

## Scenario Based Training

For the past 3 months we have been talking about Scenario Based Training (SBT), the method the airlines and military use to train their pilots. SBT focuses on developing the Aeronautical Decision Making and Risk Management (ADM/RM) skills needed to safely and enjoyably fly.

In October we introduced the SBT concepts and discussed how this modern training program is effectively used by the airlines and military. In November we showed you how individuals can use SBT concepts to plan a flight and explore the potential problems that you may encounter along the way. By thinking about them before they occur you will be better prepared to deal with changing conditions during the actual flight. In December we discussed how flight instructors can incorporate SBT concepts in primary and advanced training environments. Teaching students to make good decisions is just as important as teaching them to make coordinated turns.

After reading these articles you should have a good understanding of what SBT is and why you should use it to improve your own flying skills. However, you may still be wondering 'where do I get the training needed to actually learn and practice these SBT skills'?

First and foremost, the SSF Trustees will provide SBT training at the upcoming SSA convention. Come to the Friday afternoon SSF SBT training session to see a demonstration of how pilots and instructors can use SBT concepts in primary and advanced training environments.

Flight instructors, and other pilots, can attend one of the Flight Instructor Refresher Courses (FIRC)s being held around the country. This FAA approved class is one way flight instructors can renew their certificates. In 2014 the SSF moved to a SBT based program, where 50 minute lectures have been replaced by SBT instruction techniques and the attendees spend their time analyzing scenarios. See the SSA on-line calendar or visit <http://www.soaringsafety.org/outreach/FIRC.html> for dates and locations of FIRC's in 2016.

The SSF also operates a Safety Seminar program for clubs, chapters, and commercial operators. SBT training at the club level can be obtained by inviting the SSF to your site for a Safety Seminar. More information about the Safety Seminar program can be found at <http://www.soaringsafety.org/outreach/seminars.html>.

The next question you are probably asking yourself is 'Why should I learn these skills'? The trivial answer is 'to be a better pilot'.

In the traditional training environment the student/pilot is expected to memorize a large collection of facts and figures and your instructor asks you specific questions to see what you have learned. The problem is that these fact and figures aren't tied directly to the ADM/RM skills you need to develop. For example take learning the National Airspace System, in the traditional training environment you have to memorize the visibility and cloud separation numbers for Class G and E airspace. Separately you also need to memorize where Class G and E airspace are in the continental United States. Your instructor checks you knowledge by asking you "What are the VFR visibility and cloud separation requirements for Class G airspace?"

In a SBT environment the student/pilot isn't asked to recite memorized information. Instead the Instructor provides a simple scenario like "The cloudbase is 1,500 ft AGL with 4 miles visibility, can

we do pattern tows to work on your landings?” To answer this question the pilot needs to know what airspace the glider port is in, what the VFR visibility and cloud separation requirements are, and what obstacles or other traffic hazards exist that would allow these flights to safely occur. 1,000 ft AGL or 1,200 ft AGL are 2 possible answers to this scenario, which is correct for your gliderport? Why?

As this simple example shows, not only does the student/pilot need to know the FARs, he/she needs to link that knowledge to the real world.

SBT training also allows students/pilots and instructors to explore both normal and abnormal conditions. You are 500 ft AGL on tow when you see a puff of smoke come out of the towplane. You are on a X-C flight and you are faced with a decision to fly over a 20 mile stretch of unlandable terrain or detour around the area adding 40 miles to your flight. You notice a high-time pilot rushing to get his glider assembled while several other pilots keep interrupting him to ask questions, later as the glider is on the flight-line do you ask him if he has done a positive control check?

The airlines and military have embraced SBT concepts because it has proven itself to be a superior training system than traditional training methods. Pilots learn both the mechanical and ADM/RM skills needed to safely fly their aircraft. They focus less on rote memorization skills and more on developing the skills needed to evaluate situations and make good decisions. They help the pilot mentally prepare for a complex task, or plan for emergencies that may occur.

With the proper training students, pilots, and instructors can effectively use SBT techniques to become better, safer, and more skillful glider pilots. Start down this path by attend the SBT training session Friday afternoon or contact the SSF Trustees to find out what other training opportunities exist.