

Training AND Safety, the SSF mission
by Rich Carlson

In 1981 the Soaring Society of America board of directors established the Soaring Safety Foundation to be the Training and Safety arm of the SSA. The SSF trustees were tasked to develop programs and mechanisms that would assist the membership in reducing accidents. These programs have consisted of both outreach activities and on-line programs providing training and flight safety videos and presentations which are now stored on the SSFs web site (<http://www.soaringsafety.org>).

While most of the SSA membership thinks of the SSF as 'the safety guys' the trustees all have a strong background in flight training. All 5 trustees are current flight instructors and 3 trustees are Designated Pilot Examiners. At the February 2015 Board of Trustee meeting a major topic of conversation was on how to provide better aeronautical decision making tools to the club/commercial operation flight instructor. We all recognized that better training in decision making skills will result is safer pilots.

Thus the SSF trustees decided that the SSF will place a stronger focus on flight training, with a particular emphasis on teaching decision making skills to all SSA members. The SSF web site has been revised to help make this dual mission (Training AND Safety) apparent. The other major element is the creation of a scenario based training program with a formal analysis process to help pilots really understand how good decision are made and what factors can prevent or inhibit the pilot from making good decisions.

This SSF scenario based training program began in 2013 through the FAA approved Flight Instructor Refresher Course (FIRC) program. SSF trustees have also begun using this scenario based training at safety seminars.

While it may sound strange to some, pilots are not born with good decision making skills. Just as pilots need to be taught the skills needed to make coordinated turns, every pilot needs to be taught how to make good decisions. This is so important that long ago the FAA added language to the FAR's mandating that flight instructors provide training in Aeronautical Decision Making for every pilot (Student – Airline Transport Pilot).

The SSF's scenario based training program starts with a written description of a problem, incident, or accident that has occurred. For example, attempting to fly a full pattern without enough altitude to safely accomplish this task is a common accident. Imaging reading this incident report in your club newsletter:

“Ingrid has been instructing in gliders for over 30 years and is considered one of the clubs senior instructors. Irving is a post-solo student making a dual flight in the 2-33 with Ingrid in preparation for taking his private pilot flight test. Irving has gotten himself too low to fly a full pattern, but he heads for the Initial Point anyway. Ingrid judges that it will be close, but doable so she lets Irving go to 'see how he will react'. The glider is undamaged but Ingrid was forced to take over and make an off-airport landing after encountering unexpected sink on downwind.”

The attendees are given this scenario then the FIRC instructor leads the class though an analysis process looking at the Pilots skills and knowledge, the Aircraft capabilities and instruments, the enVironmental factors from weather to terrain, and the External pressures that can drive or impact the pilots decisions. This P.A.V.E model is extracted from the FAA's Risk Management Handbook (FAA-

H-8083-2)

http://www.faa.gov/regulations_policies/handbooks_manuals/aviation/risk_management_handbook/

This formal P.A.V.E. based analysis process helps move scenario based training from a good idea to a useful tool that flight instructors can incorporate into their existing flight training programs. It is a tool the instructor can use to both teach pilots how to make good decisions and it allows instructors to evaluate the decision making skills their rated pilots.

Over the past year several FIRC attendees have asked if the SSF can provide this type of training to the general SSA membership. The answer is yes, the SSF's safety seminar outreach program already provides this type of training. For a flat \$300 fee the SSF will send a flight instructor out to your club or commercial soaring operation to run a ½ to full day safety seminar. This will include a course on scenario based training and the P.A.V.E. based analysis process. See the SSF web site for details on how to request a safety seminar in your area.

Over the past 40 years the airlines and military have invested millions of dollars in developing the tools needed to teach their pilots the essential aeronautical decision making skills. In the coming year the SSF trustees will use this column, and time at the 2016 convention, to further describe how the soaring community can use modern aeronautical decision making tools to meet our unique needs. By doing this, we can significantly reduce the annual number of accidents and make the sport more enjoyable for everyone.