Don't Tangle With Your Towplane

The following is not prompted by anything I have seen at our club, but rather by George Thelen's "Safety Corner" article in the Oct. 2008 issue of Soaring. My concern is his analysis of a mid-air collision between a Pawnee towplane and a just released glider.

Photo by Martin Gomez
Gliders and towplanes fly in formation until they release. Tow pilots and glider pilots must ensure they do not come together again until safely on the ground.

I see Thelen as the paragon of flying safety in the soaring community. He sets the standard, but there are several misconceptions I infer from his article (whether he implied them or not) about the typical flight profile of a Pawnee towplane after release. It got me thinking that other glider pilots might have the same misunderstandings, even though I have seen no evidence of it in our club.

Some of Thelen's comments in the article infer that he was surprised that a towplane could hit a glider which had just released. To back up why he was so surprised he describes the mind set he's used during 32 years of soaring. Below are selected comments from his article, perhaps condensed in an unfair way. Nonetheless, here are his words, verbatim from the article [my remarks are in brackets].

"Wow! How did that happen? ... [after releasing tow this is how] I usually experience ... The tow pilot has turned left, put the stick forward, and chopped power. ... he is able to lose altitude fairly quickly. So pretty much neither aircraft is still at the same altitude as the other. ... The tow plane is almost always lower than the glider. ... I, in the 2-33, can focus on staying in the lift. ... The tow pilot can watch his engine temperature, and start to scan for traffic for the return to the runway. ... [in this context the word "traffic" implies potential traffic in the landing pattern, not the just released, and apparently forgotten, glider] ... Neither the tow pilot, nor I in the 2-33, is watching for one another unless it is just a pattern tow ... [it is not necessary to look out for each other because separation between the towplane and the just released glider is automatic due to their altitudes, which are virtually guaranteed to be different.] This is pretty much what I have done on aero tows for the last 32 years."

The erroneous assumption here is that separation is automatic, because the altitudes will be different.

The dirty little secret is that in my experience with the Pawnee I gain an average of at least 300 feet immediately after glider release, and this is despite an immediate gentle power reduction. This gain occurs rapidly, within 30 seconds, and I'm certain that during that period I'm going up faster than the released glider.

So, in fact, on virtually every one of my tows there has been an altitude conflict, which is typically going to occur after the first minute or two of release, when I finally start to come down. That would be obvious to any glider pilot who has done a clearing turn off tow and checked to see where I am. If he cannot find me it is probably because he is not looking up high enough. I'm going to be above the horizon for the first couple of minutes, I can just about promise you that.

The solution is that each aircraft is responsible for avoiding the other. It should be an absolute mandatory requirement for the glider to do a clearing turn off tow in order to locate the towplane just to make sure he's not doing something unexpected. Who knows, perhaps the tow pilot had to make a

sudden unusual turn because he was dodging someone else. The glider could do a 360-degree clearing turn while searching for lift or centering a thermal, or a 90, 180, or whatever. But the glider must do some maneuver that will bring the towplane into sight shortly after release. It's a pretty safe assumption for the glider pilot to make that of all the things in the sky right after release, the one that is closest to him will be the towplane and he should at least check on it.

The other half of the solution is the tow pilot's responsibility. That presents a different set of problems. My standard practice is to immediately make a 90-degree turn to the left from the heading at release and then to fly on that constant new heading for at least 30 seconds at about 80 mph. I do this to get the maximum horizontal separation I can from the release point. That is not necessarily the maximum separation from the glider, because I don't know where the glider is going after release. The best way to get separation from him is to fly directly away from his last known position. Also note that the problem with this tactic is that I am putting the glider at my six o'clock, deep in my blind spot. He could be chasing me, I wouldn't know that. But, if he were, hopefully he would have me in view. This tactic is safer than the tow pilot doing a 360 clearing turn and staying in the release area only higher up and in a position where sighting the glider would be difficult.

A small exception to the above is the rare circumstance of a rock-off. If the tow pilot rocks off the glider, the glider pilot must presume that the towplane is having a true emergency. He will not know what the problem is, only that his immediate release has been demanded. The tow pilot may be having controllability problems and is unable to maintain his heading or altitude. He probably has his hands full and may be unable to release the glider. He may have lost power and is about to break sharply to the right, if that's where the runway is.

All the glider pilot knows is that there is an emergency in front of him and that the emergency aircraft has the right of way. If the towplane has lost power the glider pilot must recognize that the tow pilot is now flying the glider with the least performance. Therefore, in the event of a rock-off the glider pilot must immediately release but not break right. He should slow down, clear the rope, and keep the towplane in sight until he has made the best assessment possible under the circumstances as to what's going on. If the rock-off is close to the ground, well ... life is not perfect and it's every man for himself, but all should do their best to maintain situational awareness.

The key point that needs to be made is that altitude separation must not be relied upon to prevent towplane and glider mid-airs.

Points to Remember

1. The glider pilot has an obligation to do some sort of a clearing maneuver immediately after release that will enable him to locate the towplane and assure that it is not doing something unusual.
2. The tow pilot has an obligation to maximize horizontal separation, most likely by flying at a constant heading directly away from the release point for at least 30 seconds.
3. Both pilots must remain alert and be aware of the fact that there is an impending altitude conflict which is likely to occur within the first few minutes of release.
4. Rock-offs are frequently used in training situations, like a rope break, to surprise a student with the requirement for an unusual landing pattern as well as to confirm that he recognizes the rock-off signal. The focus then becomes how the student sets up the landing, in other words rock-offs are quite often treated as a glider problem. We tend to forget that a true rock-off is really more of a towplane problem than a glider problem. We should train to that contingency. Rope breaks should be trained for by the instructor pulling the release, anywhere, anytime he wants. Rock-offs for student training should be used only to simulate a towplane emergency. They should be done at a high enough altitude to allow the student to demonstrate that he understands his first job after release is to follow the towplane for awhile to observe it, if feasible.

Six Possible Glider Pilot Misconceptions

1. Separation from the towplane is guaranteed by the difference in altitudes which always occurs.
2. The towplane immediately descends after release.
3. The tow pilot's field of view is as good as the glider pilot's.
4. The glider does not have to worry about clearing the towplane and can immediately focus on a search for lift.
5. The tow pilot always knows where the glider is after release.
6. The glider has the right of way after a rock-off.
These are all wrong, know and remember that they are wrong.

—Bill Burner, SSC Tow Pilot

Skyline Soaring Club, Inc.
is a private, 501(c7) non-profit organization, dedicated to the enjoyment and promotion of the sport of soaring. SSC is based at the Front Royal-Warren County, Va. Airport and is an affiliate club of the Soaring Society of America. For information about the club go to ***www.skylinesoaring.org*** or e-mail ***welcome@skylinesoaring.org.***
President — Craig Bendorf
Secretary — Jim Kellett
Treasurer — Daniel Noonan
Membership — Steve Rockwood
Chief Tow Pilot — Curtis Wheeler
Chief Flight Instructor — Jim Kellett
Safety Officer — John Noss
Skylines Editor — Dennis Johnson
Directors — Shane Neitzey, Spencer Annear, Paul Seketa, Jim Parrish, Vern Kline

Skyline Webmaster Flies Final Flight in Alps

Top: Piet Barber makes one of his last flights over the Alps before returning from his Swiss exile to Front Royal.

Below: Piet waits to launch in SGBern's Discus B at Saanen in the Swiss Alps.

Bottom: Rain pelts the canopy of Piet's Discus B during an Alpine flight.

To see all the photos of Piet Barber's Swiss soaring adventures go to: *http://picasaweb.google.com/PietBarber.com/SoaringOverSaanenBESwitzerland#*

All good things must come to an end. Joe Parrish predicted that my two-year company assignment to Switzerland would evolve into a permanent relocation. This was not to be. In April my family moved back to the U.S., leaving me in my empty, lonely apartment for the final three months of my assignment. It wasn't completely empty, I had a bed, my computer, a couch, two pet rabbits to keep me company, but no TV. The end is nigh.

I spent my evenings socializing and drinking with my coworkers and friends; I spent the weekends at the airport. There were no forces at home vying for my attention or "encouraging" me to do chores. A kitchen pass need not be requested nor given for every weekend that I wanted to fly.

I used this free time to get checked out in the club Discus B and to further hone my skills in the local dialect of Bernese German, "Bärndütsch." The remainder of my assignment in Switzerland was all planned, move out of my apartment on June 20 and move into a tent.

The Segelfluggruppe Bern (SGBern) moves the majority of their gliders to a little valley town in the Alps named Saanen for a week each year. I was to finish out my assignment in Switzerland living in a tent, flying seven days a week, if possible. I had paid for what was called a "Jahrespauschale," which means "yearly flat fee" for unlimited use of the gliders. No rental fees were applied to my flying, I only needed to pay for the tows. With the flat-fee structure in hand I was going to take full advantage of the two DG-300 or three Discus B gliders at my disposal.

Saturday, June 20—The club moved the gliders from Bern to Saanen. It rained. The movers had moved everything out of the house, with the exception of one bag of laundry, my air mattress and tent. I didn't have to move out of the apartment until the fi-

nal exit inspection on Wednesday, so I slept in a dry and empty apartment.

Tuesday, June 22—Up until then it was rain, wind, wind, rain. My soaring vacation was being ruined by inclement weather. On Monday I managed to get in a quick pair of familiarization flights at the airfield. Last year I had a three-hour flight with the ever-present Paul Keller over a little hill called "Wispile" (vee-SCHPEE-ooh-ah). With that introductory flight and two pattern flights this year I was cleared to solo any of the single seat gliders I wanted. There was no lift or interesting weather on Monday, the perfect weather for my check-flights.

Sunday, June 28—The weather and exit inspection for the apartment whittled away at my flying vacation. I finally got a good soaring day for a long flight. At my direction the tow pilot took me to my most familar area. My first solo flight over the Alps would start over Wispile where I had flown a year before. I took advantage of a very reliable "restaurant thermal" there. Earlier in the week, during the bad weather, I had taken a gondola ride to the top of the mountain to see what it looked like from the ground.

The view is much more satisfying from the air. I flew down the ridge to the south. The clouds were not being cooperative, they would not permit climbing to the tops of the mountains. I flew conservatively at first and stretched my legs to fly from Wispile to Launen and then over to a village called Grüenebüel. I turned north to Zweisimmen and back toward Saanen. I was chased down by grey clouds and made an uneventful landing after three hours and 47 minutes.

As the days went on the weather could have been better. At times I wasn't sure if I was in Ireland or Switzerland. The day would start misty and rainy, and stay that way all day. Later I couldn't decide whether I was in Brazil or Switzerland. The days were hot and the flying day ended precisely at 3:45 p.m. with a thunderstorm. Due to my conservative flying I was always on the ground before the rain started. Others got caught in the rain (but landed uneventfully). In the 17 days I was living in a tent it rained at some time in the day on 14 days.

July 6—Despite the rain I did have some excellent flights. On the final day before I was to fly back to the United States a westerly wind set in. The day started rainy and dreary but cleared out around 1 p.m. We all made late day takeoffs and I was one of the last. There was no thermal lift to be found; an overcast deck of clouds snuffed out any surface heating to generate thermals. However, the winds were strong enough and the mountains plentiful. All I had to do was pick a mountain that faced the winds and I could make some excellent ridge soaring.

I spent an hour on a very small ridge with the club's Duo-Discus, which was giving a demo ride. The majority of this flight was just above 1700 meters MSL and never got above 1800. The FLARM beeped more than was necessary but it was still welcome to have. I ventured a bit upwind from the quite marginal ridge lift and found some weak lift over a large area. I treated this 0.5 meter per second lift gently and managed to climb above 2000 meters MSL. This was definitely wave lift. I patiently worked this weak lift above 2500 meters and started looking at the overcast clouds not much higher. I headed upwind.

By this time all the other gliders had started to land. The wind was not terribly strong and I found my way into another batch of wave lift, this much closer to the mountains just downwind of the mountain "Vanil Noir." I easily climbed from 2000 MSL to 2591 MSL but was met again by clouds. It was getting late. I had not heard any radio chatter for a while. I flew downwind to Saanen.

"Hotel-Bravo three-three-four-three, Campo Saanen, report position and altitude, over."

"Campo Saanen, three-three-four-three, reporting two thousand five hundred meters, five kilometers east of Saanen, over"

The situation was not spoken, but understood. "We on the ground want to eat, but you are still flying." There was a club rule, or a club custom, I'm not sure which, that any pilots landing after 7 p.m. are "on their own." The club does not have any obligation to drive down to pick you up or help you put away the glider. I put the nose down to 150 km/h with the spoilers open. I could feel the force of the airbrakes on my feet as I was standing on the rudder pedals. The GPS log showed that I was descending at 15 meters per second.

Not many Americans get the chance to fit in with the Swiss. I'm truly lucky to have had this experience.

—Piet Barber, SSC Webmaster

Piet Barber wipes down SGBern's Discus B after landing just before a rain storm broke over the field.

Copy That

Airstravaganza

I've received a good response to my e-mail request for volunteers to support the Warren Co. Balloon and Airstravaganza Sept. 12. However, we still need more club members to help. This should be a fun event and, as a volunteer, you get in free.

There will be hot air balloons, many powered aircraft on display, vendors galore, flying demonstrations by the Flying Circus, and glider demonstrations by our club. The flight operations manager (Reggie) was so impressed with the SSC volunteers last year that he's asked us to support him again this year. We will assist power pilots to park their aircraft, explain gliders to the public, and assist with crowd control and various other duties. SSC will also conduct glider operations on a modified schedule.

It goes without saying that supporting this event helps our reputation as good patrons of the airport. If you're able to volunteer from 7 a.m. to 7 p.m. on Saturday, Sept. 12, let me know so I can give the information to Reggie. The rain date is Sunday, Sept. 13. If you can't stay for 12 hours, we can still use a 4, 6, or 8-hour commitment.

To volunteer, send an e-mail to ***steve.rockwood@aerojet.com*** or call (703) 577-9414. I'll keep you informed of how the effort is going, and provide the details you'll need. It should be a very enjoyable day, so please try to help if you can. For event information go to: ***www.warrencountyairevent.com.***

—Steve Rockwood, SSC Event Coordinator

Do Your Duty

The Skyline Soaring Club is a very special group of people dedicated to the joy of flight, and who also seek to fly at the lowest possible cost. To achieve this goal the members agreed to take on certain duties. Some are tow pilots, some instructors, some include the treasurer and editor of the newsletter. Each of these jobs demand preparation and effort, and not a small amount of time.

Members who are not otherwise assigned a special duty serve as either a duty officer or assistant duty officer. Instructor, tow pilot, duty officer and assistant duty officer are assignments that members pull on a 8-10 week rotation.

Without these people we don't fly. In short, the existence and success of the club depends on these people showing up for their duty as assigned.

We've had an excellent record of attendance for assigned duties. But, unfortunately, this record has slipped over the past few months and it appears that some members view their duty as optional. This is not the case; duty is a requirement of membership in the club. It is the added dues you pay to others in the club so that the remaining 95 percent of the time you can fly inexpensively.

In the past few months we've had numerous cases of DO and ADO no-shows. We cannot operate if this continues. While we've been reluctant to take measures against no-shows the problem has become too great to allow it to continue. Therefore, take heed, we will be changing our policy. Again, I remind you that you can give your blackout dates to the Rostermeister. But once the Rostermeister produces his duty schedule it's your responsibility to show up or get a substitute.

I will now start publishing the Skyline Soaring Club Fecal Roster. The SSCFR will include the names of people who fail to show up for their assigned duty. To get your name off the list you must serve two additional duty days for every day you miss. We're going to try this "exposure" for missing duty to see if this improves our duty attendance. If this fails the next step will be to impose fines, as many other clubs do.

I hope you take this message seriously. You enjoy top-notch equipment, excellent instruction, and very low prices at Skyline Soaring Club. But you must pay the price of showing up for your assigned duty to get these benefits. I hate to say this, but if showing up for duty is something that you really don't want to do or cannot do, then Skyline Soaring Club is not for you.

If you want to soar without the responsibility of pulling duty every 8-10 weeks then you should do your soaring at a commercial operation (where it will cost you much more to fly).

We simply cannot continue to tolerate the absentee rate we have experienced over the past few weeks.

—George Hazelrigg, SSC Chief Duty Officer

Duty officers keep Skyline Soaring Club flying.

Model Gliders

If you'd like a custom model of your glider, consider Factory Direct Models, LLC. They make custom aircraft models and have recently expanded their product line to include gliders and tow planes. Prices start at $199.95 for a 9-inch desktop custom model and a 17-inch desktop model with full color custom logo and custom inscription plaque costs $299.95 plus shipping. Each model features your color scheme, registration number, decals and graphics.

The production time for custom models is 8-10 weeks. For information go to: ***www.FactoryDirectModels.com*** or call (866) 580-8727 ext.104 or (503) 470-6700.

New Charity Committee

The SSC board approved starting a committee to study setting up a charitable organization to provide scholarships for young people to learn how to fly gliders, among other things.

We need members, especially ones with experience starting or running a charitable organization, to meet and discuss the issues and help set up the organization.

—Spencer Annear, SSC Director

Final Glide

One of SSC's probationary members, Ted Toth, passed away last month. Ted worked with Rick Regan and joined SSC with the intention of adding his glider rating. I had the chance to meet Ted a couple of times, he was a great guy. My thoughts and prayers go out to his family. I just thought all the members might like to know.

—Bruce Codwise, SSC Instructor

Updates to Web-Based Training System

SSC Students and Instructors Can Follow Learning Progress Online

Attention Skyline students! While in exile in Switzerland I made huge changes to the computerized system that records your training progress. After many late nights of hacking away, programming and crafting database tables and indicies I'll introduce SPR 2.0 to the membership Sept. 1.

Once online we'll have the best soaring training record system in the country. I'm pleased how well the beta testing is going and really looking forward to making this new system go live.

Both the current and new systems track a student's progress against the Skyline Soaring Club Training Syllabus. Around 2000 Jim Kellett, Shane Neitzey and Joe Parrish assembled a training syllabus that contains all of the requirements for solo described in FAA regulation 61.87. The SPR system records the student's progress to the levels of "Demonstrated" (an instructor demonstrated the technique), "Performed" (the student performed the task) and "Proficient" (the student performed the task to solo standards).

A Little Paper History

The original system was stored on paper in a folder at the field. Some of the disadvantages of the paper system were quickly discovered: the paper was often illegible, the file folder was hidden away and often forgotten, the paper system could not be reviewed during the week when the student was reflecting on his progress or when an instructor was crafting a lesson plan for the upcoming weekend. Sometimes the student would take the syllabus sheet home to review and not return it. If not returned any progress recorded on the paper syllabus was lost and a new sheet would have to be created. The privacy of the student's instructional record could not be guaranteed either. Despite its shortcomings the paper system was far better than the alternative, which was chicken scratch in each student's logbook. The logbook approach is hard to review against the 61.87 training standard. Despite the shortcomings of our paper system it was still far ahead of many other flying club's training programs.

From Paper to Electrons

In 2004 I spent hours converting the paper syllabus sheets into a computerized system.

In the computerized system each area of operation gets a sign-off from an instructor when the student demonstrates the levels of "Demonstrated," "Performed" or "Proficient." In addition the instructors can write a short essay describing each training flight. There was not much difference from the paper system except that it was immune to the illegibility and mutability of paper. You can find the computerized training syllabus at: ***http://skylinesoaring.org/TRAINING/Syllabus/.***

Non-members of the club can view the training syllabus but only active members can log in to view the details of their progress. For each section of the syllabus there is a page describing the expectations of the lesson. Such a sample lesson plan can be found by going to any of the hyperlinks on the syllabus page link above.

More Enhancements

By 2008 many of the strengths and weaknesses of the computerized system became apparent and many of the issues were addressed incrementally. With feedback by Jim Kellett, John Noss and especially Bruce Codwise we've made way for major revisions to the system. These changes come mostly in the form of how the student's progress is being recorded and displayed.

Taking inspiration from "Part 141" flying schools we are now linking the different types of information. Now combined are the flight information database, the SPR database and the instructor reports. The flight information database contains all of the information about your flights, with whom, how high and how long you flew. The SPR system tracks a student's progress against the training syllabus and the instructor reports are essays written by the flight instructors after each instructional lesson.

	Days Ago	1369	1362	1362	1353	1347	1284	1284	1271	1263	1263	1263	124
	Glider	K	K	K	K	K	K	K	K	K	K	K	
	Tow Release (x100)	30	30	30	30	30	25	30	30	30	30	30	3
	Instructor	GH	SL	SL	GH	DW	GH	GH	PB	GH	PS	GH	J
Lesson	Phase												
1	Before We Fly												
1a	Preflight Planning					1			2				
1b	Aeromedical Factors												
1c	Use of Controls	1							2				

Figure 1: Grid of training progress—flight information is along the top. Anything abbreviated can be expanded by holding the mouse over the word. After the new system is in place each column is expected to have some sort of progress noted for all areas of operation.

How it Will Work

Here's how the new system is designed to work, with the fictional instructor, "Joe," and fictional student, "Bob." Bob requests instruction by sending Joe an e-mail. Instructor Joe logs into the SPR 2.0 system and goes to the "Grid" view of the SPR system **(Figure 1).** There he sees a page showing the student's progress plotted on a grid. He can see all the flights with each item in the training syllabus as the Y axis and the past 20 flights on the X axis. Within each grid cell there's a score for the level attained during that training session—Demonstrated, Performed, Solo Proficient, Rating Proficient and Critical Issue (marked in red).

Joe goes into the "Records" section of SPR 2.0 **(Figure 2)** and gets a list of the training items that are still outstanding. The "Records" page plainly states that the student needs instruction in several areas and even has a green progress

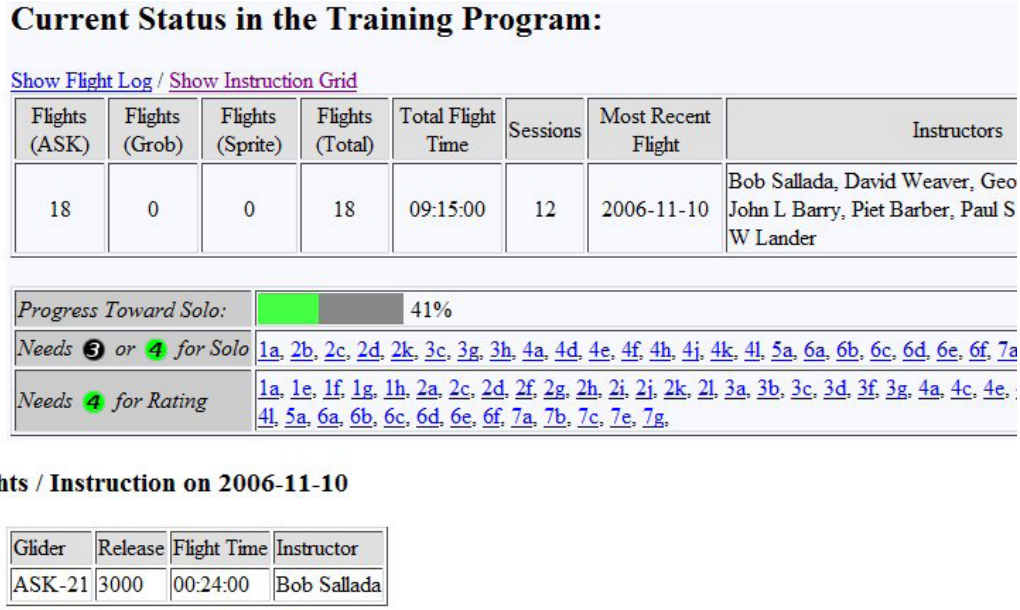
bar to show the student's general progress. Joe decides which areas from the syllabus will be suitable for flying that day and may assign reading lessons for the student to study in preparation for the flight.

Joe and Bob fly together and Joe records the results of the flight in the student's logbook. Meanwhile the duty officer records the flight information on the logsheet program. When the DO uploads the logsheet to the club's web server it sends an e-mail to Joe asking him to report his recent flights. The instructor will be reminded of any flight instruction sections not documented by continuing e-mails.

Joe logs into the system and marks any appropriate sections on the grid, using the scores of Demonstrated, Performed, Solo Proficient or Rating Proficient. If any items need special attention during the next lesson Joe will mark it as a "Critical Issue." Joe can write a short essay about the training session, issues to look out for, what was done, etc. The progress report is e-mailed to the student so he can compare his progress against the training syllabus. The same report is e-mailed to all instructors so they can be aware of the student's progress.

Bob can log into the members-only section of the website to view his entire training record. Also available are lesson plans of the sections he has not completed and he can prepare for future lessons by reading ahead.

The process loops back to step one until the student has accrued all the training syllabus items marked as required for solo. At this point the instructor who is flying with Bob has a clear record of his instruction and will be more likely to sign off Bob for solo.



Current Status in the Training Program:

Show Flight Log / Show Instruction Grid

Flights (ASK)	Flights (Grob)	Flights (Sprite)	Flights (Total)	Total Flight Time	Sessions	Most Recent Flight	Instructors
18	0	0	18	09:15:00	12	2006-11-10	Bob Sallada, David Weaver, Geo John L Barry, Piet Barber, Paul S W Lander

Progress Toward Solo:	41%
Needs 3 or 4 for Solo	1a, 2b, 2c, 2d, 2k, 3c, 3g, 3h, 4a, 4d, 4e, 4f, 4h, 4j, 4k, 4l, 5a, 6a, 6b, 6c, 6d, 6e, 6f, 7a
Needs 4 for Rating	1a, 1e, 1f, 1g, 1h, 2a, 2c, 2d, 2f, 2g, 2h, 2i, 2j, 2k, 2l, 3a, 3b, 3c, 3d, 3f, 3g, 4a, 4c, 4e, 4l, 5a, 6a, 6b, 6c, 6d, 6e, 6f, 7a, 7b, 7c, 7e, 7g,

Flights / Instruction on 2006-11-10

Glider	Release	Flight Time	Instructor
ASK-21	3000	00:24:00	Bob Sallada

Figure 2: Instructional record—the top of the page shows a summary of the student's flying, including the gliders flown, total flight time and instructors he's flown with. The page goes on to describe the lesson sections that still need completion, both to the solo standard and for the practical checkride for a private pilot license.

This may seem like a lot of steps but it's really not that complicated, I promise. It's also worth noting that the system also works well for rated pilots completing spring checkouts, BFRs or just some proficiency flying with an instructor.

Why It's Better

The old system only recorded the steps of progress once. If a student's instruction covered many years the student may have covered something on the syllabus years ago and his further progress could not be tracked. Once a student got a proficient score he had it forever. After years of training he might have completely forgotten the subject matter, but the syllabus says he did it. Because of the score-once-forever symptom of the old system there was no way to document backsliding or regression. Often a student would go for months without any apparent progress on the syllabus, the syllabus would only get updated when he graduated from "performed" to "proficient." Because of this, sometimes the training record system would become less significant, and often forgotten. With a report of every training session, the student's progress is continually tracked.

Instructors forget—It happens. They spend the day at the field, go home and forget the flights they did that weekend. With the e-mail reminder they are less likely to forget making a report. With continuing reminders they will eventually acquiesce and write something.

Students forget—How often have students gone home from the training session and not thought about flying again until the next weekend? With the new system an e-mail report of the student's progress is sent so he can get feedback.

Consistent feedback—When I was a student, I hated living in a vacuum of not knowing "how I was doing." With the report of the training session from the previous weekend the student is kept in the loop.

Goal Setting—The student has clearly-defined short-term and long-term goals to help keep his focus. With the new system it's obvious what he needs to work on and what he's accomplished.

Liability—With this training system the club has documentation about the FAA-required training needed for solo. It will be much more difficult for a litigious ex-student.

Critical Issues Noted—The new system has a place for instructors to indicate to a student that a section of the training program needs more attention. This isn't meant to shame the student, but to give the instructors and student a record of issues that might need extra training. Example: the student has not learned the takeoff checklist after 10 flight lessons. This student would get a "critical issue" item on his record and the next instructor would notice that checklists are a problem. He could reach into his bag of tricks to help the student.

I hope the club students find this new system as helpful to their training program as I think it will be. This is all new software, so if you find any bugs in the system, or if something doesn't seem right, e-mail me at: ***pbarber@skylinesoaring.org***.

—Piet Barber, Webmaster

Membership Notes

Club membership has continued to grow during the summer. Skyline Soaring now has 106 active members, including three new probationary and 15 introductory members.

Welcome the following members who have recently joined with probationary status.

•Tom and Debi Flynn are both pilots for FedEx. Tom has a private glider pilot's license and Debi will be working toward her glider add on. Tom and Debi also own a fruit orchard and will spend a lot of their time in the fall picking and selling their wares. Welcome Tom and Debi.

•Salvatore 'Sal' Speziale comes to the club with a wealth of glider experience. Sal currently flies for American Airlines and holds ATP, CFI and CFIG certifications. Sal was a glider instructor at the Air Force Academy and is anxious to start dispensing knowledge to Skyline members. Welcome to the club Sal.

We have 15 introductory members for August—Todd Adkins, Sarah Applegate, John Beegle, Joseph Cianfrani, Michael Dewar-Massis, Garth Hichens, William Kost, Iiven Lichlov, Roger Martin, Patrick Matus, Keith Olver, Leo Schmittel, Peter Schwenke, Zack Vickland and Peter Wheeler.

Welcome to the club.

—Steve Rockwood
SSC Membership Officer

Who's Got the Right of Way?

Tony Cirincione's article in last month's issue of Soaring about patterns at mixed-use airports is an excellent one for promoting discussions at airports where gliders fly. It also provides an opportunity to share an observation to promote heads-up flying, with regard to the FAR's right-of-way rules, Sec. 91.113 (q.v.). It's arguably one of the most provocative regulations in the book and one read very carefully by very few airplane or glider pilots.

The most interesting aspect of Sec. 91.113 is, in my opinion, the way it's written to make clear that pilots are expected to apply reason and exercise good judgment—a much better standard than trying to document every conceivable conflict between every conceivable combination of aircraft category in every conceivable situation. The FAA actually expects us to think. (See 91.113(b).

To jump to the conclusion, few pilots realize that Sec. 91.113 applies a glider's right of way over an airplane in one, and only one, very narrowly defined situation, specifically "When aircraft of … different categories—[are converging at approximately the same altitude (except head-on, or nearly so)] … a glider has the right of way over an airship, powered parachute, weight-shift-control aircraft, airplane or rotorcraft." [paraphrased] (See 91.113(d)(2).)

So if a glider is on an intercept course (other than head on) with an airplane, the glider has the right of way. However, the rule is quite explicit in the subsequent section (See 91.113(g)) on landings. In that section other right of way rules apply, i.e. on the surface or in the air, at a lower or higher altitude, etc., to aircraft, without distinction to category (it says aircraft, not airplane). It's also important to note that "g" follows "d" and is not a subset of the several distinctions among category in "d".

Finally, few people recognize that aircraft of any category in distress (91.113(c) earn the right of way "no matter what" and that aircraft towing (such as gliders) on a converging (other than head on) earn the right of way over all other aircraft (including gliders in free flight) (91.113(d)).

Why is this so universally misunderstood and taught? As a certified old fart I'm tongue-in-cheek of the opinion that few people under 60 years old or so have never received rigorous training in English, particularly syntax, paragraph and page construction, and precedence. The regulation has to be read with a full understanding of how regulatory language uses "and" and "or," and constructs outlines which become decision trees … and where in the letter/number order the statement is written.

To be realistic, almost all pilots operate thinking that gliders have the right of way over airplanes all the time. In many instances that's a good thing since it promotes erring on the side of caution. On the other hand it can result in poor airplane/glider pilot relationships at airports with both types of traffic when, for example, an airplane on short final aborts his landing to yield to a glider on downwind when it would be quite safe to complete his landing. Also, if the glider lands while he's going around it takes the glider pilot longer to clear the runway, further frustrating the airplane pilot. Glider pilots sometimes tend to rely on an "I've got the right of way" attitude to an extreme that's truly poisonous to fostering goodwill among our fellow aviators. In a few instances yielding to gliders is the less safe option.

The bottom line is that pilots need to think through all their options in the pattern and a discussion of this regulation makes an excellent starting point for teaching the importance of situational awareness, pattern planning and good judgment.

—Jim Kellett, Resident Curmudgeon and Interim Chief Flight Instructor