Airworthy

The Official Journal of the Black Forest Soaring Society

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Facebook Group Page: BFSS Member Only Page **Facebook External Page:** BFSS Public Page

Kelly AWOS Cam: Weather Cams

FROM THE EDITOR

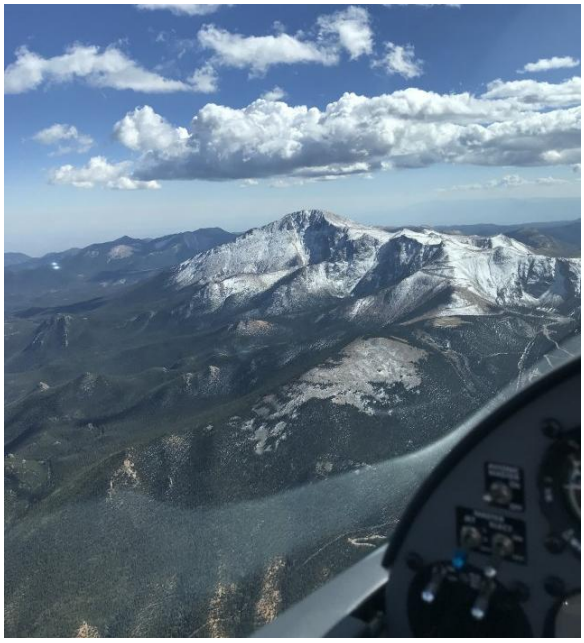
The days are colder and shorter. Summer seems so far away now. In response to the bumper stickers that say "Never Summer," I want one that says "Never Winter." Standing out on the flightline in the wind and the cold isn't as romantic as it was twenty years ago (if it every was).

The good news is that 840 is nearing completion. As the saying goes, it's all the tiny little details that take the most time. **Alice** has a great report on the accomplishements this last month. Special thanks go out to **Doug Curry** for his hard work on 840 and our towplane, which are in addition to his other work for the club and at Meadowlake.

With 2020 almost behind us, there are many things we can look forward to in 2021. **Raul Boerner** should take delivery of his GP15, **Lee Kuhlke** should receive his Ventus 3 FES, and best of all, 840 will be back in the air, ready for another 50 years of flying.

As the year comes to an end, the staff at *Airworthy* (Mark, Alice, Herschel, and Frannie Mae) wish you a wonderful holiday season. Please be safe, follow the health rules, and we can have a much better 2021!

Mark Palmer, Editor



Clay Thomas took this beautiful picture of Pikes Peak in early October.

PRESIDENT'S MESSAGE by Bif Huss

Happy Holidays everyone! Even though we're still in the midst of this awful COVID-19 crisis, I hope you're able to enjoy the holiday as best you can with your friends and family.

Operations have definitely slowed down at BFSS as the thermals have migrated south and the winter inversion has set in. We're still flying a bit though, mostly training and proficiency rides. This is certainly a good time with the

often smooth air to check your variometers and other instruments for proper calibration. **Vitaliy Aksyonov** and **Brian Price** are hosting weekly Condor soaring simulator races, which are becoming more popular as more members join in. These are great fun and I highly recommend you give it a try. Last week we flew a downhill dash to Flagler. We actually had a prestart gaggle! They'll definitely keep your head in the soaring game and will improve your soaring skills.

I have a few announcements for you. The first is that the BOD has modified the Visiting Pilots policy. Visiting pilots can now fly up to 6 tows a year from Kelly. Details will be published shortly on the BFSS website. If you have pilot friends who would like to give BFSS a try, this is a great way to have them check out this great flying site. Maybe we can even recruit a few new members!

Our new committee list will be published soon. Please note your committee and plan to contribute some time to it. As an example, the Buildings and Grounds committee recently repaired a portion of the dry-rotted clubhouse siding. Special thanks to **Frank DeBacker** and **Becky Kinder** and others for taking this on.

Alice Palmer and her team have been making excellent progress on the 2-33 refurbishment. Don't be surprised if you see it in the air soon!

Finally, I'd like to thank **Vitaliy Aksyonov** and **John Gillis** for volunteering to be my copilots and crew as we represent BFSS in the Duo Discus at the 20M Nationals to be held at Montague, CA next summer. We plan on updating *Airworthy* on our preparation for the Nationals. This should be a great adventure!

Bif Huss
President, BFSS

CALENDAR

Board of Directors Meetings

December 8, 2020 6:30 – 9:00
Via Zoom

January 12, 2021 6:30 – 9:00
Via Zoom

20-Meter and Standard Class Championships
June 14 – 22, 2021
Montague, CA *(Go Team H7!)*

1-26 Championships and Low Performance Contest
June 24-July 1, 2021
Sunflower Soaring, Hutchinson, KS

Women's Soaring Pilots Association Seminar
August, 2021 (tentative)
Springfield, Vermont

Downhill Dash
Summer, 2021

FLEET UPDATE

ASK-21 – Airbrake alignment block repaired

2-33 – Restoration is getting close to finishing! See Alice's report below.

AC-4C Russia – Out of service due to repair gear-up landing damage

PW-5 – Nothing to report

Blanik L-23 – Nothing to report

Pawnee – Bad left magneto replaced

FRIENDLY REMINDER
The winter snow season is here. Please, DO NOT drive the golf carts on the grass. Driving on the grass could result in deep ruts and a lot of headaches for the club and airpark users.

OPS DUTY CALENDAR

Here is the Ops Duty schedule for December and early January 2021:

Aksyonov, Vitaliy	12/05/2020
Bachler, David	12/06/2020
Baker, Gary	12/12/2020
Beineke, Jacob	12/13/2020
Brown, Dylan	12/19/2020
Culbertson, Rick	12/20/2020
OPEN	12/26/2020
OPEN	12/27/2020
Dean, Val	01/02/2021
DeBacker, Frank	01/03/2021

Every flying member who does not have other duties in the club, such as instructor or towpilot, is on the schedule for line duty. If you are either a pre-solo student or have never performed this duty, Joshua has paired you with someone who has experience. Please check this list carefully to see when you're on duty and if you're working with someone.

Remember, if you can't make your duty assignment, you must find a replacement. Once that is done, contact Joshua Abbe and let him know so he is aware of the change. Be sure to go to the calendar page on the website and put yourself down for the day you're assigned. If you see OPEN listed on the schedule, that indicates that no one is scheduled for that day and that volunteers are appreciated. Please contact Joshua if you are available.

ACCOMPLISHMENTS

Donald Bannon – Bronze Badge

Alice Palmer – Blanik front and back seat checkout

Alice Palmer (front seat) works on her Blanik checkout with Jon Stark (GIB)

THANK YOU!

Doug Curry and **Bill Gerblick** – For meritorius service to change out a bad magneto on 76 Sierra. Thanks to Doug's foresight, we had newly refurbished magnetos on hand. Special thanks to **Kerin Curry** for driving out to KAP on a Saturday afternoon to deliver the replacement mag.

Stan Bissell, **Gary Baker**, **Mark Palmer** – For volunteer Friday GOD duty

Dave Rolley and **Vitaliy Aksyonov** – For work on the Russia gear and gear doors

Jamie Treat – For no-slip tape for 840 steps and last-minute painting of small parts

Dave Rolley – For repairing the ASK-21 airbrake bracket

EMERGENCY RESPONSE BOX ADDITIONS by Mark Palmer

KAP Safety Officer **John Thomas** let me know that 8 soft collars were donated to the emergency boxes by a KAP resident. There are now two of those collars in each of the four emergency boxes, which are located at each windsock and the NE side of the BFSS clubhouse. Thanks John and KAP residents!

RUSSIA GEAR-UP LANDING
by Vitaliy Aksyonov

It was nice sunny day with almost no wind. I came to Kelly to fly couple of times in the Russia. I was going to practice no-spoiler landings for practice.

Preflight checks did not find any issues with the plane. We went to the end of runway 17. I said to GOD that I am going to land in the opposite direction to avoid extra towing on the ground. Calm wind favored to do that.

I asked **Bif** (today's towpilot) to tow to 10,000 feet because I did not expect any lift today. But surprisingly, there was some. After release I found a couple of thermals and even climbed to 10,000 feet again! But everything ends, and in about 40 minutes after takeoff I was low enough to enter the pattern. Just several minutes ago the Fox landed (what a nice view from the air when he does his famous low pass).

During pre-landing checks, I realized that the gear would not go down. The Russia has two handles to operate the gear: the usual gear handle and a knob to release the lock. To extend the gear the pilot pulls the knob to disengage the lock, and then uses the handle to let down the gear and lock it in that position.

The disengage knob didn't work. I pulled it several times and it was not moving. It looked like it had jammed. The gear handle also didn't move, because you need to disengage the lock first.

There was the towplane with a glider in the vicinity of the airport, as well as another plane entering the pattern. I broadcasted my situation—that I cannot lower the gear and was going to land in the grass. The pilot of the plane asked me if I wanted him go around, and I confirmed that. So, he went go around.

Frankly speaking, I got some stress at the very beginning when I realized that it was going to be an emergency landing, but then I calmed down, read the checklist again just not to forget something and prepared for landing. I tried to move the stick back and forth to get some negative G. Unfortunately, it did not help. OK. Not many options left. Landing in the grass.

I entered the pattern and flew it as usual. When I looked at it on my track it was perfect. I made radio calls as usual on all turns, repeating that I am going to land with gear up. I approached the grass right of runway 35 with minimal safe speed. I tried to touch the ground with minimal speed and closed the spoilers. When I hit the ground, the glider was much lower than usual. "Roll" was very short and the glider stopped in about 200 feet. I smelled a little burned fiberglass. I turned off the transponder and came out of the glider. Looking below, it looked not so bad.

7 Echo on the grass after Vitaliy's landing
Photo by Vitaliy Aksyonov

Then I went to the hangars for help. Several people came to help me. First of all we confirmed that the gear lock failed. Then four of us lifted the glider. (This is the time when low weight helps a lot.) **Dave Rolley** managed to lower the gear opening lock manually from the wheel well.

Looking at the damage, we found that the gear doors came off and I went to find them. Luckily, they got only a little damage and it shall be easy to repair them. Also, the springs that hold those doors are not usable anymore and lower fuselage got some scratches. Looks like only paint was damaged, but a more thorough

inspection is necessary. And we need to check the reason for the lock failure.

Vitaliy finds the gear doors.

I am very sad that the glider is damaged, but glad that I was not injured, the glider got only minimal damage, and it is still flyable.

I appreciate everybody involved for the help. Glider sport is a group activity and that is great!

[Editor's Addendum] Upon inspection, it appears the Bowden cable that controls the gear uplock had come loose from its attach point. It's not something that would be evident in a preflight inspection. Vitaliy was universally praised by instructors and observers with this calm handling of the situation and foresight in landing on the grass, thus minimizing any damage to 7Echo and not blocking the runway.

Dave Rolley (l) and Vitaliy Aksyonov (r) inspect the Russia after Vitaliy's gear-up landing. Bif Huss in the Pawnee, landing. Photo by Andy Gerner

TAKEOFF SPOILER INCIDENT

Sunday, November 1st, was an interesting day at KAP. First we had Vitaliy's forced gear-up landing, then at nearly the same time, the Blanik took off with the dive brakes unlocked. Below, I've reprinted the emails from Quay as PIC in the Blanik and Bif as towpilot. This will give you and idea of what was happening on both ends of the rope at the same time. Quay's point is well taken: use your checklist and <u>really</u> use your checklist. As Bif points out, it's easy to fall into the trap of reciting, but not following, the checklist.
– Mark Palmer, BFSS Safety Officer

Quay:
On Sunday, I was fortunate enough to have Bif towing. He made a radio call to me on takeoff that my spoilers were open and we were not climbing in the L-23 over the departure end. I did not understand the first one and asked him to repeat. He told me a second time, rather than cutting me loose, which was imminent. I was able to get them closed and the rest of the tow was uneventful as we went by Vitaliy, who had just executed a perfect emergency landing with gear locked up.

Lesson for me: Checklist fully completed. My checklist states SPOILERS - CLOSED & LOCKED. I closed them before takeoff, but executed the wrong procedure for LOCKING them. The backseat spoiler handle is oriented opposite of the front seat, which I usually fly from. As I rolled down the runway with a slight tailwind, the spoilers, which were not locked, came open slowly from the best I can tell and were fully deployed near the end of the runway. I was looking straight ahead to keep the glider behind the tow plane and did not see them extend. It could have resulted in a very bad outcome, but Bif saved the day. I relearned a lesson I have been teaching for decades, but failed to execute properly. Please learn from my mistakes.

Fly safely, Quay

Bif:
This incident illustrates that regardless of your experience level, flying can still teach you a lesson! For me, I noticed something was not right when I didn't get airborne where I previously had been on this day. My first thought was that the Pawnee's engine was not producing enough power. There had been some discussion among the towpilots that the Pawnee's engine was producing about 200 RPM less than its normal takeoff power. I immediately checked the RPM and it was fine.

By now, I was at about 30 feet and approaching the fence. Something was definitely wrong. I checked the mirrors, which were vibrating significantly, and thought I noticed a splash of red on top of the Blanik's wing. I steadied the mirror and definitely saw that the Blanik's spoilers were deployed. I radioed Quay to check his spoilers. He responded immediately, but asked me to repeat what I said. I repeated to "Check your spoilers!" The Pawnee was climbing slightly, but was just above stall. I gave him a rudder waggle and wing rock, but they were pretty weak signals because I was afraid of putting the Pawnee into a full stall. Luckily, Quay responded immediately, closed the spoilers and the emergency was over.

I've been towing for 20 years, but this was the first time I'd actually thought about pulling the emergency release. This incident definitely increased my experience level and I came away from it with several lessoned learned that will make me a better towpilot:

The radio saved us this day. If you've towed behind me, you know I'm a stickler for establishing radio contact before starting the takeoff roll. On this radio call, I make sure that the glider pilot positively responds to my call and that I know we are communicating. We teach signals with the towplane, *i.e.*, rudder waggle or wing waggle, but when you're just trying to keep the towplane airborne, a radio call is safer and quicker. I would recommend that our CFIGs add teaching the use of radio calls to check for spoilers, PTTs, traffic, etc., to make sure their students are actually monitoring the radio throughout the tow.

The lack of climb performance was significant. If this had been a heavy glider with water ballast, or even the Blanik on a day with high relative humidity, I doubt we would have been able to climb.

There's a reason the spoilers are painted red. The color flash in the mirror immediately alerted me to the problem.

Quay's description of the difference in the spoiler locking technique between the seats of the Blanik illustrate the trap we can fall into due to "muscle memory." Anytime we break our normal routine, we can fall victim (believe me I know!). I've also caught myself on occasion, when performing very frequently used checklists, reciting the items without actually doing them. I always have to stop myself and make myself start again from the beginning.

The bottom line, in the Navy, we had a saying "you fight like you train." In this case our training paid off, we dodged a bullet, and had a very nice Sunday afternoon flight.

Bif "H7"

RESURRECTING A PHOEBUS, PART III
by Jon Stark

When we last considered the rise from the ashes of my newly restored half-century old glass slipper, I was sitting in the cockpit, tow cable attached, ready to go, reassuring myself

that nothing had been overlooked. Back to the story—**John Mann** pushed the throttle on 76S, and I was rolling down the runway, and then, in the air! (Figure 1)

Figure 1 – Airborne!

To my unending joy, everything seemed to work. To my great surprise, the trim was one of those things that now worked, and it was grossly mis-set (I had chosen the same setting habitually used long ago in the days when the trim was not actually functional, and that setting was far from optimum in a working system). While fiddling with the right-hand-operated trim shortly after breaking ground and with the stick in my less-adept left hand, I induced one pitch diversion, courtesy of the all-flying tail and corresponding pitch sensitivity, but that was promptly corrected, and otherwise the launch was delightful. John Mann kindly made gentle towing turns as I reacquainted myself with the ship's manners on tow, and before long I was off tow and climbing nicely.

Memories of long flights soaring skyward came rushing back as I zipped up through 13,500 feet in nice lift. Just then I noticed a pleasant cool breeze from the right on the back of my neck. It soon occurred to me that I had no memories of such a breeze on my Phoebus flights back in the 20th Century, and that neither the panel vent nor the left side canopy window could produce that sort of cockpit airflow. A quick look around revealed a two-centimeter gap between the right-rear canopy edge and the fuselage where it had previously been tightly mated. This is neither normal, advantageous, nor comforting.

For those who have never examined a truly old glass ship, some explanation is necessary. The Phoebus canopy is not hinged on the left side like a Schweizer nor at the right side like a Grob nor at the front like a DG nor at the back like our Blanik rear cockpit. It comes completely off the aircraft to open, being secured at the back by a metal tab and at the front by a key-holed fork through which a pin is pushed forward to latch it in place. (Figure 2 shows it in detached form while being measured for its custom cover.)

Figure 2

Something was truly amiss, as the latching pin had obviously traveled back out of the fork, and departure of the whole canopy from the rest of the aircraft was imminent. Pushing on the latching pin did not yield satisfying results as the canopy was now skewed out of proper alignment and not amenable to refitting and realignment in flight.

In other designs, an untimely canopy unlatching event more typically happens early in the launch, and with a bit of yawing to place the hingeline into the airflow, one may be able to hold the wayward plexiglass in contact with the aircraft long enough to land, if not to latch it down properly. This was a rather different situation, with no hinges at all and with the airport a full vertical nautical mile below me. I did not relish the prospect of losing the canopy, or having the canopy smash into and damage that aforesaid sensitive all-flying tail, or suffering a descent to landing from that height with my face exposed to the breeze.

My solution was to stick my left hand out the left side vent window and trap the right canopy edge under my right elbow, pushing downward with both arms with all my available effort. That would have been challenge enough, but I still had to fly and configure the aircraft while in that position. I managed to get the gear down, the spoilers fully open, and the glider centered in sink to descend with as much alacrity as I could muster. In due course, I was zipping along in the pattern. Witnesses noticed a few wobbles on final, no doubt arising from my attempts to adjust the spoilers while not actually having a free hand with which to do so. Touchdown provided the illusion of calm control for the crowd (having been alerted to my difficulties by radio), and soon the bird was stopped.

Post-landing investigation showed that the latching pin, traditionally held forward by spring force, was now operating *sans spring*, and without any retaining spring, the pin had slowly worked its way aft over the course of the first 45 minutes of flight, releasing the canopy. The errant spring was soon found comfortably parked between the rudder pedals, well hidden among nearly identical springs in the rudder system. Apparently, in all the restoration work on the instrument panel, the spring had been dislodged and fell there, and its absence went unnoticed in my preflight inspection owing to its location underneath the fixed glareshield. The canopy had been properly fitted and latched pre-launch (with all feeling and looking normal), but did not stay that way without the spring continuously urging the latching pin forward.

A second flight nervously undertaken a few weeks later, with the canopy latch spring in its proper place, went without incident, provided nearly two hours of fun, and restored my full confidence in the restored aircraft. Lacking flaps, water ballast, winglets, a high Vne, or the most modern airfoil, the Phoebus C won't run with other recent 17-meter ships, but it certainly does climb wonderfully in the weakest of lift. If the pilot is not in a hurry, 42:1 can be had. I think it has a certain charm that justifies the restoration expense and I'm supremely satisfied with it.

I'll end with one request for readers: if you have ground duty while I am in the launch queue, please humor me when I ask for assistance in fitting and confirming security of the canopy before launch! (Figure 3)

Figure 3

N65840 TANKER 2-33 REFURB by Alice Palmer

We've had so much progress on our bird, it's hard to know where to start. The big news is that the the wing and fuselage painting is done! After **Jamie Treat** finished painting the white base color, **Gary Baker**, **Mark Palmer**, and I helped him tape off the fuselage for color.

Jamie prepares the door for color.

Meanwhile, **Frank DeBacker** helped **Doug Curry** install spoilers and ailerons, and a group of volunteers moved the wings to Doug's hangar.

Frank works on the wings.

Once Jamie finished the fuselage painting, volunteers moved the fuselage back to Hangar 3, where **Doug Curry** promptly got to work to install the new aluminum skid and skid plate, new spring tailwheel, and the tail feathers. Doug and I spent another afternoon installing the new polycarbonate window panes in the window and door.

Doug installs the tail feathers, assisted by volunteers.

Aluminum skid

New tailwheel

Friday the 13th was our lucky day. A great crowd of volunteers came out to help weigh the wings. Each wing had to weigh at least 155 pounds to meet minimum specs for the increased gross weight mod.

Doug directs the weighing of the right wing.

They came up a bit light and Doug obtained and installed wing weights from K&L Soaring to meet specs. After the wings were weighed, there was a surge of energy and enthusiasm, so we put the fuselage on the trailer for the trip to Doug's hangar.

Club volunteerism evident when moving the fuselage

Once there, it was a "short" hour or two (with some help from a brass hammer and Lubriplate grease) to get the parts together. Our tanker is a beautiful bird!

Wings are on!

Some of our very dedicated heavy lifters

The other big news is that Doug discovered the wheel and brake components to be worn out and no longer available, which prompted a necessary upgrade to a new hydraulic disk brake. He got that in quickly, with help from **Bill Gerblick**.

Doug's installation of the new brake system behind the rear seat

After brake installation, Doug wanted to seat the new brakes, so I got some back-seat time applying the brake while being dragged by Doug in his golf cart, and assisted by Bill and Mark. We're hoping Doug's cart did not give its life for the effort, as we had to push it back by hand after its ordeal.

Finally—a little back seat time, assisted by Bill Gerblick at the wing

Now that we're 95% done, 95% of the small details are underway and take a lot of time, just like the finish work on a house. **Raul Boerner** helped complete the sanding and painting on the interior panels. **Mark Palmer**, my patient and dedicated partner, helped me with the very time-consuming work of fitting the panels, which are now in the finishing stages. Final installation will wait until other interior work is done.

Front-left seat panels

Left-rear seat panel

Dave Rolley is working on the radio wiring harness and has other electronic parts on order for installation soon.

John Gillis is helping with all sorts of aircraft bits and hangar contraptions, such as his powder coating setup (no extra charge for the mouse fur). He also donated blood to the project in the process of helping Doug and Bill install the wing weights. So now we can say this project has required blood, sweat, and tears.

Numerous other members listed below came out multiple times this month to lift wings, transport the fuselage, and rig the glider.

Doug Curry
Jamie Treat
Mark Palmer
Raul Boerner
Gary Baker
Frank DeBacker
Bill Gerblick
John Gillis
Dave Rolley
Jon Stark
Scott Dimick
Mike Keefe
Jeff Sherrard

As we get closer to flying our tanker, I cannot forget all the many hours that have been put in by so many people in this club, and to others who have donated money to help the project along. I also appreciate the **BFSS Board** for its support through all of this. Thank you all!

SHIPS FOR SALE

Have a ship you want to sell? Looking for a partnership? We can list it in *Airworthy*.

FOR SALE: 1/3 share in ASW-26E motorglider D2D. Based at KAP. If interested, contact **Gerald Peaslee**.

FOR SALE: Lak 17 AT
SN 163, 1070 hours, sustainer motor, excellent condition $69,000. Contact **Clay Thomas**.

FRIENDLY REMINDER:
STOP BEFORE THE DROP!
During the landing roll, assure that the glider's wing does not scrape across the rocks on the runway edges. Before the wing drops, apply the wheel brake, but not so hard that you put the ship on its nose!
"Stop before the drop!"

PHOTOS

It flies! Jon Stark starting up his Bell 47 after completing its annual. 11/28/20.

Busy Saturday at Curry Aircraft

Becky in the PeeWee
Photo by Stan Bissell

Clay's JS-3 awaiting another long flight
Photo by Clay Thomas

Good decision making and skills by Vitaliy resulted in this being a minor incident with easy repairs.