

Off Tow Newsletter

Puget Sound Soaring Association, Inc.

Editor: Dave Kremers

July-August, 2006

Seattle, WA

Upcoming Events:

It's **Annual PSSA Picnic** time! We hope you've been having a great summer but that you still have room for some more grilled goodies with sunshine. We've set aside **Saturday, August 26**, as our special day to get together for food, fun and flying at Bergseth Field. It's a potluck affair with you bringing your favorite salad, side-dish or desert along with your own choice of nonalcoholic drink. We'll follow that with our usual array of flying events to give pilot members a chance to demonstrate their aerial skills. All are welcome and that means friends as well as family.

Recent Events:

It seems that over the last few weeks we've been setting a new club record for introductory flights to new prospective members. We're glad to see so many new people getting the chance to sample the delights of glider flight. A number have been back for the opportunity to take some lessons and log flights in their own glider log book.

Here's proof that members have been up and finding the lift and of what you've possibly been missing:.



Van's view from the back ridge on August 6th . . .



. . . and his shot of Mt. Si and the I-5 corridor.

The soaring at Bergseth has been getting better and better as the weeks go by and we hope more of you will be getting out to enjoy all the great flying the late summer will have to offer.

Board News:

With June and July being the peak of vacation time it was next to impossible to get PSSA's board of directors together for a meeting so there is little new to report from the standpoint of club business.

There are however a couple of interesting developments concerning obtaining glider ratings. Jim Yates, the FAA Designated Pilot Examiner for gliders in Washington State has announced he will no longer be offering practical check rides. For the present time this leaves Washington State without an FAA Designated Examiner for glider ratings. If you're working on a rating be sure to talk with your instructor(s) as to what options are available for a check ride.

On a similar note, it had been suggested that as a stepping stone to obtaining a full Private glider rating qualified individuals could obtain a Sport Pilot glider rating. The main advantage being that the person would then no longer need to be under the direct supervision of an instructor for solo training flights. Upon checking with PSSA's insurance company it was discovered the policy specifically states anyone flying club aircraft must have a Private glider rating or higher or be under the direct supervision of an instructor. At the present time the Sport Pilot glider rating does not meet the requirements set by the insurance company. Since the Sport Pilot license is relatively new this may change with time, but don't hold your breath.

T.H.
PSSA President

Membership:

Welcome to two new members to PSSA: Melvin White and Jerry Hermanson

Reports From Members:

Checklists, Unnecessary Necessities? *by Mark Allen*

The following article is rated “ZZZ”. That’s not to say that it’s sleep inducing but rather its risqué factor greatly exceeds “XXX”. This is only for people who have passed beyond open-minded maturity to nothing shocks them. Disclaimer: Nothing discussed should be considered as a proposal for change or modification to the usual procedures that assure flight tasks are performed appropriately. **THIS IS A THOUGHT EXERCISE ONLY**, based on experience and observations. Please don’t pluck my feathers out for discussing heresy. If you insist, I’ll give you a few of my downy feathers.

Early in my aviation education I was taught that checklists are not only fundamental to an aviator’s professionalism but their use is demanded as a means to minimize mishaps. Checklists are indeed well established and accepted by all in the aviation community because their use is logical and addresses a common human fault, forgetfulness.

I, as most, never questioned their need until one day on one of my many air force training flights my instructor happened to walk by me while I was testing the Automatic Direction Finder (ADF). He asked me why I wasn’t using the checklist for this piece of equipment. I was dumbfounded. It had never occurred to me that there might be a checklist for such a simple item. I thus began looking through my stack of checklists and was stunned to find that indeed there was one written for the ADF. If you are unfamiliar with an ADF, it’s essentially an AM radio with a needle that will point to the radio transmission tower for which it is tuned. Have you ever used a checklist to turn on an old AM radio? I’m embarrassed to say that I have. The checklist went something like:

- Turn Radio on with Volume Control Knob
- Adjust Volume to Comfortable Level
- Tune to Desired Station
- Verify Station Identifier
- Turn ADF Needle on with Switch Labeled ADF and Monitor

You have got to be kidding me! This use of a checklist went from meaningful oversight to the insulting assumption that the user has no concept on how or why he is using the equipment. I will return to this point later, it is an important one.

A year later, I was in an operational squadron. The equipment that we flew had a number of systems that had lengthy checklists (several pages) that went with them. The malfunction rate on them was always high, forcing us to always do a full systems check before flight so we knew what we had to work with. If one were to diligently read each item on the checklist and perform the task, the checks would take 20 – 25 minutes to complete. We had typically six or seven minutes available. Clearly, the checks had to be streamlined. I initially scanned the checklist for group sequences, completed those tasks and repeated until all were accomplished. Doing this still did not allow me sufficient time to finish but I would go as far as I could and pick up the rest later. One day when I was about to start my checks, I realized that I had left my checklist in my locker. I was paralyzed. I knew I had to complete the checks, but how? I decided to go as best I could from memory. I surprised myself at how well I knew the checks. There were a number of things I couldn’t remember but I was able to do most. What surprised me even more was how fast I had completed them, in record time. It was then that I realized that I needed a system that would give me easy recall. Memorizing a constant routine, a systematic flow as it were, wasn’t enough. We had to go different paths depending on the outcome

and mission. Once I realized that I had previously become a robot, methodically performing each task without thought, blindly following instructions without consideration for the logic, it became obvious how I could achieve a greater top speed by getting out of this mental autopilot mode. The procedures had to follow a progression that was meaningful, logical and straightforward to me. They had to make intuitive sense. The checklist did not always achieve that, which was why it was difficult for me to remember them. Once I worked out a procedure that met my mental requirements, I never used the checklist again and I was able to complete all checks on time. Was I jeopardizing safety of flight by ignoring my checklist? I believe I actually increased flight safety.

By completing the checks I knew what I could depend on and more importantly what I couldn't. This gave me time to figure out ahead of time how to compensate for the deficiencies. It also allowed me to spend more time with my head out of the cockpit instead of buried inside running checks. More importantly, it gave me a much greater appreciation of what I was doing and why. In order to streamline the procedures, I had to understand in greater depth why I was doing the check, why in the order it was listed and when I could ignore it. I no longer took it at blind faith. I knew what I needed and only checked those items, bypassing the extraneous.

Am I unique in not following my checklist? In truth, my experience with others says that I am more the norm than the aberration. I flew with and around many professional pilots; all took their job extremely seriously and demanded the same of everyone else. They knew their airplane, had thought through contingencies and responded to serious emergencies with utmost calm, control and skill. These were a very impressive core of pilots who you would willingly go into battle with because you knew they were competent and you could depend on them. And yet, when checklists were pulled out, it was more for show than reference.

We were required to preflight our planes with checklists in hand and yet I never once saw a pilot refer to his checklist during the walk around. Many actually joked about how to avoid being caught not using the checklist. This is not to say that checklists were never used, quite the contrary. Crew coordinated checks (one reads while the other performs), such as for takeoffs and landings, were always performed, as they were for every emergency. However, mission checks were rarely performed even though duty said we should. These might include weapons and systems selections and activation for delivery to target. Obviously, if inappropriate selections were made or not made, errors could be consequential. But yet, errors were rarely made. In fact, my impression is that errors made while referring to the checklist were more common than when the checklist was not used. And this is the problem that I have with checklists. They are not the panacea we expect them to be, they give false expectations.

How can an error be made if the checklist is used? Well, as it turns out, quite easily. We are not the robots we profess to be. Have you ever read a story? Do you read every word? How about after you have read the same story 50 times? Our minds easily wander and when we think we know what is coming, we tend to start skimming, particularly if we are in a hurry. This is not necessarily a conscious effort but it is an inherently natural human trait, we don't pay close attention. We don't seem to like to admit to this characteristic but it is real. We have a zillion accidents in which the pilot claimed he used his checklist but somehow overlooked that one critical item. We think that if we just keep telling ourselves that we have to use the checklist diligently, this will overcome our tendencies to miss items. I don't know about you but I am unconvinced. Although I have tried, I have not been able to program myself to consistently read and perform a sequence of instructions as accurately as a computer can. I am prone to error. I recognized this long ago and chose to take a different route.

I think my biggest problem with checklists is that it allows us to operate our machinery without being mentally involved in the decision making. It's kind of like stop lights in the street, we don't have to worry about who is doing what. When the light is green we go, when it's red we stop. It's a mindless reaction. There is no thought or concern needed about what anyone else is doing. However,

occasionally this proves to be a problem. Our checklists allow us to operate in the same manner. We don't have to worry or think about what is needed next, our checklist tells us. It becomes a crutch for which we depend on and we don't question the logic or timing of the sequence. Do we always want to perform a task at the very moment we read the instruction? Often not. Has this ever been a cause for accidents? You tell me.

I prefer to take a more active role in what I do next. How can I be assured of not overlooking something important? Well, the simple answer is there are no assurances. But I have also found that there is virtually nothing in a checklist that is critical. And, I define critical as anything that can cause something bad to happen if not accomplished. If you fly by the seat of your pants, being sensitive to what the airplane is telling you, you will notice when something isn't right. You don't need a checklist to tell you that.

What I have done is identify everything that is critical, and committed that to persistent cognizance. In other words, I never forget these items. I am paranoid about them. This is a lot easier than you think because it is almost trivial. For power airplanes there is only ONE item that I consider critical if I fail to correct before takeoff. I must have sufficient fuel for takeoff in the selected tank. That's it. Anything else I might forget is unimportant to me because it will eventually become obvious to me without causing undue hazards. For landings, again, only one item. I must get my gear down. Anything else I do is a bonus.

For gliders, it's the same thing. What's critical for takeoff? There is only one thing, get the canopy locked. For landing fixed gear gliders, there is NOTHING critical. How simple is that? Even if retractable-gear gliders are landed gear up, they rarely do much damage. So, is that critical, maybe but not really.

You may want to claim that spoilers out on takeoff are critical but they really aren't if you know how to deal with the situation, and you should. If you are sensitive to your airplane you will know something is wrong and correct it promptly. But that's another discussion.

Earlier I mentioned that checklists can tend to become insulting, stating the obvious and becoming a shortened version of the user's manual. Checklists have created their own problems because of this. They have removed the need for thought, resulting in lengthy lists that take considerable time to get through, particularly at critical times. Flying the airport traffic pattern should be done with the head out of the cockpit the whole time. You should not have your head down in checklists in this phase. Doing otherwise is a petition for falling behind and becoming distracted, which then prompts rapid checklist skimming. This is a setup for an accident.

If you keep your mind's autopilot disconnected, safety cannot help but improve. By avoiding unnecessary distractions you have more time to devote to the more important needs of your flight.

Fly safely

Training:

A PSSA Cross Country Program (cont.) (by Dave Kremers)

In the last newsletter I presented an outline of a proposed club program for getting more of our members, especially the less experienced pilots, comfortable with cross country flying. This time I would like to take it a step further and expand on the idea of the flying exercises we can introduce to get the ball rolling. Following is my proposal for how this can be done:

Ideas for Implementation of PSSA Cross Country Training

- Stress accuracy landings regularly in Bergseth Field training.
- Push the SSA badge program with Bronze Badge as a prerequisite for readiness for PSSA X-C program (emphasis on accuracy landing within set limits).
- Encourage novice and student pilots to fly with an experienced pilot in the 2-33 or L-13 for a “land-out” experience.
- Establish a progressive skills-building program for novice flyers:
 1. A planning session - plot safety circles with altitudes on chart, note local knowledge, etc.
 2. Visit the land-out site(s) for assessment of hazards, best approach, etc.
 3. First flight - tow to within glide distance of land-out airport
 4. Second flight - local Bergseth tow with attempt to soar to land-out airport.
 5. Set triangle tasks around local Enumclaw area fields (after survey of those additional sites).
- Establish a “scoreboard” which would chart the progress of members along the path to X-C success.
- Schedule special “X-C Development” days when the L-13 would be available for land-outs or triangle task work. The 2-33 would be reserved for local student training and demo flights.
- Include “back ridge” seminars and flights whenever possible to give novice/student pilots a taste of breaking away from the usual front ridge experience.
- Encourage “mentor flights” for those making first solo efforts.

Since this kind of thing will go better if we have as many involved as possible, I would volunteer to be the organizer, but with the help of others. Anyone who has ideas on how we can get this kind of thing started or any additions or alterations to the suggested program, please contact me with your input.

Thanks,
Dave K.

Operations:

Field Manager schedule:

Sat. Aug. 12 - Stefan Perrin
Sun. Aug. 13 - Kim Sears
Sat. Aug. 19 - **volunteer needed**
Sun. Aug. 20 - **volunteer needed**
Sat. Aug. 26 - Curt Chenoweth

Sun. Aug. 27 - Branislav Mikulik
Sat. Sept. 2 - Wayne Ginther
Sun. Sept. 3 - Dean Gittleman
Mon. Sept. 4 - Stefan Perrin
Sat. Sept. 9 - Tom Graham
Sun. Sept. 10 - Tim Heneghan
Sat. Sept. 16 - Dave Kremers
Sun. Sept. 17 - Charlie Long
Sat. Sept. 23 - Branislav Mikulik
Sun. Sept. 24 - Marlene Nelson
Sat. Sept. 30 - Kenji Ominato
Sun. Oct. 1 - Stefan Perrin
Sat. Oct. 7 - Kim Sears
Sun. Oct. 8 - Dariush Zand
Sat. Oct. 14 - Van Chaney
Sun. Oct. 15 - Curt Chenoweth
Sat. Oct. 21 - John Ennes
Sun. Oct. 22 - Wayne Ginther
Sat. Oct. 28 - Dean Gittleman
Sun. Oct. 29 - Tom Graham

Note:

Newsletter contributions:

As always, your input to this newsletter is very important. Please let us know if you have new information, valuable experiences, constructive comments, even gripes which will help to make this a better club offering the safest and most cost effective soaring opportunity in the area. Send items to Dave Kremers (dkremers@earthlink.net).