

July 4th Issue Guest Editor: Phil Jordan

"All That's Necessary for the Forces of Evil to Win in the World is for Enough Good Men to Do Nothing."—*Edmund Burke*

Andrews AFB May 17, 2007 photos by Johnny Jordan





Three Minutes of Terror

By Gordon Roesler

But the important parts, the lessons, stem from the few minutes before the touchdown, which was on a long, flat, empty field. The landing was the easy part.

Do you remember our annual safety meeting? It was about three months ago, but only a few weeks before the flight that is my subject. The two accident discussions we had at those meetings were key to my successful landing, and may have saved my life. Later, I will show specifically what I mean.

The forecast for April 12th was for light southerly winds in the morning, building to strong (15-knot) surface winds from the southwest in the afternoon. This forecast was accurate. Remember those conditions: STRONG WINDS FROM THE SOUTHWEST. I always will.

I had a first flight in the Sprite during the morning's light southerly breeze. I released at 2,000 feet, under a ceiling probably less than 3,000. I expected to have a brief flight. But as I approached the edge of the cloud base, I found spotty lift, aided by some hawks, and was able to work it for a flight of over half an hour.

I then spent a restful morning under the awning of the FBO, watching the wind conditions change as forecast. I started thinking about how that would change flying conditions. The lift on my first flight had obviously been thermal in origin. But now, the winds of 12 knots at the surface and no doubt higher at altitude should shred any thermals that start up. I anticipated turbulence when behind the ridge, for instance while climbing out on tow. I hoped that maybe some wave might kick in.

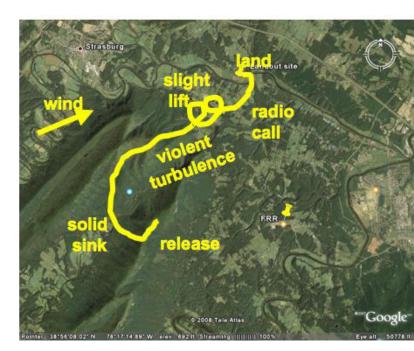
And sure enough, Craig Bendorf in WV reported wave to the north of the ridge. So when my turn to launch came, I decided that wave was my goal.

For some reason, though, I had Paul Seketa tow me OVER the ridge rather than to the north of it. I just can't remember what my thinking was. It was not a good idea.

We got the expected roller-coaster ride during the tow. It did seem that there were some moments of strong lift during the tow. But I held on to 3,000 feet AGL, and released heading south, right over the eastern ridge. I turned west, and was instantly in TEN KNOT sink.

This is where my thinking really betrayed me. My good morning flight seduced me into thinking that "there must be lift somewhere," an irrational thought considering that wind conditions had completely changed. I kept going WEST, thinking that "what goes down must go up." In other words, if Massanutten Ridge was the cause of the sink, there must be a corresponding area of rising air nearby. There wasn't. At least not where I was. I was sinking FAST, approaching the eastern side of the western ridge. The sink was absolutely unbroken. In retrospect, what was probably happening was: there was in fact a wave, generated by Great North Mountain to the west, and the Massanutten ridge was under the downwardgoing part of the wave.

But that's academic. What was happening to me was completely real. I was now nearer the western ridge than the eastern, and concerned that I wouldn't even clear the eastern ridge if I turned back toward the field. My decision was to exit to the north, in the gap between the eastern ridge and Signal Knob. My altitude at this point was probably about 2,800 feet MSL. (Altitudes in the rest of the article will be MSL because I can remember the altimeter clearly.) Time for a picture:



The flight path is not from GPS (been meaning to get one of those), but just an approximate view. There may have been a couple of turns in the first minute or two after release, chasing ephemeral lift, but I'm not sure.

During our safety meeting, it was suggested that a westerly breeze will actually accelerate when it rounds Signal Knob. I was hoping that would give me a "kick" and that I might make it back to the field, although at this point I was definitely considering the possibility of landing out. (From the safety meeting: when it's time to land, land. Don't play "hope springs eternal.") But instead of a tailwind, (or in addition to one) what I got at this point was the most extraordinary turbulence I have ever flown in.

If you only remember one thing from this article, let it be this: BEWARE THE GAP BETWEEN THE RIDGES DURING STRONG SOUTH-WESTERLY WINDS. With very tight straps, and I re-tightened them during the excitement. I was repeatedly slammed into the canopy. (The Sprite only has 4-point straps; a crotch strap would have helped.) For a few moments, things would get very quiet; I would look down to see the variometer pegged low. Then the slamming would start again. I could barely counter the roll rates with full aileron deflection.

[Later that evening, at dinner for the retrieve crew, George Hazelrigg III and his girlfriend told about similar excitement they experienced. They were near enough to the field to make it back.]

Not surprisingly, there was occasional lift in all the tossing. Down to 2,000 feet, I managed to circle in one brief patch and get up to 2,500 feet. (I believe that made my landing more orderly.) But then the lift ended, and I knew that it was time to land. I radioed Skyline Ground, gave my position as 2 miles northeast of the Knob, and got turned north.

I had noticed a nice-looking field there during the brief lift phase; I said, "That's the place" and turned toward it. It was a beautiful light green color; I could see rows from planting of the previous season. I was still in ten-knot sink. I scanned the field for cows, rocks and fences; seeing none, and noticing how nicely lined up with the wind it was, I went immediately into final approach. The recent safety meeting had come to mind: a crash had occurred because the pilot flew a full pattern (not far from where I was) and lost too much altitude. None of that for me.

At 60 mph and 1,900 feet, I opened spoilers to get rid of some of my altitude. That's when I noticed that I was making no headway; I was essentially going straight down, and there was a tree line on the eastern side of my chosen field. I closed spoilers and increased to 80 mph. Still in sink, I now had enough speed to clear the trees with ease (I was probably 300-400 feet above the ground at this point), and just worried a little about how to get rid of my energy after clearing the trees. Of course, if I'd been more relaxed, I would have realized that I still had very little ground speed and that wasn't going to be a problem.

The landing itself was quite smooth. I made sure to line up with the former corn rows. On rollout, I heard a couple of corncobs bonk against the bottom of the fuselage; otherwise it was no different than landing on the grass at FRR. Just as I was stopping, the Sprite weathervaned vigorously to the left. This was not a wing dragging; both wings were still clear of the 1-foot tall green stuff. It was just a really stiff southerly component to the surface wind. Craig Bendorf actually watched the landing from WV a few thousand feet up.

Everything is denouement from that point forward. I felt relief, of course, and almost immediately began the "How do we get this glider home?" phase. Paul flew over me in the Pawnee to "be sure I could walk." I was still experiencing a sense of relief well into the retrieve, as you can see:

There have been several emails about the rather difficult retrieve; I've recommended that the Skylines editor reprint the excellent email George Hazelrigg Jr. wrote about it. But what I experienced

Lessons from a Difficult Retrieve

by George Hazelrigg Jr.

ssuming that you don't live on the back side of the moon, you already know that we had a landout yesterday. As it turns out, the landout was fully successful, no damage, no injuries. But, as with most landouts, there were lots of lessons. It's worth taking some time to review them.

First, a few notes about the day and the landout itself. The day was somewhat better, and somewhat worse than expected. It was clearer and with better lift that expected. It was also much windier and had much more sink that we might have expected. The morning was calm and flat, with very little lift. Then the sun came out and the lift began, 6 kts up. It was looking good. Then the wind came up, about 20 kts, but pretty much down the runway. With the wind came lots of turbulence, lots of lift and lots of sink. A couple people handled it all just fine, but with very aggressive flying. One person got caught in the sink and landed out in the Sprite.

As for the landout, I can make several comments. But let's prioritize things. The first concern in any landout is your safety. Never make choices that compromise your safety. Next is the glider. It's nice to come away from a landout with no damage to the glider. And still next is the retrieve. It's also nice to be able to retrieve



in the flight itself will always stay with me.

Others may have ideas about lessons resulting from this experience, but here are my top three:

 Before flying, decide what your objectives are for the flight, and take a tow to a location that's consistent with those objectives.
Encountering strong sink off tow, head back for the field immediately.

3. Once again: BEWARE OF THE GAP AT THE NORTH END OF THE RIDGE DURING STRONG SOUTHWEST WINDS.

Thanks again to the two pilots who briefed their stories at the safety meeting. Those stories, and a Soaring Magazine article talking about "How can you be sure you really have enough altitude," actually came to mind during my flight. I believe that they helped me take the safest possible actions after some extreme conditions, leading to a relatively uneventful landout.

the glider from its landout point. Case in point, the pilot chose a field that offered considerable safety. The field was large and flat, directly into the wind and with relatively short grass. Save for the excessive wind and greater than 10 kt sink, an easy landout, with some 1,000 feet to spare. Now for the retrieve. That was a chal-



lenge. And this is the focus of my comments.

If any of you have any desire to fly on anything other than plain vanilla days, it's worth having (1) a portable GPS, (2) a cell phone and (3) a hand-held radio. This may be about \$500 worth of equip-



ment, but well worth it. The GPS enables you to specify your exact location. In this case, there were two gliders in the air and the tow plane that all could see the glider on the ground and relay its location. But finding it while driving was still a challenge (funny story to come). The cell phone is an absolute necessity. Although we had radio contact, the cell phone was the vital link in establishing our needs for the retrieve. A hand-held radio is important because you can break the glider in a way that disables the aircraft radio (e.g., breaking off the tail boom can disconnect the antenna). Lesson 1: when you arrive at the field, give the DO your cell phone number, whether you plan to land out or not. Let's keep a piece of paper next to the computer for cell phone numbers (or let's keep an upto-date list of cell phone numbers taped inside the computer box).

Case at hand, no one was home, the glider pilot had to walk out of the landout field to a road and then to an intersection to ascertain his location sufficiently well for the retrieve crew to find him. Luckily, they had a detailed map, and with considerable navigational skill, managed to locate the glider. But an hour later, things were probably in worse shape than when they had just arrived. The glider was not in a place from which an easy retrieve would be possible. Now for the cell phone again. We got detailed driving instructions from the retrieve crew, and it was apparent that it would take all available hands to get the glider. And a few extra notes: (1) the retrieve vehicle and trailer were stuck in the mud, and (2) there was a "lake" between the road and the glider. Lesson 2: explore first, don't drive into a muddy field. Off we go in two more vehicles with seven or eight more people. This retrieve is about 3-4 miles north of FRR, on the north side of the north branch of the Shenandoah River. More like a 12-mile drive. We need to make a left turn onto Rt. 626. After driving several miles, we worry that we may have passed our turnoff. We stop to ask directions of two women, one standing in the road and the other cutting her lawn. They don't know where this road is, but urge us on. Turns out that the road is on one side of the first woman's property-it literally went down her property line. So much for getting directions. Lesson 3: you cannot depend on the locals to know the name of the road they live on.

We find the glider. I look across the lake and think, "Well, we can get it, but it ain't gonna be pretty." There's a lot of water between us and the glider (and a lot of mud under the water), and no way to drive near the glider. Luckily, by the time we arrive, the three people already there have discovered a somewhat drier approach to the glider, but it involves getting over a barbed-wire fence. We can handle that. Lesson 4: a bit of exploration can help a lot.

To get the glider out of the field, it will have to come apart and be carried out, one piece at a time. Lesson 5: bring lots of people along on a retrieve. It takes about six people to disassemble the Sprite in a muddy field. (And even more to push the stuck retrieve vehicle out of the mud.) It also takes someone who knows how to disassemble the glider. Lesson 6: take the time to assemble AND disassemble every glider you fly. Learn how to do it, read the manual, and know where the manual is (in the glider, right?). And be sure to do this before you fly on challenging days. Case at hand, the pilot and initial retrieve crew did not know how to disassemble the Sprite. Luckily, two of us in the retrieve crew did know how to do the job.

Next, the glider needs to be fully disassembled. Canopy off, stabilizers off, wings off. Remember that both wings and the fuselage need to be held throughout the disassembly process (that's why you need all those people). Luckily, the Sprite is light, and five of us were able to carry the fuselage out of the field and over the fence (but my back aches a bit today). You'll need more people to retrieve heavier gliders. Piece-by-piece, we carry the glider back to the road. We also push the trailer out of the mud and back to the road.

Now to put the glider on the trailer. Lesson 7: someone needs to know how the glider goes on the trailer. By the way, the glider manual doesn't cover this, so you need to be shown in person. I've put the Sprite on the trailer a few times, but need to think about it each time. I don't do it that often, and it isn't obvious. The fuselage gets tied down with a special bracket. If you don't know about this, you could spend all night trying to figure it out. The wings get bolted to the trailer in a very special way also. Let me just say that it's real embarrassing to have a successful landout just to damage



the glider trailering it back to the airport. And that is quite easy to do.

OK, glider is on the trailer. Now to get it home. Turns out that the ball that was used to hitch the trailer to the retrieve vehicle was the wrong ball, and we don't have a correct ball-hitch set. The next half hour is spent trying to rig up a ball to which the trailer can be connected. Lesson 8: be sure you have the correct equipment. We really didn't. There were correct balls, but they didn't match the hitches. And the original retrieve vehicle didn't have an electrical connection. So we towed it back with our 4Runner, which



did have the necessary electrical connection. We were able to push the stuck retrieve vehicle out of the mud and retrieve it as well. Lesson 9: don't go driving off into mud. You're just going to lose the retrieve vehicle. Lesson 10: always use a four-wheel drive vehicle for a retrieve, no matter how simple the retrieve would seem.

This story has a happy ending, although it took about four hours to get there. But it easily could have ended on a sadder note. We need to do some retrieve training, and everyone needs to get be involved. Some instructions and checklists would help a bit too. Perhaps, now that he has recent experience, our latest landout victim could write up some instructions for Sprite retrieves.



SSC Ops Report 6/29

Mike Ash, DO

t was an interesting day today. Things looked depressing on the drive over, but conditions improved around the Front Royal area, and we kicked off operations right around 10AM. Tom Park took two flights with Paul Seketa instructing and Shane Neitzey towing, Kevin Fleet launched in his Libelle, and then Gyoergy Gulyas went up with Paul.

Right about then the radio lit up with all sorts of chatter. Turns out that Kevin Fleet had encountered severe turbulence, hit his head on his canopy hard enough to shatter it, and then made a hard emergency landing in a field near the river north of the airport. Craig Rodarmel and Richard Griggs soon left to look for him, while Shane took the Pawnee up to search from the air. Paul spotted the glider, directed Shane to it, and soon Shane and ADO Kevin Barrett were off in Kevin's truck. Both glider and pilot were recovered with, as far as I know, no major injuries. Kevin was in the hospital when last I heard getting checked over, and hopefully there's nothing big.

This pretty much put a stop to the flying, so we put everything away after Paul and Gyeorgy landed, giving us a total of four flights.

Some notes: The club's Emergency Response Plan was nowhere to be found. I thought it was in a binder in one of the document boxes along with everything else, but I couldn't find it. We defi-

nitely need a hard copy sitting someplace where it's easy to locate. If nobody else gets to it first, I'll print out a copy and bring it to the field whenever I'm out there next.

The Grob battery's knob would continue to rotate even after being fully tightened. It appears that the threads are fine, and the problem is just that the knob at the top isn't fully secured. It felt plenty solid to fly with, bit it would be good to get it fixed. I'll email specifics directly to the Grobmeister.

In the last DO mailing from the field this card was enclosed—a thank you note from a 'Bonnie' that was left with Reggie. She obviously had a great time (she flew with Jim) —Dan Noonan Due to the sudden nature of our shutdown, no fuel was put in the Pawnee at the end of operations. It should still have a lot since we only did four tows plus Shane's search flight, but the next tow pilot should be aware.

So there you have it. Kevin, good job on getting down as well as you did. To everyone else, thanks for all your hard work today.

We hope to describe Kevin's harrowing flight in a future Skylines article."

what a econdiczed explusee. first a quick THANK YOU. Jim Lellett made me feel at lare over he jare eve evere off Devanted to scacy Thanks far one of the most lemaging advertices fire ever had. of the gracerd, Wow! what a If anyone had told se a Areat filat! lough af everes ago that I'd Thank you so much fac be flegergin a glider I the experience. would have Devely tald these Jin any time exact like there ware next of their ninds. some never enetusiastice If anyone says takay lit's fle congany on one of excell Jagker - Jeest lit me trace. in a glibu - I'll be the first Stark you so mack, en lize. BRANIO

Membership Report

Steve Rockwood, SSC Membership Officer

ur membership has continued to grow during the spring months and the club now has a total of 97 active members, including 5 new introductory members. Welcome the following members who have recently joined or converted to probationary status with the Skyline Soaring Club:

Those who recently joined as probationary members include: • Amilio and son Eric Escobar. They joined the club in March and have flown several times since joining. Eric is fourteen and looking forward to training for a glider rating when he is sixteen. Amilio will be learning to soar along with his son, what a great father-son activity.

• Richard Griggs is new to soaring and very anxious to learn. Since joining in April, Richard has had about a dozen instructional flights and what I hear from the instructors he is doing well.

• Gyoergy "George" Gulyas has relocated from Hungary where is currently has a glider rating for that country. He is now working to obtain a United States glider rating. Just this week, George demonstrated sufficient glider proficiency to solo both the ASK-21 and Grob 103 and has made the most of that opportunity. You will see George at the field almost every day we have operations and he will try to get in three to six flights in a day. The guy is tireless when it comes to soaring and will only quit when we have to put the equipment away for the day. George is very knowledgeable in all aspects of soaring and has considerable expertise in aircraft maintenance and repair.

We have five new introductory members; Skipper Darlington, John Grosskopf, Brenda Leerar, Francesca Pezzarossa, and Bryan Holland. Bryan is from Vermont and holds pilot ratings for both powered and glider flight. He is on temporary work assignment in the DC area and looking to fly with the club until he is relocated again in the early fall time frame. Welcome all to the club.

Due to work and other commitments, Ron and Geoffrey Anthony have decided to go inactive. Geoffrey has indicated he may return to active status as soon as his work commitments return to normal and he can find the time to get back in the air. We are very sorry to not see them flying with us any longer, but I'm sure they will come out and visit from time to time and support club extracurricular activities.



Tost Reel Magic

George Hazelrigg

few years ago, our club switched from yellow nylon rope that we dropped near the approach end of the runway after each tow to the Tost reel system we currently use. I think that anyone who has worked with the old system can tell you why we made this switch. It requires much less effort on our part—no need to retrieve the rope after each tow—takes less time on the runway, and just plain works a lot better. Still, the system seems to be a bit of a mystery to many. So maybe I can debunk some of the magic.

The heart of the Tost reel system, as shown in Figure 1, is the reel. We use a 200-foot tow rope. All 200 feet are stored on the reel located just behind the pilot's seat in the Pawnee. An electric motor drives the reel through a clutch to retract the rope after use. The clutch limits the retraction force to about 20 pounds (that's the force needed to pull the rope out for a launch), so there's little chance that a glider could be retracted into the belly of the Pawnee even by the most diabolical of tow pilots. The tow rope is not tied firmly to the reel, however. It is held on by a piece of duct tape. (That stuff has many more uses than you may have thought.) This is very important, as the reel does not take the force of the tow. The maximum force that should ever be exerted on the reel is limited to about 20 pounds by the clutch.

So what keeps the rope attached to the Pawnee with the glider in tow? There is a little thing called the "slug." This is a little aluminum "nut" that houses a knot in the rope as shown in Figure 2 (yes, there is a knot in the rope at the Pawnee end). The slug is on the Pawnee end of the rope. As the rope pays out, the slug







Figure 2 a & b





Figure 3



Figure 4



Figure 5



Figure 6

passes into the tube shown in Figure 3 and, near the aft end of the Pawnee, comes to a stop, Figure 4. This is the point where that 1,000 pounds of force on the rope can be generated. The rope then passes out through the cone on the aft end of the Pawnee, and back to the glider.

At the glider end, we have the Tost ring that connects to the glider tow hitch. The rope we use is 2,000 pound test and, as you know, this is too strong for our gliders (remember the 80-200 percent-of-gross-weight rule). So weak links are required at both the glider and tow plane ends of the rope. The weak link is contained in the slug that is hooked up to the glider. It is rather important that you know what goes on inside that little slug. So here are some pictures. The rope passes through the end of the slug and is knotted as shown in Figure 5. This knot is all that keeps you on tow, so you want to be sure that you can see the end of that little pig tail that extends beyond the knot. That is your indication that the knot is still there and hasn't slipped.

Next, the end of the slug attaches to the weak link shown in Figure 6. The weak link itself is the white "dog bone" with the hole drilled in the middle. This dog bone is calibrated to break at 1,100 pounds, which is appropriate for all our gliders—it puts us in the 80-200 percent-of-gross-weight range. The dog bone is housed in a silver sheath also shown in Figure 6. The sheath prevents the dog bone from twisting, which would weaken it, but provides no additional strength to the dog bone. The sheath and the dog bone bolt to the slug, with the rope pushed to the side as shown in Figure 7, and the Tost ring bolts to the free end of the dog bone. The whole assembly is as shown in Figure 8.

Now let's come back to Figure 4. What about the weak link at the tow plane end? You'll notice that this mechanism is a bit complicated. On the left side, you see the tube that houses the Tost rope leading to the cone. Just in front of the cone is a red lever. That lever controls a guillotine, which the tow plane pilot can use to cut the rope in case of an emergency. And that mechanism



Figure 7

Figure 8

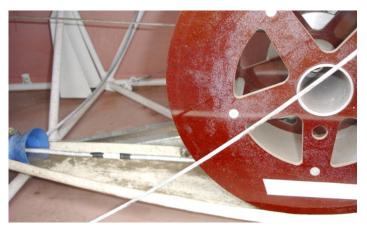


serves as the weak link at the tow plane end. To the right side of this mechanism, you can see an old-style Tost hookup for a droppable rope. As shown, the cable that would normally go to the guillotine is hooked to the Tost rope release. So, in a nutshell, that's the mechanism of the system. How can we get in trouble using the system? First, when you release from the tow plane, it is possible to knot the rope. I've seen some pretty incredible knots put in the rope just from the release. If a knot gets into the Tost rope, it will not retract properly. The tow plane will land with the rope out, and we will need to untie the knot and retract the rope on the ground. This is no big problem, and it does not pose a threat. A worse problem arises when the rope jumps off the reel, either during rewinding or extension. Rewinding isn't serious, and can be corrected after landing. During extension, it can be a problem. If the rope jumps off the reel during extension of the rope on the ground, the rope will bind and give the impression that it is fully extended. But, with the nut not seated at the end of the tube, the force of the tow is now borne by the Tost reel, which is not designed for this load. So it is very important to be sure that the rope is fully extended before the tow is begun.

One check we have implemented to be sure that the rope is fully extended before the tow is begun is to look for a little section of white tape, bordered by black tape, Figure 9, that is on the rope in a position that indicates full extension of the rope. The tow plane pilot (at least the more agile of our tow pilots) looks over his shoulder at the rope to see this marker. When the marker is visible, the rope is out, and the nut is properly seated.

Another problem, although rare, is that the knot in the slug can pull out. The glider pilot can check the security of this knot by looking for the pig tail in the slug assembly. It should be visible through the plastic sheath. If it is not visible, don't accept the rope. It only takes a few minutes to retie the knot. Better that than lose the rope during tow.

Now we have had one curious string of events with the system. We have had some six or eight actual premature terminations of tow (PTTs) during the time we have been using this system-actual rope breaks. The curious thing is that we have always broken the rope, not the weak link. Why is this when the tensile strength of the rope is 2,000 pounds, and the strength of the weak link is 1,100 pounds? It all has to do with the knot in the slug, which is right where the rope breaks. But first a few words about the rope itself. This rope has a sheath around a core of synthetic fibers. The sheath protects the core fibers, but does not carry the load. The





inner fibers carry the load and provide the rope with its strength. When the rope is bent or curved tightly into a knot, the fibers in the outer part of the rope (away from the center of the knot) are stretched, and they take the bulk of the load imposed on the rope, while the fibers on the inner part of the curve are compressed and take little or no load. To be overly simplistic, the half of the fibers on the outside of the knot take the load, and the half of the fibers on the inside of the knot are not under tension. Hence the rope, at the knot, has only about half its normal, unknotted, strength. That's why the rope breaks at about 1,000 pounds tension at the knot. And, since 1,000 pounds is less than 1,100 pounds, the knot breaks, not the dog bone.

By the way, this little slug assembly costs about \$100. And someday you're probably going to break the rope. The trick is to try not to lose the slug. So long as you don't have 50 feet of rope hanging down from the glider, the slug itself is no big threat. Leave it attached and land. Or, if you feel compelled to drop it prior to landing, try to drop it on the runway as you make your approach. But never trade money for safety. So if you feel that there is a problem that involves your safety, drop the slug. *(Whatever else we do, don't engrave "Property of Skyline Soaring on the slug".* —Judah Milgram) To date, however, all of the rope breaks we have experienced have been at the knot in the slug, and no rope has been left dangling. Why has the rope never broken in the nut at the Pawnee end? Ah, that is one of the great remaining mysteries. But hopefully, now you know more about our Tost reel system than perhaps you ever wanted to.

Roster Issues

Since this is an issue on the table right now, I feel I must add my comments. Over the past few months, we have had increasing problems with the daily crew showing up. The biggest issues have been over the ADO not showing up or not being at the field early. Flight line duty in the club is not optional. Ours is a volunteer club, with the DO, ADO, tow pilot and instructor as an assigned crew for each operating day.

During the assignment phase, when the Rostermeister asks for your blackout dates, you have the option to black out those days you do not wish to or cannot serve. However, once your name appears on the roster, it is your obligation to show for duty. In those extenuating circumstances when it suddenly becomes imperative that you miss your duty, you are responsible for finding a substitute. Failure to find a substitute can force us to shut down operations for the day. The purpose of these rules is to enable us all to fly and to share the experience of soaring at the lowest possible cost. Commercial clubs are the place for people who do not want to share such duties, but you will pay about twice as much to fly at a commercial operation because they have to hire people to do the jobs you are asked to perform once every6-8 weeks in our club. Finally, everyone needs to know when they are scheduled for duty.

So I strongly recommend that the roster be left on the public part of our web site, where all members can readily access it.

George, your Chief DO 🛛 🛰



June 14

Family Day at NASM Udvar-Hazy

Richard Freytag and Frank Banas displayed their sailplanes at the NASM Family Day on June 14th. Jonathan Kans and Phil Jordan assisted them in answering a billion questions as did Dick Otis who took these neat photos. Richard thought the crowds were less than last year. Perhaps the gas crunch was starting as we watched.

It was a wonderful opportunity for SSC exposure to the general public and many people went away with promises to explore FRR. It was fun but hot and sweaty.

The approach of the uggiest cumulonimbus from hell justifiably caused most of the power guys to take an early powder but, all in all, a good day for visitors.









Copy That! Selected flotsam and jetsam from the editor's daily Tsunami of email

444 Miles Of Non-Powered Flight—Eric Rupp, 49, last Saturday flew more than six hours from Hollister, near San Francisco, to the southern U.S. border town of Calexico, some 444 miles away, using nothing but the natural power of thermals and orographic lift, and in the process broke a Bay Area record of 362 miles held by Brian Choate since 2003, according to the Santa Cruz Sentinel. "I was literally flying with hawks and eagles, wing tip to wing tip," Rupp told the paper. At about 11:20 a.m. Rupp began his flight in a DG-300 sailplane with two other pilots flying separate gliders. Harry Fox and Tom Hubbard would exchange information with Rupp, sharing what they found about where to find good lift. The two other men and Rupp continued together all the way to Santa Barbara, where Fox and Hubbard elected to turn back for home -- unlike Rupp, they didn't have brothers on the ground chasing them with glider trailers in tow. Loren Rupp was on the ground in chase. Somewhere near Bakersfield, Calif., Rupp reported he found very good lift and lost radio contact with his brother who continued with faith for five hours, driving along a pre-planned route. Rupp's 444-mile flight took him as high as 17,300 feet. He flew with the benefit of oxygen and the aircraft's natural attributes, a 40:1 glide ratio. Referred to by Fox as an airborne adventurer, Rupp is said to be the kind of pilot who doesn't mind landing in a remote area and begging a ride home from a truck driver. That, says Rupp, is just "adventure number two."

Uplifting as Rupp's flight indeed is, we must report for those unfamiliar with sailplane flying that the longest recorded flights in gliders have exceeded 1,000 miles. One such record stood for almost 20 years. It's not easy. *http://www.avweb.com/ eletter/archives/avflash/1151-full.html#198198*

Sure Sign of Summer—No, I don't mean thermals, or even hot weather. Yesterday I picked the first dog tick of the season off my leg. They are VERY common at the airport, and particularly in grass (and especially tall grass).

Dog ticks don't carry Lyme disease (that's done by the very much smaller deer tick), but they do carry Rocky Mountain Spotted Fever, and are generally just plain ugly nasty little bloodsuckers. Time to think about carrying some DEET-containing insect repellent and/or making sure you check your skin carefully after a day at the field .—*Jim Kellett, Resident Curmudgeon*

Capstan for Sale—To defray expenses, I promised Valerie I would get a partner or two. It has been a year and no partners. Lots of fun but regrettably, the Capstan is for sale.

N7475 1968 Slingsby T49B "Capstan" side by side two place,

480 lb payload, all wood construction, one man rigging, terminal velocity divebrakes, worlds largest Cobra trailer. 30:1 L/D, US Standard Airworthiness Certificate, Current annual May 08. \$20,000 club to member. I will advertise at \$24K.—*Shane Neitzey* Office 703-335-8185 Home 703-753-3806 Cell 571-259-0042

Congratulations to Tom Park for his glider solo on June 23.

Lawrenceville Vintage Sailplane Regatta Canceled

Due to the recent heavy rains in the Midwest, the Illinois / Indiana streams and rivers are flooding. Worse, there have been levee breaks near Lawrenceville which are causing flooding of the Lawrenceville airport itself and which will most likely flood the glider hangars. All but one road to the airport have already been cut off.

We have no idea, at this point, how serious the flooding will be or whether the airport will even be open in the next several days. Please take this as our sincere apology for any inconvenience, but please don't come to Lawrencville in the middle of this disaster.

We will supply more information as soon as it is known. Meanwhile, if you know of anyone who may have been planning to come to Lawrenceville for this regatta, please call them to urge them not to come.—*Jim Short VSA President*



Skyline Soaring Club, Inc. is a private, 501(c7) nonprofit 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 — Shane Neitzey Secretary — Craig Bendorf Treasurer — Daniel Noonan Membership — Steve Rockwood Chief Tow Pilot — David Dawood Skylines Editor — Dennis Johnson Directors — Robert Creedon, Spencer Annear, Paul Seketa

"Freedom is more precious than any gifts for which you may be tempted to give it up."—*Baltasar Gracián*

HAPPY 4TH OF JULY

