



The Good, the Bad and the Ugly. Observations from 166 Site Surveys

By Burt Compton

The Soaring Safety Foundation has conducted 166 free surveys (so far) by the invitation of clubs and commercial soaring sites in every SSA Region coast to coast.

The Good. Most soaring operations are compliant with glider pilot, tow pilot and ground crew training, along with safe launch procedures, SSA Signals and FAA regulations. A part of the SSF Site Survey is to collect your good ideas and practices to spread to other soaring sites to help improve their training and operations.

The Bad. Common observations include casual preflight inspections without a checklist, poor towrope management over obstacles and near people by tow pilots, ground crew handling a towrope by hand or around their waist, not using hooks. Starting the towplane before glider hookup while people are still standing in front of the glider has resulted in injuries. I speak from experience. At age 12, holding a towrope prior to hookup, I was painfully dragged down the runway 20 feet when a tow pilot accidentally bumped the towplane throttle forward at my Dad's gliderport near Miami. On Site Surveys I have witnessed ground crew tangled in a towrope or knocked over by the glider.

The Ugly. Club managers tell me landing just short of a runway occurs a few times a season often with damage to the glider or property at the approach end. At my morning briefing at a Site Survey after I discussed the safer "flexible pattern" of never losing sight of the landing area as suggested by the Soaring Safety Foundation (and used in Europe), we saw a glider pilot making an "airplane" pattern, not turning base leg until he was over a distant point on the ground or perhaps a certain altitude as taught by some CFG's. Turning final into a headwind and the "drop out" of a wind gradient close to the ground, he landed well short of the gliderport. Delaying the turn from downwind to base might be a result of glider instructors coming from airplane instructing. Remember, flying an airspeed of 60 MPH on downwind results in a ground speed of 88 feet per second. Add the usual tailwind aloft and a bit of added airspeed for safety and **your groundspeed on downwind is about 120 FEET PER SECOND flying past the runway.** As a glider pilot, consider your flexible pattern goal is to touch down and roll to a predetermined stop point, not to make a pattern over objects on the ground. Using specific altitudes in your club pattern may be confusing if you land at another airport with a different runway elevation or on an off-airport field landing. Be flexible and never lose sight of the landing area. Be aware of the extra seconds adding unnecessary distance by flying too far downwind and delaying your base turn.

More Ugly. There is an epidemic of canopies not locked then opening on aerotow. At many Site Surveys I learn about canopies opening on tow. In some cases, the glider pilot got too high on tow while grabbing for the canopy resulting in a dangerous "Kite" on tow or a release from the tow pilot. Canopies completely departing the glider may cause damage to the stabilizer or rudder. Look into glider cockpits to see many different canopy locking systems! Pilot checkouts must emphasize how the canopies lock and the different location and color of the separate tow release knobs or handles.

Very Ugly. Incidents of glider pilots "Kiting" too high above the towplane. Tow pilots tell me about glider pilots flying too high on tow causing the tow pilot to jettison 200 feet of towrope to the glider as the towplane is being tipped down to vertical in less than 3 seconds. In the FAA Glider Flying Handbook, the glider tow position illustration is captioned "high tow" above the wake. Let's call it "Normal Tow" instead.





The SSF Site Survey was modeled after a site survey program I observed by the Swedish Soaring Federation on a visit to the Swedish Soaring Conference in 2001. Along with better training, they credit their mandatory club surveys for ZERO fatal glider accidents in recent years!

I have more information in a free "Safety Officer's Training Guide," a work-in-progress job description which includes safety issues with solutions soaring site managers have found to improve safety and efficiency. Find it at <https://soaringsafety.org/publications/Safety-Officer-Training-Guide.pdf> or I can E-mail the latest updated Guide by your request to burtcompton@aol.com

The Soaring Safety Foundation conducts Flight Instructor Refresher Courses (FIRC's) across the USA, offers Safety Seminars and the FREE "Site Survey" program along with updated training information and interesting videos at www.soaringsafety.org

