to Headings								
	Recovery from Unusual Flight Attitudes								
	SRM								
Arrival and Landings	Normal and Crosswind Approach and Landing								
	Slips to a Landing								
	Go-Around/Rejected Landing								
	SRM								
Post Flight Procedures	Postflight Procedures								
	SRM								

**De-Briefing:**

The debriefing will be lead 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.

Have the student instructor develop the scenario prior to the preflight briefing. After the student instructor has presented and discussed the scenario, you should critique the scenario and provide guidance about how to improve it if necessary.

In this scenario, the flight starts out as a VFR flight to a nearby airport. Along the way, put the student instructor put on a view limiting device and demonstrate each of the basic attitude instrument maneuvers. At some point, put the student into an unusual attitude and demonstrate the proper recovery procedures.

Upon arrival at the destination airport, have the student instructor demonstrate a slip to a landing. While in the traffic pattern, have the student instructor demonstrate a go around from a rejected landing while explaining the key elements that go into deciding when to reject a landing.

At this point, you can remain in the traffic pattern and complete another landing or depart the pattern for the return trip depending on how the student instructor performs the approach and landings.

During the return flight, the student instructor should have you put on a view limiting device. For safety purposes, you can simulate the role of a student wearing a view limiting device. The student instructor should be able to properly explain each of the maneuvers to be flown as well as properly evaluate your performance on each one you demonstrate. During this time, you can help the student instructor learn proper techniques for putting students into unusual attitudes without imposing undue stress on the airplanes or putting the flight at risk.

Upon arrival at the original airport, demonstrate a slip to a landing, normal landing or a go-around and have the student instructor analyze and evaluate your performance.

