

Flight Instructor-Instrument Airplane

Precision Instrument Approaches, Holding, DME Arcs and Missed Approach Procedures

Scenario:

Your student (the flight instructor will play the role of the student) has to fly to a nearby large airport to pick up a client who is flying into that airport via commercial airlines. Your client is coming to your business to discuss a large contract and to view your facilities. Your client is coming in on the only flight of the day from her home city. The weather for this flight is marginal and will most likely require an ILS approach to land. Because of the low weather and the need to make sure the client is met, your student has asked you (the student instructor) to go along on the flight to help if necessary.

Lesson Objectives:

The purpose of this lesson is for the student instructor to learn to effectively perform and analyze precision instrument approaches, DME arcs, holding procedures and missed approach procedures.

The student instructor will also be able to assess the risks associated with this flight and be able to explain how to manage those risks to insure a safe training flight is conducted.

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 and the risks associated with training students to fly instrument approaches.

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 Instrument Practical Test Standard for Airplane.

FI-IA Precision Approaches, Holding, Circling Approaches. Desired Outcome Grade Sheet			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								
Preflight Procedures	Weather Information								
	Instrument Cockpit Check								
	SRM								
Air Traffic Control Clearances and Procedures	Air Traffic Control Clearances								
	Compliance with Departure, En Route, and Arrival Procedures and Clearances								
	SRM								
Navigation Systems	Intercepting and Tracking Navigation Systems and DME Arcs								
	Holding Procedures								
	SRM								
Instrument Approaches	Precision Approaches								
	Missed Approach Procedures								
	Landing from a Straight-in Approach								
	SRM								
Post-flight Procedures	Checking Instruments and Equipment								
	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:

In this scenario, you will play the role of the student flying to pick up the client and your student will act as your instructor going along to assist if necessary.

You should pick an airport nearby that has an ILS. If the only airport that has an ILS is the one from which you are departing, then you will need to have the scenario depart on a flight to another airport, then create a situation where you will have to return to fly the ILS. If possible, pick an approach that has a DME arc. If there are no approaches that have DME arcs, then you will have to create a reason to fly an arc such as flying an arc to intercept a course.

One way to set up the holding pattern would be to simulate traffic delays because of inbound commercial traffic and hold before the first approach. You can ask student instructor to explain and perform a holding pattern for you. After the demonstration, you can fly a couple of patterns and have the student instructor analyze your performance.

You should mention to your student instructor that you, in your role as the pilot, would like for him/her to demonstrate the ILS as you have never flown an approach down to minimums and would like to observe. This way, you can get the student instructor to demonstrate and explain the approach to you. The student instructor should demonstrate the landing from a straight-in approach.

After landing and simulating picking up your client, you can fly the return trip with the student instructor analyzing and critiquing your performance. When you return to the airport, you can set up the weather so it is at minimums and may require a missed approach. Approaching minimums tell the student instructor to take the airplane and demonstrate the missed approach. Then complete a second approach with the student instructor explaining and demonstrating it again.

Your decision to actually wear the view limiting device while playing the role of the student should be based on the actual flight environment and traffic situation. Do not compromise your duties as PIC or safety while playing the student role.