



Proactive Safety Program
by Richard Carlson SSF – Chairman

In late February my glider club held its mandatory annual safety seminar to prepare for the start of a new soaring season. In preparation, the club's operations director sent a draft version of his presentation to the club instructors for comment. The main point on slide one was 'the club had no incidents in 2019'. Note this does not say no accidents, but no incidents. Given that I knew of several, I questioned that statement and got it changed to "no serious incidents".

The question remains, why would an intelligent glider pilot, who personally had an incident, report that there were no incidents in 2019? I've drawn the conclusion that it wasn't malice or an intention to deceive, but pure forgetfulness. Things happen in our lives and we forget those that become less important or impact-full over time or seem to affect only us..

From the SSF's point of view, this is bad!

The more incidents that get reported, the more we can learn. The more we can learn, the fewer incidents and accidents we will have.

To raise the number of reported incidents we need is to move from a reactive safety mindset to a proactive safety mindset. In a reactive safety mindset we identify incidents after they occur. Then we develop strategies to prevent them from happening again. In a proactive safety mindset we actively look for leading indicators and correct the issue before an incident or accident occurs.

Let me give you a couple of examples.

A pilot installed a new climb/cruise switch to change the flight computer's function as the flaps changed in his DG glider shortly before the start of a regional contest. On a weak task day he determined that he could not make it back to the home field and decided to land at a near by airport. He arrived at the field with plenty of altitude and moved the gear handle to the opposite position in preparation for entering the landing pattern. When the flap handle was moved to the landing flap position, the gear warning horn went off. Since the pilot had moved the gear handle he assumed that there was a fault in somehow connected to this newly installed climb/cruise switch. As you may have guessed, he landed gear up on the hard surface runway as he had been flying with the gear down and had retracted the gear instead of extended it.

The tow-plane pilot experienced a power loss while towing a glider about 200 ft AGL. The problem appeared to be a fuel starvation event as lowering the nose restored some power and the tow as able to reach 1000 ft AGL before the glider was waved off. A cursory inspection of the fuel system showed no problems, the tank was filled and more tows were successfully given. This power loss happened again and again before a more through inspection was done. This time the mechanic found the fuel intake on the tank almost completely clogged with debris.

In both of these cases the pilots reacted to an unusual situation without serious damage to themselves or their aircraft. After reviewing what happened the pilots developed strategies, a better use of checklists, better pre-flight inspections, that will help prevent these incidents from happening again.





Consider these alternate situations.

The glider pilot was conducting the morning inspection of the Grob G-102 and as usual for this pilot he slid his thumb under the mylar gap seal tape on the rudder to inspect the hinges. Noticing something didn't look right the glider was returned to the hanger and the gap seal tape was removed. Dye penetration testing showed a major crack on the hinge and possible damage to the fiberglass itself.

The mechanic inspecting the horizontal tailplane of a Piper Pawnee (PA-25) in accordance with the Airworthiness Directive instructions did not find any significant play when the external bracing wires were attached. However when the bracing wires were removed excessive play was felt and a closer inspection revealed cracks had formed in a hard to see portion of the carry through tube.

In both of these situations, the pilot/mechanic took extra measures and found significant physical damage to the aircraft. Flying with these conditions could have resulted in a serious, and possibly fatal, accident.

Participants in a proactive safety program, such as that demonstrated by the last 2 examples, actively looks for problems. Everyone, the pilot, ground crew, wing runner, mechanic, looks at the situation and ask themselves, what could go wrong here. Then they actively investigate to see if there are warning signs that indicate something bad may occur. By taking these proactive steps, a serious incident or accident can be avoided.

In contrast participants in a passive safety program, as demonstrated by the first 2 examples, respond to issues when they arrive. The pilot can take steps to avoid repeating the steps that led to this incident. If the pilot is lucky or has sufficient skills a serious accident may be avoided.

Once you have this proactive system in place the next step is to write down and document what you have seen or done. Only by documenting these actions will it become part of the organizations collective memory. One way to document these incidents is to use the Soaring Safety Foundation's Incident reporting Database. You can access this database by going to the <https://www.soaringsafety.org/forms/incident.html> page and selecting the 'Register a new incident into the Database' option. Your anonymous report will be sent to the SSF trustees to verify that no personally identifiable information is included and then the report will be posted for public view. By sharing your experiences, you can help others as much as yourself by making a permanent record of what you learned.

There is an old saying that the superior pilot uses their superior judgment to avoid having to use their superior skills. Proactive safety programs allow everyone to put this saying into practice. Do yourselves, your friends and family a favor, adopt this program at your soaring club or commercial operator.

