How to Effectively Teach
Scenario-Based Training

Lesson 1: Characteristics of Effective Scenarios Summary Sheet

Lesson 1-1: 6 Purposes for Scenarios

The scenario:
- attempts to place the student in a training environment that closely reflects real flying
- is a set of stories – written or spoken – built around a constructed plot so students can
  - apply knowledge
  - do a self-assessment of flight skills and judgment

6 purposes for implementing scenarios are to:

1. Point to voids in understanding

2. Show potential problems

3. Provoke debate

4. Expand the range of options that a pilot is to consider

5. Apply practical application of knowledge

6. Identify choices and make decisions

Lesson 1-2: 4 Higher Thinking Skills

In addition to flight maneuvers, a good scenario plays up the following higher thinking skills:
1. Situational awareness
2. Single pilot resource management (being in command)
3. Aeronautical Decision Making
4. Managing the risks inherent in every flight

Lesson 1-3: Scenario Limitations and Enabling Solutions

Limitation 1: Pilots do not like to fail and will likely be confused and irritated by making mistakes in judgment.
Solution 1: Tell the student early in training that the training is practical in nature and that learning how to recognize pilot error and manage mistakes is part of the learning process. Lead a debrief so the student discusses what problem-solving skills were used.

Limitation 2: A scenario is not meant for beginning students.
Solution 2: Before introducing a scenario, make sure the student has basic knowledge and proficiency in aircraft control so the student can practice being in command and pulling all these individual tasks together.

Limitation 3: Scenarios introduced early in a training program are simple and does not provide an effective total training program.
Solution 3: After the student gains more proficiency, include more complex situations in higher thinking skills.

Limitation 4: The challenge of keeping the pilot in the mindset of making decisions and conducting the flight as if it were the real
Solution 4: Make it as real as possible within the limits of the training device.

Limitation 5: Some scenarios are not effective.
Solution 5: To be effective, scenarios must be specific to the pilot, plane, and local flying environment.