

Pilot Proficiency – Better than Currency

By Richard Carlson SSF Chairman's

Spring has sprung, and more pilots are showing up at their local glider club or school looking to knock the rust off and get Current. That is great, but why strive for simple currency? Why not strive for Proficiency?

What's the difference?

- **Currency:** is the condition where you meet the FAA legal requirements to operate as Pilot in command (PIC) of your glider. That means meeting 61.56 'Flight Review' and 61.57 'Recent flight experience: Pilot in command' regulations.
- **Proficiency:** is the condition where you can deal with normal and abnormal situations while acting as PIC of your glider. The glider Practical Test Standard (PTS), or airplane Airman Certification Standard (ACS) appropriate for your certificate describes the proficiency metrics you have met.

To help pilots achieve and maintain their proficiency the FAA developed the Pilot Proficiency Awards Program. This is better known as the WINGS program.

Pilots who accomplish a defined set of six (6) activities, three (3) flight and three (3) knowledge, in a twelve (12) month period compete a Phase of WINGS. Read the FAA's WINGS User's Guide (https://www.faa.gov/documents/Wings_Manual.pdf) or view the SSF's FIRC WINGS presentation (<https://drive.google.com/file/d/1B2vRi936Vqk-ip5qZO7lWxYqmOI0M3Z3/view>) for specific details on how to participate. Once a Phase is completed, the FAA sends the pilot a certificate noting this fact. As per 61.56(e) completing a WINGS phase also resets the pilot's Flight Review date. Any pilot, including Student Pilots, can receive WINGS credits!

One drawback has been the limited number of glider specific flight and knowledge activities. Something the SSF trustees and advisors have been working to rectify for the past few years. To increase awareness of these glider specific activities a new page has been added to our web site. See https://www.soaringsafety.org/learning/wings_activities.html for an up to date list of glider flight and useful knowledge activities.

These additions to the initial activities generated by the FAA are designed to allow the pilot to develop new skills or demonstrate proficiency in others. Some recent additions are:

SSF-Glider Advanced Handling: This WINGS activity expands upon previous glider training and builds upon a number of airplane performance maneuvers applied to a glider. Steep turns are a fundamental element of soaring flight. They are tested in both the Private and Commercial Pilot Glider PTS. The description here however is augmented by elements from the Commercial Airplane ACS which expands on the knowledge and introduces the risk management items the pilot needs to consider. The tasks for Chandelles and Lazy Eights are each testable in the Commercial Pilot– Airplane Airman Certification Standards. Minor modifications to the ACS wording have been made to focus the activity to use in a glider. A fourth task, is the Max Performance of the High Drag Devices. This task is not found in any PTS or ACS. It is also not explained in any of the handbooks. It is however, a very effective technique for rapidly descending in a safe and stabilized manner. The task description outlines the procedure to perform the task.

SSF-Forward Slips to Landing: This activity makes the Private Pilot Practical Test Standards for Glider Area of Operation IV: Launches and Landings, TASK R: LANDINGS - SLIPS TO LANDING a WINGS activity.

Forward slips allow the pilot to steepen the approach path without increasing airspeed. While drag devices reduce the need for forward slips, these devices may fail or be otherwise unavailable to the pilot. There are also situations during a short/off-field landings, or approaches over obstacles where a pilot might want a descent greater than provided by the drag devices alone.

The use of slips has definite limitations. Some pilots may try to lose altitude by erratic slipping rather than by smoothly maneuvering, exercising good judgment, and using only a slight or moderate slip. In off-field landings, erratic or violent slipping may lead to excess speed that could result in landing long or overshooting the entire field.

Note: the PTS calls for the pilot to demonstrate that the glider would be able to land in an emergency without the use of spoilers or dive brakes. The maneuver should be terminated no lower than 100 ft AGL and a normal landing performed during practice events.

SSF-Glider Advanced Aerotow: Aerotow is the most common glider launch method used in the United States. This WINGS activity expands upon your previous glider aerotow training. When aerotowing, there are two positions a glider pilot can fly. The normal position is just above the towplane's wake. The second position is just below the towplane's wake. These are commonly referred to as high tow and low tow.

In routine practice, most glider pilots only fly in a high tow position. This works well under most situations. However, the low tow position does afford some advantages. In low tow, the glider pilot has a better view of the towplane. Low tow is also more aerodynamically efficient as the towplane requires less upward elevator. The most obvious advantage to low tow is realized in level flight during a cross-country tow. During a normal climb the towplane's wake is below and behind the towplane as it climbs away. However, when level; the wake is directly behind the towplane. In this case in order to fly a position slightly above the wake the glider pilot must fly above the towplane. Being above the tow plane is generally recognized as an unsafe position thus a transition to low tow is desired.

This flight activity provides guidance on how to successfully conduct a cross-country aerotow. Instructions for both the glider pilot and the tow pilot are provided. With the current SSA emphasis of building cross country skills, knowing how to safely and efficiently conduct that aerotow retrieve is a must for all.

SSF-Stall and Spin Awareness Training: Flying gliders is vastly different than flying an airplane. Although the mechanics are basically the same the employment is completely different. Airplanes tend to fly from point A to point B in a straight line in level flight. Gliders on the other hand need to follow the areas of lift. An airplane only turns when it has to. Gliders are turning most of the time to remain in an area of lift until they get high enough to proceed to the next lift. Making this more challenging is when the glider is attempting to climb, they are turning at high angle of attack (slow speed) in turbulent air. The result is glider pilots spend a fair amount of time maneuvering at the low end of the flight envelope where they are susceptible to stall and potential spins.

This activity exposes glider pilots to the extreme lower corner of the flight envelope in a safe and controlled manner. Detailed guidance on developing and understanding the Knowledge required to



safely spin a glider, the Risks involved in this activity, and the Skills a pilot needs to demonstrate are all clearly described in the activity description. Both flight and knowledge credits are given to the pilot who completes this activity.

Additional activities will be added in the future. If you have ideas for a flight or knowledge activity send it to the SSF at webmaster@soaringsafety.org. The list of glider specific activities will be updated as new activities are added.

Safe Soaring and have fun maintaining your proficiency!