

Airworthy

The Official Journal of the Black Forest Soaring Society

24566 David C. Johnson Loop
Elbert, CO 80106



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July 2019

Club Web Page: SoarBFSS.org

Facebook Group Page: [BFSS Member Only Page](#)

Facebook External Page: [BFSS Public Page](#)

FROM THE EDITOR

Alice and I just got back from the 1-26/Low Performance Championships in Moriarty, NM, and boy did we have a blast! Despite strong winds and early overdevelopment, the group managed to eek out 4 contests days. We had a lot fun crewing for BFSS's own Brian Price in his 1-36. Brian overcame a lot of early setbacks to prevail and bring home the LP trophy!

Let's start thinking about a team flying the PW-5 and/or the Russia at next year's event, which will be held at Sunflower in KS.

July issues always seem to be jumbo issues. Lots of articles, lots of pictures. Thank you all who contributed to this big issue!

Now Alice and I are off to the Women Soaring Pilots Association seminar in Highland, IL. We'll have a report next month.

Fly safe!

Mark Palmer, Editor

PRESIDENT'S MESSAGE by Bif Huss

In June, we had the first of our planned 3rd Saturday of the Month Pot Lucks. Even though it wasn't a great soaring day, we had a good turnout. It was great to see everyone and get to know some of our new members. Thanks to everyone who made this event happen. If you weren't able to attend, please mark the 3rd

Saturday of July on your calendars. We hope to see you at this new monthly event.

June also saw the Club purchase Ed Anderson's PW-5. The "PW" has been a very popular glider and will be a great addition to the BFSS fleet. Thanks to Ed to making this ship available to us.

There were a few issues that came up at June's BOD meeting that I'd like to talk about. The first is the BFSS website's calendar. As I mentioned in an earlier email, if you plan to fly, please schedule yourself on the calendar. Our volunteer tow pilots and GODs need to know what the day's planned schedule will be so they can plan around their personal schedules. Also, if you plan to fly during the week for an off-scheduled operation, please place your flight on the calendar as well. It's important that the BOD knows when club operations are being conducted.

Secondly, we are looking for volunteers to work on several Club projects. These include updating the Club's website, creating a Club member photo board, making a Club award board, and hanging pictures in the clubhouse. If you can help with any of these projects, please let me or Steve Johnson know.

The Club's "Zenmaster" XC pilot, Dave Leonard "ZL" is representing BFSS at the National 18m Soaring Contest in Hobbs, New Mexico this

month. You can follow his progress on the SSA.org website. Go get them Dave!!

Finally, it's been raining just about every weekend. I can't remember when Kelly Airpark has looked greener. It hasn't been great for good soaring though. Here's hoping the soaring gods will let up a bit and let summer arrive.

See you at cloudbase!

Bif "H7"

CALENDAR

Board of Directors Meetings

July 9, 2019 6:30 – 8:45

Castle Rock Library

100 S. Wilcox St.

Castle Rock, CO

<https://www.dcl.org/castle-rock/>

August 13, 2019 6:30 – 8:45

Castle Rock Library

100 S. Wilcox St.

Castle Rock, CO

<https://www.dcl.org/castle-rock/>

Women Soaring Pilots Association Seminar

July 1-5, 2019

St. Louis, MO

BFSS Saturday Potluck Barbeque (after flying)

July 20, 2019

(Also 50th Anniversary of Apollo 11 Moon Landing!)

BFSS Saturday Potluck Barbeque (after flying)

August 17, 2019

SSA Convention

February 20-22, 2020

Little Rock, AR

1-26 Championships and Low Performance Contest

TBD, 2020

Sunflower, KS

FLEET UPDATE

ASK-21 – Nothing to report

2-33 – Restoration continues. See Alice's article below.

AC-4C Russia – Nothing to report

PW-5 – New panel and transponder. See Ed's article below.

Blanik L-23 – Doug Curry installed a new shock mount on the vertical fin spar plate.

Pawnee – Nothing to report

FRIENDLY REMINDER

Mud season is here! Heavy summer thunderstorms will make the grass portions of the field very muddy. Please, under any circumstances, **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 July and early August:

Dimick, Scott	06/29/2019
Maki, Jeff	06/30/2019
McClain, Kip	07/06/2019
Metzgar, Marc	07/07/2019
Palmer, Alice	07/13/2019
Palmer, Mark	07/14/2019
Paluch, Zach	07/20/2019
Peaslee, Gerald	07/21/2019
Price, Brian	07/27/2019
Rolley, Dave	07/28/2019
Sherrard, Jeff	08/03/2019
Szwagrzyk, Jerzy	08/04/2019

Every flying member who does not have other duties in the club, such as instructor or towpilot, is now 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.

ACCOMPLISHMENTS

Brian Price – 1st Place Low Performance Championships. Congratulations Brian!

THANK YOU!

Steven Dalfollo-Daley, Donald Hannon, John Mann, and Kip McClain – For mowing

Lisa Farley – For removing the popcorn ceiling, prepping, and (soon) for repainting the women's bathroom

Raul and Brenell Boerner – For the great brats at the June barbeque

Alice Palmer – For cleaning the bathrooms

Steve Johnson – For hooking up the water connection to the new shop, and other wall work. He also did hangar door maintenance.

Quay Snyder, Brandon Kolk, and Iain Wayman – For washing the Pawnee, Blanik, and ASK.

Brandon Kolk – For donating some great pictures!

Doug Curry – For fixing the broken tail spring on the Pawnee

Dave Allen – For mowing the Common Area

Becky Kinder, Julie Kinder, and Bif Huss – For additional work around the clubhouse

OVERDUE THANK YOU!

We've neglected to properly thank **Dave Rolley** for his wonderful 7-part soaring seminars earlier this spring. They took a lot of work and planning. We all learned a lot. Thank you Dave!

WELCOME NEW MEMBERS!

Jon Stark – Jon is an old BFSS member from the early days. Jon is retiring back to Colorado and is looking forward to getting glider current again. Jon owns the hangar directly east of the clubhouse. He has a Phoebus and a Bell 47!

Nikola Gradinski – Nikola is from New York and moved to Colorado this summer. He has an ASW-27, "NG." We hope to have a picture of Nikola next month.

Pete Gabardi – Pete is a retired Southwest captain. He's getting back into soaring after a 30-year absence.



Alan and Roen Luke – Father and son Alan and Roen are new members as of last month. Alan is a commercial pilot and used to fly Skywatch in Denver. Roen is an international hockey player who starts his freshman year of high school in the fall. Both are after their glider ratings.



1-26 AND LOW PERFORMANCE NATIONAL CHAMPIONSHIP by Brian Price

The 1-26 Association 2019 National Championship competition was held in Moriarty, NM, May 28 through June 7. The Association graciously hosted the 2019 Low Performance competition as well. The Albuquerque Soaring Club supported us splendidly with facilities, volunteers, and local weather expertise. Ridge Moreland, whom you may have met when he visited BFSS in April, did a superb (year-long) job as Contest Manager, and Daniel Sazhin, Contest Director, ran each day with dynamite efficiency. In particular, Daniel selected tasks that were carefully tailored to the forecast and the capabilities of the 1-26. On that note, I was astounded by the skill of the leading 1-26 pilots in covering substantial distances in imperfect conditions – they have been doing this for a while!

Nineteen 1-26 crews, from as far away as Long Island, NY, brought their spectacularly painted aircraft to compete. The 1-26 pilots are a friendly and supportive lot, and most have been flying in these competitions for many years. The social element was highlighted by three dinners, one held at the SW Soaring Museum, and a final awards breakfast. The overall winner was Daniel Nezgoda, flying 225. [Ed. Note: *the 1-26 pilots use the ship serial number for contest letters.*]

Only six aircraft entered for the Low Performance competition, including three PW-5s, an AC-4 Russia, an L-33, and my 1-36. Due to work demands and/or the dismal long-term forecasts, they dropped out one-by-one until I was the last glider flying. So I “won!” by default (no contest, officially). [Ed. Note: *Brian is too modest. On the first contest day he came in at 2nd place behind Bill Snead in his PW-5.*] But the real win for me was the terrific experience I gained in competition flying. Our world-class competition pilots will smile at this,

but I quickly learned how very much there is to learn, concerning every aspect of preparation and participation.

The weather did not cooperate, and only four days of nine went into the books. The weather was dominated by moist Gulf air that sprouted strong storms almost every day. Winds were moderate at launch, but heavy winds generally filled in from the south or east, making upwind progress for us slowpokes very frustrating, and landings interesting. I flew in the most turbulent and stormy conditions I have personally experienced, sometimes having to dodge among storms, or in one case, running like a scared bunny. It was a great way to build my confidence!



Brian on the grid

We saw about 12 landouts, with 6 on the last day, when pilots had to make a long jump across a blue corridor to get to the first turnpoint. All were safely executed, and we gained a new appreciation for the crop circles that dot otherwise inhospitable terrain. I landed out once in gusty winds, trying to squeak in short of gliders blocking the runway and taxiway, and then sat 20 minutes in the cockpit while a torrential thunderstorm passed over.

I could not have made the trip without my angel crew, Mark and Alice Palmer, ever encouraging, optimistic, and energetic. It was they, along with 1-26 pilot Kristin Farry, who hunted up bolt cutters and rescued the 1-36 and me from the

“Rop’em Nude Dude Ranch.” No dudes, no nudes, just weeds and rain. I cannot thank Mark and Alice enough for the gift of their time and support.



Brian's retrieve

Some lessons learned for other less-experienced pilots: (1) keep a big bolt cutter and a fresh padlock in your tow vehicle; (2) be 100% ready early each day, with electronics, personal gear, trailer, and all equipment in place and understood; (3) practice altering the task, turnpoint dimensions, and other task elements on the fly; (4) the human body has to be protected from sunburn, dehydration, and exhaustion; and (5) it's a load of fun! Next year's 1-26 and Low Performance Championships will be held at Sunflower Gliderport in Yoder, Kansas, near Hutchison. We are hoping that BFSS will send the Russia and the PW-5 to mix it up with the others in our handicapped class. Now is the time to start training for competition tasks, so who is game for the challenge?



*Waiting to launch
Photo by Brian Price*



First place! Photo by Brian Price

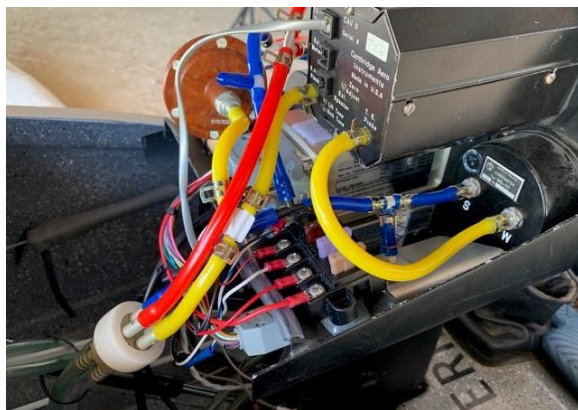
PW-5 UPDATE by Ed Anderson

Thanks to **Dave Rolley**, the PW-5 panel is sorted out.

1. The front flask and 20-second averager gage were removed to make room for the transponder. Both varios were plumbed in series to a single flask that is located behind the pilot's seat. This seems to work very well. The PZL mechanical vario and Cambridge electric vario sync up nicely. Both are compensated for total energy through the KWEK-2 compensator.
2. The panel was rearranged somewhat. The positions of the airspeed indicator and electric vario were swapped for improved scan. Both varios are now on the left side. Note: the averager function is still available by selecting 20S on the vario.
3. All instrument tubing was replaced with new color-coded tubing. It's gorgeous!
4. A fuse block was installed behind the panel to serve as a power distribution buss.
5. The transponder was installed at the center of the panel, with altitude encoder tucked in behind the PZL vario. What a clean installation!

6. Finally, I took the glider up for nice test flight and everything worked flawlessly. Again...thanks to Dave Rolley!

Attached are a couple of photos of the recent upgrades to the PW-5. This little glider keeps getting better. I encourage everyone to fly it.



THE ALLEN'S RESTORATIONS

Our neighbors, the Allens, both grew up in California's San Joaquin Valley, Jeanne in Madera, Dave near Fresno. Dave's early

summers were spent waking at the first sound of a radial engine and racing on his bicycle to where the biplane crop duster was working. Dave began his aviation career as a flagman for a local crop duster at the age of eleven, but was forced into early retirement by his parents after being poisoned at sixteen. Fortunately, Jeanne had a more normal childhood. School, military, marriage, raising two wonderful boys, and work took up the intervening years. But round engine biplanes were not forgotten.

Following their last active duty assignment with Dave running the soaring program at the Air Force Academy, they were the first residents of Kelly Airpark. With a boyhood background of model airplanes and the dream of round engine biplanes, they built a Taperwing WACO replica from 1987 to 1993.



They next restored a Schleicher ASK-13 and followed it with the blue and silver 1930 Straightwing WACO.





Against their better judgment, they began a ten-year restoration of a fairly rare cabin WACO, which is the teal one you may have seen. It was an Ohio National Guard airplane that spent 1934 to 1939 flying the Governor around the country. It also has Civil Air Patrol history during WWII.



Most of their projects share the same old-time steel tube fuselage, wooden wing, fabric-covered technology, which is not too dissimilar from the early modeling days. The Allens readily acknowledge all the information and help they have received in doing the restorations and very much enjoying sharing what they learned, especially the techniques involved in fabric covering.

They are nearing completion of an exception to the earlier projects, which is a 1947 Piper PA-11 Cub Special. But the latest rollout was of a new Straightwing: a pedal plane for their granddaughter, Sophie.

The Allens have long been advocates for taking care of our beautiful Airpark especially since the biplanes are much safer landing in the grass.

They much appreciate BFSS members' help and support. When the Allens are not out on their frequent biplane trips, they heartily welcome everyone interested to stop by their hangar for a look at restorations of a long past era of aviation.



Sophie's Straightwing pedal plane

FRIENDLY REMINDER:

STOP BEFORE THE DROP!

During the landing roll, assure that the glider's wing does not scrape across the ground (read: rocks). Before the wing drops, hit the wheel brakes. New saying: "Stop before the drop!"

FOX IN THE BOX by Andy Gerner

Team Fox represented BFSS at the recent Ben Lowell Aerial Confrontation, an International Aerobatic Club-sponsored competition hosted at the USAF Academy 1-2 June 2019. In all, twenty-four pilots competed in Power and half again as many competed in Glider. Competitors were challenged to precisely fly up to 10 aerobatic figures of varying complexity in a continuous flow while performing their sequence within a 1 km square aerobatic box.



IAC Logo

Team Fox was composed of Andy Gerner, LT Joe Gerner, and LT Shane O'Connell. It was the IAC debut for rookie competitors Joe and Shane, both of whom serve as Air Force E-3 pilots at Tinker AFB, OK, in their spare time. Although Shane was a former USAFA cadet soaring instructor, his lack of a glider add-on required Andy to serve as Safety Pilot for his routines.



Joe and Shane chill with the Fox on the 30-Acre SPLA (Sailplane Landing Area).

With just a week prior to the competition, training began in earnest on Saturday 24 May, only to get off to a non-start on account of a Pawnee tailwheel spring that unsprung, which was fixed by a house call from "Doc" Curry; but by then, high afternoon winds grounded the Pawnee for the rest of the day.

Sunday marked the first full training day with four acro training flights from towpilot Clay. Thanks to towpilot Todd, the Memorial Day holiday was another Club fly day, so another four training flights ensued. Improvised flying scheduled for Tuesday through Thursday yielded mixed results. Tuesday's flying was weathered out after two tows, and even our intrepid towpilot Iain had to pick his way around thunderstorms to fly his Cub back to Meadow Lake. An unseasonably cold and damp Wednesday was weathered out altogether, with low ceilings from morning to evening. And although Thursday turned out to be a fantastically warm and clear blue day—just perfect for a USAFA graduation—it was off limits due to a TFR that remained in force until

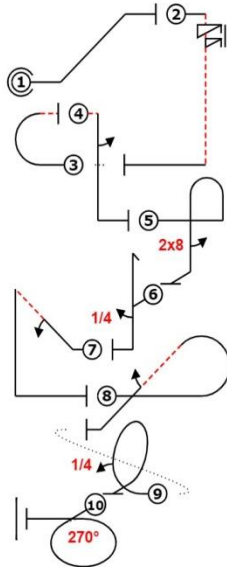
1515 as a result of the President being in town for his commencement address. Undeterred, Iain had the Fox in the air by 1525, and despite the late start, managed seven tows!

Rather than break it down and trailer the Fox to USAFA, John Gillis towed it to within final glide of KAFF first thing on Friday morning; thereafter, it cleared tech inspection and flew an additional three practice flights at USAFA, courtesy of Bob Lynn of Denali Aerotows (a familiar name to many in BFSS).

On the opening day of the competition, Shane was up first to fly, but got off to a challenging start in the Sportsman-Known program. Unfortunately, he was denied the opportunity to claw his way back up, as weather would turn out to preclude his remaining two competition flights. Nevertheless, his collected performance under pressure earned him a respectable overall 3rd place in the Sportsman class on the basis of his one and only flight (c'est la guerre).

Andy, on the other hand, was determined to outdo Shane's Hard Zeros with spectacular HZs of his own, landing himself squarely in the basement after the Intermediate-Known program (sometimes, the magic doesn't work). Just as Joe was staging for takeoff at the tail end of the roster, the competition day was called off early for encroaching afternoon thunderstorms.

No worse for the overnight wait, Joe was first to launch on Sunday morning and ended up gold-medaling in the Intermediate-Known program. Joe immediately followed that up with a respectable Unknown program (a sequence handed to us only the day prior). Andy redeemed himself somewhat by silver-medaling in his Unknown program to Joe's bronze medal in that round. Though, between his gold and bronze rounds, Joe was in 2nd place overall in the Intermediate class going into the final round, the Free program (a sequence of his own design).



Intermediate Free Program

But alas, weather was to preclude that round too. In fact, Joe and Shane were lucky to escape USAFA (yet again) by 1300 at the end of a rope behind Bob, who dropped the Fox off somewhere near Kelly on his ferry flight back to Boulder. After remaining behind to attend the ad hoc awards ceremony, Andy drove out to Kelly to retrieve the soggy LTs, slogging his way along CO83 through the thundershowers that pursued the Fox to the Airpark. All things considered, what a ride! Special thanks to all of the moving parts within BFSS that made this all possible.

STATISTICS AND SOARING

By Raul Boerner

The right-brain review of this June flight is that it was great: Released early, circled infrequently, flew as straight a course as lift allowed. And, the day was wonderful.

The left-brain description is analytical: This June 6, 2019 flight released at 7,921 feet MSL, duration was two hours and three minutes, circled 24% of the flight (6 thermals to the left and 1 thermal to the right), cruised 76% of the flight, averaged 53.5 kts, flew 107 nm, always remained within glide distance of a runway (any runway), and... had a good time.

SeeYou is a program that not only analyzes your flight, but it also provides a 3-D motion review to relive the joy. Additionally, the Internet offers ways to superimpose your flight track (known as an IGC file) over a Google Earth map for a simulated three dimensional picture: Fun.

When you are practicing, have a goal; it can be distance, altitude, duration, triangular ground track, pre-determined circling percentage, etc. The no-goal alternative is to just fly here, then there, oops, then back to here, or over there, then maybe over there, but will change and fly over there....

Practice with a simple 50-km (27-nm) flight, such as this: Kelly Airpark to Perry Park to Green Roof to Kelly Airpark. In most of our club gliders, as long as you fly over these turnpoints at 13,000' MSL, you'll have a comfortable glide to either Kelly or Perry. And of course, between 12,500' and 14,000' MSL, after 30 minutes, you'll either have to use oxygen or descend back to 12,500' for a breather recharge.



General information	
Date of flight:	6/8/2019
File integrity:	Not checked yet
Pilot name:	Raul Boerner
Glider type:	LS6-B
Competition class:	undefined
Registration:	N987DM
Competition number:	DM
Takeoff:	13:23:40 at 7030ft (Sunrise: 05:31)
Soaring begin:	13:25:20 at 7921ft
Soaring end:	15:27:32 at 7055ft
Landing:	15:27:32 at 7053ft (Sunset: 20:22)
Duration:	02:03:52
Declared Task - Unknown type of task	
No task specified	
Flight statistics	
Maximum altitude gained: 9977ft, low point 7921ft at 13:25:20, high point 17898ft at 14:20:50	
FAI Badge goals completed: Silver distance, Silver height, Gold height	
Circling:	Time Vario Alt.Gain Alt.Loss Thermals
Total	00:29:50 (24%) 440.8fpm 14324ft -1179ft 7
Left	00:25:32 (89%) 457.8fpm 13022ft -619ft 6
Right	00:03:18 (11%) 223.7fpm 1302ft -564ft 1
Triees (<45s)	00:03:58 (3%) 110.0fpm 840ft -404ft 4
Straight:	Time Dis.Done Alt.diff Netto Avg.GS IAS Glides Avg.Glide Mean L/D
Total	01:32:22 (76%) 116.7nm -140.16ft 10.65fpm 76kts 59kts 8 14.6nm 51
Rising	00:25:34 (28%) 29.9nm 10456ft 487.3fpm 70kts 59kts -17
Sinking	01:06:48 (72%) 86.9nm -24472ft -171.9fpm 78kts 61kts 22
Netto rising	00:42:52 (46%) 52.9nm 8219ft 350.8fpm 73kts 58kts -39

N65840 TANKER 2-33 REFURB by Alice Palmer

We made a big step forward this month as we installed the rudder cable and elevator pushrod fairleads. **Doug Curry** came by and installed the control surfaces so we could do the final measuring to position them.

Then **Mark Palmer** designed and cut the gussets for the fairleads and the team went to work to install them. We got all the gussets on the fairleads and on all inspection rings.



Raul, Frank, and Gary install gussets.



Elevator and rudder fairleads and inspection ring with gussets installed.

The team continues to make progress laying finishing tapes. After we take a break for some vacation time, we'll be ready for a final push to finish this work so Doug can begin spray coats.

Raul Boerner put in a lot of filling and sanding time on the first interior panel to get it ready for paint. He's got the patience for this detailed

work and has agreed to do the same on the second panel.



Raul's sanded panel ready for paint

The other good news is that we think we're done with propane! It is sooooo nice to work in a warm hangar. We'll be complaining about the summer heat before you know it.

Thank you to the hardworking team who put in a lot of hours this month:

Raul Boerner
Mark Palmer
Frank DeBacker
Doug Curry
Gary Baker

Dave Allen continues to patiently answer our questions each week. Thanks Dave!

PHOTOS



Dave, Sharon, and Chris enjoying a gathering



Dave Leonard and ZL coming home, 6/8/19



After Dave Leonard landed, he captured this picture of the storms north of Kelly.



Raul spent part of Father's Day with his son Troy. Here they're confronting Big Bertha.



Riding the Bow Wave. Photo by Raul Boerner

MORE PHOTOS FROM MORIARTY



*The ultimate zero-emissions setup!
Pierre Grellet-Aumont from New York trailered his 1-26E to Moriarty with his Tesla.*



1-26 Championship Contest Director Daniel Sazhin got a taste of Western thunderstorm flying. In the background is the storm that almost sucked him in. Daniel flew a borrowed LAK after contestants had launched.



Low Performance Contestant Tammie Searles talks with Contest Manager Ridge Moreland under the wing of Tammie's borrowed PW-5.



Waiting out the storm



Brian gets his bird secured during a lull.

AND A FEW MORE FROM HOME...



Spiffy Award winner Kristin Farry with 400 (the 1-26 D-model prototype, newly refurbished by K&L Soaring)



Spot landing



Gliders landing everywhere!



Goodbye Ingo (and Grace). We will miss you. Thank you, Ingo, for all of your instruction, serving on the Board of Directors, and other contributions to BFSS. Enjoy your new digs in Texas and come back and fly with us soon!



Two pretty PW-5s in Low Performance