

# Airworthy

The Official Journal of the Black Forest Soaring Society

24566 David C. Johnson Loop  
Elbert, CO 80106



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Club Web Page: [SoarBFSS.org](http://SoarBFSS.org)

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

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

## FROM THE EDITOR

February has been an awful month for flying this year. Other than **Becky Kinder's** solo flights and a handful of others, we've been shut down by strong winds and snowstorm after snowstorm. Let's hope Mother Nature gets this out of her system and March is the beginning of a wonderful soaring year.



Photo by John Gillis

On a more sobering topic, I've just finished reading the [FAA accident report](#) on the crash of a Pawnee towplane last October that killed the towpilot and destroyed the Pawnee. This has generated a lot of discussion on the rec.avaiation.soaring group. What appears to have happened is that just after takeoff the pilot in command of the glider became distracted with a video camera, got high and to the left and pulled the Pawnee's tail up. The rope apparently broke but it was too late and the Pawnee impacted the ground.

These kinds of accidents are completely preventable. On tow, we, as glider pilots, have only one job—fly formation with the towplane.

Don't distract yourself by fiddling with cameras, water bottles, air vents, unlatched canopies, or Miller moths. Fly the tow!

In my 2,000-odd hours of towing, I've had to pull the tow release on the towplane end only a few times. Most were towing in the wave when a ship would get out of position in the rotor (ask Alice about our first date). But on a couple of occasions I've had a student pilot get high on me right after takeoff while still low to the ground. I could feel the tail coming up and no amount of back stick could prevent it. I didn't hesitate—I pulled the release on my end and got out of the way.

According to the *FAA Glider Flying Handbook* (FAA-H-8083-13A), "One of the most dangerous occurrences during aerotow is allowing the glider to fly high above and losing sight of the towplane. The tension on the towline caused by the glider pulls the towplane tail up, lowering its nose. If the glider continues to rise, pulling the towplane tail higher, the tow pilot may not be able to raise the nose. Ultimately, the tow pilot may run out of up elevator authority."

Your actions on tow can have serious repercussions for the tow pilot. For the towplane. For the club. You literally have the towpilot's life in your hands. Exercise disciplined preflight checklists and keep the focus on flying the tow. Make the tow the first part of a great flight.

Mark Palmer, Editor

## CALENDAR

### Board of Directors Meetings

**March 12, 2019 6:45 – 8:45**

Castle Rock Library

100 S. Wilcox St.

Castle Rock, CO

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

**April 9, 2019 6:45 – 8:45**

Castle Rock Library

100 S. Wilcox St.

Castle Rock, CO

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

### Spring Training Seminars by Dave Rolley

**Next one, March 2, 10 AM**

See full schedule later in this issue.

### Minden Wave Camp

**April 8 – 12, 2019**

Minden, NV

Contact [www.soaringnv.com](http://www.soaringnv.com)

### BFSS Annual Meeting

**May 18, 2019**

Clubhouse, after flying

### 1-26 Championships and Low Performance

#### Contest

**May 28 – June 7, 2019**

Moriarty, NM

### Women Soaring Pilots Association Seminar

**July 1-5, 2019**

St. Louis, MO

## FLEET UPDATE

**ASK-21** – Grounded for replacement of canopy hinge parts. Expected to be flying soon.

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

**AC-4C Russia** – Waiting for space in Dave Rolley's shop.

**PW-5** – Nothing to report.

**Blanik L-23** – No problems except mud! See article and photos later in this issue.

**Pawnee** – Issues with the tow reel have been resolved.

#### FRIENDLY REMINDER

Mud season is here! Heavy snows and rain will make 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 March and early April:

Kolk, Brandon/Kewish, Dean	3/2/19
Leonard, David/Kinder, Rebecca	3/3/19
Maki, Jeff	3/9/19
McClain, Kip/Kinder, Julie	3/10/19
Metzgar, Marc	3/16/19
Palmer, Mark	3/17/19
Palmer, Alice	3/23/19
Paluch, Zach	3/24/19
Peaslee, Gerald	3/30/19
Price, Brian	3/31/19
Rolley, Dave/Ravotti, Chris	4/6/19
Sherrard, Jeff	4/7/19

Every flying member who does not have other duties in the club, such as instructor or tow pilot, is now on the schedule for line duty. If you are either a pre-solo student or have never performed this duty, Ingo 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 [Ingo Kuenzel](mailto:Ingo.Kuenzel) 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

**Becky Kinder** – First solo flights and A Badge!  
Congrats Becky!



## IT TAKES A CLUB TO TRAIN A PILOT by Becky Kinder

One advantage of it taking a record number of flights before my first solo was that I had lots of time to get to know the people at the BFSS and to see how the club works. It has been a real privilege.

I promised myself that when I finally got to this point, I'd thank the people who helped. Stan Bissell is a wonderful instructor, but he doesn't work in a vacuum. Our flight instructors have each made a point of getting to know students and to encourage and guide us. They work well together, and their professionalism is a treasure.

Our tow pilots have been patient and careful—and extremely generous with their time. The Blanik magically gets fixed in short order whenever something breaks. The magic is a skilled and dedicated group of invisible mechanics who could easily find other things to do.

Ground Operations Directors that take the job seriously are a gift from God. Their situational awareness and support are a joy and might even save your life.

The grass gets mowed, the clubhouse cleaned, the golf carts repaired, events planned, accounts settled, and the trash taken out.

And throughout the process members encourage each other.

I couldn't ask for a better place to learn to soar. Thank you, BFSS!

## THANK YOU!

**Dave Rolley** for snow shoveling; for sourcing parts for the ASK canopy hinge and for assisting with repairs; for teaching his Saturday soaring seminars; and for being MC at the Winter Party.

**Steve Johnson, John Gillis, Andy Gerner,** and others for snow shoveling.

**Doug Curry** for repairing the Pawnee tow reel and for work on the ASK canopy hinge.

**Gary Baker** and **Ingo Kuenzel** for organizing the Winter Party.

**Raul Boerner** for creating and facilitating the soaring song game at the Winter Party.

**Frank DeBacker** for fixing the urinal in the men's room.

## WARNING! DON'T BE ON THE NO-FLY LIST!

It's that time of year again. Club rules mandate that all active members take the KAP/BFSS Ops Knowledge test every year. Failure to do so will result in you being placed on the no-fly/no-tow list. The test is on the club website, in the Members Only area. The cutoff for completion is **SUNDAY MARCH 31<sup>ST</sup>**! Do it now, do it today!

You must score 100% on the test to pass. The test is auto-scored and you'll receive results immediately. If you scored less than 100% on the first try, retake the test to achieve 100%.

## CLUB DINNER AND AWARDS CELEBRATION

The Winter Party on February 9<sup>th</sup> was well attended and lots of fun. Good food, good company, and fun, thanks to Raul's soaring song game! It also gave us an opportunity to show our appreciation for our annual club award winners. Congratulations everyone!

**Student of the Year – John Gillis**  
**Robert Knapp Service Award – Doug Curry**  
**Junior Member of the Year – Zach Paluch**  
**Volunteer of the Year – Alice Palmer & 840 Team**  
**Soaring Free – Bif Huss**  
**Blizzard Award – Quay Snyder** (*If you're wondering what this is, check with Becky!*)

See photos later in this issue.

## N65840 TANKER 2-33 REFURB by Alice Palmer

This month we welcome volunteers **Becky** and **Julie** Kinder to the project. This mother-daughter team already has lots of aircraft maintenance experience through their volunteer work with the **Vintage Aero Flying Museum** ([www.vafm.org](http://www.vafm.org)) in Fort Lupton, Colorado.



*Raul, Becky, and Julie prepare to apply PolyBrush.*

We are grateful for their help since several of our regular volunteers are recovering from surgery or dealing with family issues.

Work has been slow due to lost days for cold and snow, but we're still moving forward. We just need a stretch of warm weather so we can tackle the finishing tapes.

Meanwhile, **Kyle Kendall** has been working on repairing the back seat interior panel.

Thanks everyone for your help this month:

**Raul Boerner**  
**Becky Kinder**  
**Julie Kinder**  
**Kyle Kendall**  
**Doug Curry**

And, we can't forget to thank **Dave Allen** for your continued support on our project. And best wishes to those volunteers who are still with us in spirit even though they can't be with us in person!



*Photo by John Gillis*



## ABOUT THAT MUD... by Raul Boerner

Mud, mud, mud. When it freezes overnight, frozen mud, frozen mud, frozen mud.

Recently, we could not move the L-23 from the hangar because mud from the previous day had frozen as hard as concrete. The brakes and tire were locked. We cleaned most of it away.

Then we flew. But on landing, a hidden chunk of concrete-like mud broke loose from the top of the wheel well. Fortunately, we had already slowed to about 5 knots or less. We came to a sudden stop: No damage. After returning the glider to the hangar, we cleared the new and old mud away.



## FOR SALE

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

## SPRING TRAINING SEMINARS by Dave Rolley

Dave's first seminar on February 16, *Introduction to Cross Country Soaring*, was well attended and very informative. It was a perfect day for learning, with strong winds and snow showers inviting us to stay inside. Thank you Dave! We're looking forward to the next one. A seminar will be held every two weeks running through the spring. The sessions will be 1 to 3 hours in duration. Starting time will be 10 AM. Most sessions should be about 2 hours. Here's the remaining schedule:

**Session 2:** March 2, Air Data Systems: Airspeed, Altimeter, and Variometers. Focuses on variometer types and uses.

**Session 3:** March 16, Intro to portable gliding computers: Cockpit workload management, equipment, and software. In class flight example using XCSoar.

**Session 4:** March 30, Collision Avoidance Technology: Transponders and FLARM, types of units, usage, what they can, and what they cannot do.

**Session 5:** April 13, RASP-based weather forecasting.

**Session 6:** April 27, Flight Tracking: Satellite based (SPOT, InReach), smartphone based (GlideTrack), FLARM based.

**Session 7:** May 11, OLC: It's all for fun, but if it isn't on the OLC, it didn't happen.



## Vne, FLUTTER AND DESTRUCTION By Raul Boerner and Darrel Watson

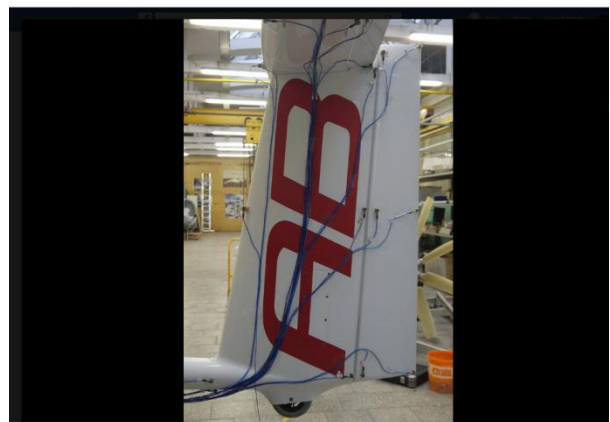
The painted red line, Vne, on the airspeed indicator is a speed limit but only up to a defined altitude. At low altitudes, Vne is based on airspeed loads. Above that altitude, it is based on flutter consideration and becomes the only airspeed limitation based on true airspeed. Since gliders don't have expensive airspeed indicators with red lines that move to indicate a lower Vne for higher altitudes, we have to memorize changing Vne limits.

For example, PW-5 Vne: 115 KIAS from sea level to 9,800' density altitude, 105 KIAS between 9,800' to 16,400', and 95 KIAS from 16,400' to 23,000'. The 115 number is the only one painted on the airspeed indicator.

Get the point? Vne for us at Kelly Airpark (because we normally take off when the density altitude is approaching 9,800 feet) is lower than the indicated red line and it goes lower as density altitude increases.

Flutter speed limits are driven by the elasticity of the aircraft – designers attempt to estimate by calculations, then get a feeling for how well they did via elasticity testing, and eventually flight testing. Test pilots attempt to prove it during really scary testing.

Here are photos of pre-test-flight elasticity and vibration tests on a prototype glider. With good ground test results, the test pilot can feel more comfortable flying the maximum dive speed test that eventually determines Vne, and from there flutter considerations take over.



### **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!"



## MRS. BADGER ASKS...

### What are your soaring goals for the year?

The new soaring season will be here before you know it. Have you thought about what you want to accomplish this year?

We are lucky to have the full range of experience in our club, from beginning students to world-class competitors. That means our individual soaring goals might vary from accomplishing our first solo flight to qualifying for national or international competition.

Would you like to stretch your wings to include some cross country flying for pleasure or FAI badges? If so, have you thought about working on your Bronze Badge as a stepping stone toward that goal?

How about flying in your first competition? The 1-26 Championships and Low Performance Contest in Moriarty, NM beginning in late May might be your perfect opportunity.

Consider setting yourself some stretch goals. Maybe your first goal is to earn your Bronze Badge. What's next? Maybe a Silver altitude, distance, or duration? Or all three?

Regardless of your goals, there are many people in the club who can help. Reach out to other members you know who can help directly, or who can get you connected with other members who will help you achieve your goals. Good luck and fly safely!

*(Thank you to Andy Gerner's son Andre for his artistic skills in getting a badger to wear a hat!)*

## IN MEMORIAM – GARY RUBUS

Former club member and treasurer Gary Rubus passed away suddenly on January 31<sup>st</sup>. Gary was a long time member and strong supporter of the club. He had moved to Moriarty, NM a few years ago to continue his soaring in retirement.

From club member Deona Neal:

“Gary was the first person I met when I came to BFSS for my introductory flight in 2011. When I pulled out my checkbook to pay for it afterwards, he told me that he was happy to pay for it. He also had let me fly a large portion of the flight. I remember him being very encouraging to me about my flying skills and future as a soaring pilot. He introduced me to Quay and the rest is history. :-)

When I officially joined the club as a student pilot, he convinced me to take on the maintenance officer position as part of my volunteer commitment. This was a stunning suggestion to me because 1) I was a student pilot; 2) I knew absolutely nothing about aircraft maintenance at all; and 3) it seemed like a strange role for the only woman at the club to hold. However, Gary told me that I didn't need to know how to turn wrenches, but that I simply needed some good organizational and administrative skills and a commitment to aviation safety. Overall, being the maintenance officer was a great experience for me and I held that position during my entire time at BFSS. I learned a lot from doing it, and I was always grateful to Gary for suggesting that to me. Gary was a passionate aviator, which came through in his dedication to the club.”

Gary's friends at the Albuquerque Soaring Club have published a nice obituary at [http://www.abqsoaring.org/news\\_small.php?id=156](http://www.abqsoaring.org/news_small.php?id=156).

Soar on Gary!



## ADVENTURE ON THE EASTERN PLAINS by Alice Palmer

I don't know about you, but after weeks of cold, snow, and no flying, Mark and I were going stir crazy. It was too cold to work on 840, but still a bright sunny day. Perfect for a road trip!

We'd been wanting to get out and start scrutinizing the area east of KAP for possible cross country flights. We're not ready to go back into the mountains, but in the past we were familiar with some Gold Distance/ Diamond Goal (or Downhill Dash) routes eastward along the major highways and thought this would be a perfect opportunity to check the area out. Destination: Burlington, CO.

We headed east along Highway 86 toward I-70. The edge of Class B airspace falls right at the Kiowa water tower, a great landmark. The terrain most of the way to I-70 is hilly and rough, with only a small number of landable fields, at least within sight of the highway. There are probably more options when viewed from the air, but as we headed further east it became apparent that you want to try to land near civilization. There are some great fields that are miles from anywhere, possibly without cell coverage! You would have a long walk in some areas.

We stopped at Limon to check out the airport. We met Pat, who owns a hangar there and flies ultralights. He was very helpful and welcoming. Limon is a good landing option. He said they may develop the grass area west of the runway and north of the windsock for taildraggers, which would be perfect for us too. Pat says there's a great house thermal just SE of the end of runway 34!

Continuing eastward, we noticed more landing options, but many fields will be in crops during soaring season. Arriving at Burlington, we discovered a good restaurant (The Dish Room) where we had a nice lunch before heading out to Kit Carson Airport a few miles south of town.

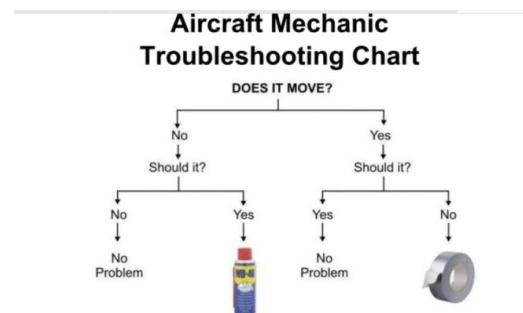
There we met Daniel, the airport manager, who was very excited to see us and gave us excellent information. The main runway is wide and long, and there's a short crosswind runway. Each summer he mows the grass west of the runway for taildraggers—again, perfect for us. Just keep to the northern 2/3 of the runway length if landing in the grass. There is a huge ramp, perfect for derigging, and plenty of hotels if you and your crew want to stay the night after a long day.



Photo credit: Kit Carson Airport Facebook Page

On the way back home, we stopped at several private airstrips to check out their conditions. We saw Aspen Acres, Hildebrandt, Flagler, and Koch. We're happy to share what we learned with anyone who is interested.

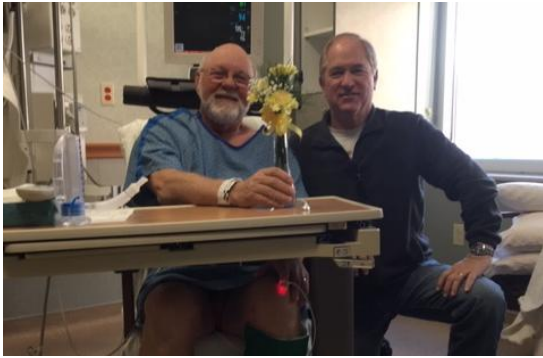
Although we know we're going to have to be careful of storms on the Eastern Plains, with the right conditions there may be some good cross country options out east. This road trip was so fun, we're looking forward to our next one: checking out some of local private fields closer to KAP.



Actually, I don't think Doug Curry would concur.



## PHOTOS



*Gary Baker is visited by John Mann the day after Gary's back surgery.*



*John Gillis—Student of the Year, with BFSS President Dave Leonard*



*The Kinder family was there for Becky's first solo flights.*



*Doug Curry—Robert Knapp Service Award*



*Photo by Roland Laning*



*Zach Paluch—Junior Member of the Year*



*Alice Palmer Accepting Volunteer of the Year  
for the Entire 840 Team*



*Bif Huss—Soaring Free Trophy*



*Quay Snyder Accepting the Blizzard Award  
from Becky Kinder*



*BFSS Winter Party! Lots of eating and  
camaraderie!*