

Scenario-based Training Toolbox (continued – sheet 3)

Basics of developing scenario situations

Scenarios used for lesson plans should be developed using risks for a particular pilot, aircraft, environment and external pressures. The scenario “situations” are many and varied while representing real life situations.

For Scenario Based Training (SBT) to be effective there must be a purpose for the flight and consequences if it is not completed as planned. It is vital that the pilot in training and the Instructor communicate the following information before performing the scenario based training flight:

- Purpose of flight
- Scenario destination(s)
- Desired student learning outcomes
- Desired level of student performance
- Possible in-flight scenario changes (during later stages of the program)

With the guidance of the Instructor, the student should assist to make the flight scenario as realistic as possible. This means the student will know where they are going and what will transpire during the flight. While the actual flight may deviate from the original plan, it allows the student to be placed in a realistic scenario.

Humans learn better, the more realistic the situation is and the more they are counted on to perform. For example, realistic cross-country flight scenarios planned and executed by the student with assistance from the flight instructor begin the early development of cockpit management, situational awareness, and ADM. Continued engagement by the student in the planning, executing, and assessment of each scenario reinforces it throughout the training.

Once the formal scenario's start in flight lesson 5, it is important to remember the student is responsible for planning the flight scenario from a menu of short cross-country flights developed by the instructor. While the flight instructor will certainly assist the student in aircraft performance data, weight and balance, and general aircraft layout prior to the first lesson, the sooner the student assumes these responsibilities, the better the learning environment.

Basic examples to develop scenarios for lesson plans

This is only a partial list of scenarios but provides a starting point for developing scenarios. We will start out with some generic scenarios to be used in the first flight lessons as the student is getting familiar to the aircraft controls and move to more complex and unique situations to modify for each individual student.

Initial/first and general scenarios to be performed with first lesson plans

- First, the instructor should take the student to a number of different airports during the first few lessons and do some touch and goes. This provides the basis for a student to explore areas away from the local airport and get used to “flying places”. The use of a sectional with basic pilotage to determine course and frequencies plus an airport facility directory helps to determine appropriate runways, while the student is controlling the aircraft. This provides the basic foundation for scenario based training (SBT).
- Second, after flying out from the airport, ask the student to find a place to perform some maneuvers, perform them, and then take you back to the airport – this is a great first scenario the student to get to pick the place for the maneuvers, perform them, than figure out how to get back to the airport for the current conditions. This is the first scenario in flight lesson 4. This flight plan is something the instructor has done in the past but now the student must make the decisions.
- While flying to one airport, divert to another. Now there are different set of risks and the decision must be dealt with in flight. This is a typical diversion exercise and should be started early in the process. Sometimes it is best to go to the selected airport, than divert to a new airport before going to the home airport where the aircraft is utilized.