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# Hangar Soaring

THE OFFICIAL PUBLICATION OF THE WOMEN SOARING PILOTS  
ASSOCIATION.

<https://womensoaring.org/>

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Artwork by Ulrike Franz

**2022 WSPA seminar rescheduled  
(Thank you to Sarah Arnold for stepping in and  
making her facility available)**

THE WOMEN SOARING PILOTS  
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FOUNDED IN 1986 AND IS  
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SOCIETY OF AMERICA

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## Badges and Records

Recorded through May 2022

**WDA Award**  
CarolAnn Garrat: 25 000km

**B Badge**  
Karol Fenzi, NY

**A Badge**  
Karol Fenzi, NY  
Karen Becker, CO

Just before going to print, Hangar Soaring learned that four women are flying in the 1-26 Championship at Chilhowee, a first for WSPA and the 1-26 Association. They are:

Cathy Williams  
Judith Galbraith  
Kristin Farry  
Sarah Arnold



## President's Note



Spring is finally in full bloom here in central Pennsylvania after an unseasonably cold and windy start. My club has been flying all winter, but the increase in flights, weekday operations, and training is very noticeable. By now, even those of you in the most northern areas should be completing safety sessions and check flights and resuming your soaring adventures in the sky. Remember, this is known as the "silly season." Be sure to anticipate some rust in your skills and proceed with caution and safety in mind.

Gail Schipper, our secretary, has written a summary of the March WSPA general membership meeting. Please read the news and upcoming events in her column. Congratulations to the 2022 scholarship awardees announced in this issue of the newsletter. It's not too early to be checking out the scholarships available and planning to apply for one in 2023. We are all grateful to Alice Palmer and the entire scholarship committee for their hard work!

I will be at the 1-26 Championships at Chilhowee, Tennessee from May 3rd through May 12th. With Sarah Arnold as contest manager and Kristin Farry, Judith Galbraith and me on the contestant list; women will be in full view. You can follow our adventures on the SSA racing site.

Wishing you blue skies, plenty of lift and all the awesome flights you have been dreaming of!

Cathy



## From the Editor

On April 12, 2022, I looked back on 60 years in soaring. Although I don't fly anymore, I am still deeply involved. This culminated in being the 2021 recipient of the Paul Schweizer Lifetime Service Award, being only the 3<sup>rd</sup> woman in the award's 29-year history. I feel especially honored because Bertha Ryan, my idol and mentor is one of the three women having received this prestigious award.

It all started back in 1957 when I got hold of Hanna Reitsch's book "Fliegen mein Leben" ("Flying my Life", available in English under a different title). Hanna was a history making German glider and test pilot in the 30ies and during WWII. It was in this book that I read for the first time about motorless flight, and I was intrigued, but never dreaming that one day I would do that myself. Move to 1961. My first job freshly out of college with a degree in chemistry was at an aeronautical research lab (the equivalent of NASA here) in their material division. We also had a flight mechanic division and several others. The flight mechanic had in their fleet of airplanes a Ka7 glider as a research airplane which the employees were allowed to fly for fun on weekends. I was curious and asked the engineer in charge if I could come out one weekend and watch. His answer was: "yes, but you are not going to sit on the ground, you are going to fly". And so, on Easter weekend 1962 (which in Germany is a very long weekend including Good Friday and a second Easter day) I got my first flight in a glider. The story of that flight is further down in Hangar Soaring (a reprint). Over 50 of these 60 years I have been active in soaring in the US.

With great sadness I noticed that over the last two years we lost about 100 members. Blame this partly on COVID and its derivatives. But with this membership

loss we also lost some international members. Some of this is because in several countries women organizations have sprung up now. I have contact with organizations in Australia, Italy, Germany and Great Britain. But still the loss of so many members, a trend throughout the soaring world, is troublesome.

Over the years I put a lot of energy in encouraging women to fly.

I am not done yet, but I know that I am past the zenith of my life. Someone has to take over the baton sooner than later. Give it a thought.

**Frauke**

In the February 2022 HS issue I reported on one of our young club members, who after doing all his "homework" had gathered an amazing amount of flying scholarships, (motor and motorless flight). The latest in this saga:

Abdalla has been accepted at the Air Force Academy and he will begin his Air Force career in Fall.

## WSPA members, friends and family can support WSPA when shopping at Amazon.

How to sign up for AmazonSmile

1. Visit [smile.amazon.com](https://smile.amazon.com).
  2. Sign in with the same account you use for Amazon.com.
  3. Select "Women Soaring Pilots Association" as your charity.
  4. Start shopping!
- Remember whenever you shop, start at <https://smile.amazon.com/> in order to generate a donation.



## Summary of General Membership Meeting 3/13/2022

The on-line General Membership Meeting held on 3/13/2022 started with the introduction of the new officers: Cathy Williams, Ute Kaden, and Kristin Farry who were elected to 2-year terms. Cathy will continue as President and Kristin has accepted the role of oversight of Scholarship and Trophies. In 2022 we will elect 4 board members. Please consider if you would like to contribute to WSPA by becoming a board member.

We took a moment to celebrate Frauke Elber's Lifetime Service Award by SSA. This well-deserved honor was supported by many WSPA members and people across the soaring community for her life-long commitment to Soaring.

Margarett Roy, WSPA treasurer, presented the Financial report. Total funds and assets of WSPA as of 12/12/2021 are \$167,790.87. Despite lower revenue from seminars for the past 2 years, we are in good shape financially.

We discussed membership renewal and the concern that the new membership website works differently than our historical, manual membership renewal. Members now should renew on their renewal date via the web site. Failure to renew by the individual member's renewal date will cause the member to show as no longer part of the WSPA membership. Please note that renewal through the treasurer is no longer possible. You may send payment of dues to Margarett, but members must log in to the website and complete the renewal online. To verify your membership status, login or create an account here: <https://womensoaring.org/members-dashboard/>.

Our 2022 Seminar will be at Chilhowee, September 12 - 16. Karl Striedieck and Silvia Grandstaff will be part of the coaching team. Aircraft will include Schweizer 1-26E, 2-33 and 2-32 gliders, a PW-6, and a PW-5. We expect this to be a really good Seminar, so do plan to attend! Also, mark your calendars for July 3 - 7 in 2023 when we will be in Uebersberg, Pfullingen, Germany.

CarolAnn Garratt will be hosting the 2022 Women's Cross Country Camp in Moriarty, July 3 - 8. The camp will include morning classes and afternoon flights. Bring your own glider or contact CarolAnn for more ways to participate, [cagarratt@gmail.com](mailto:cagarratt@gmail.com).

We have formed an Investment Committee that is being headed by LyndaLee LaBerge. We are looking for interested parties to help us steward the investments WSPA uses to fund operations and scholarships. If you would like to be involved, contact LyndaLee LaBerge, [lyndaleelaberge@gmail.com](mailto:lyndaleelaberge@gmail.com).

We have also moved our accounting to Quickbooks and engaged an accountant and bookkeeper to oversee the WSPA accounts.

Our current Membership is about 132 members: 68 women, 5 youth, 11 associate, 11 Lifetime male and 37 Life female members. We are looking for ideas and help with recruitment for new members, both US and International. If you are willing to help advertise WSPA at your home airport or local glider club, please be in touch with Ute Kaden, [ute.kaden@gmail.com](mailto:ute.kaden@gmail.com). If you have experience in marketing or promotion and would like to help direct our recruitment initiative, please Cathy Williams, [clsar2@gmail.com](mailto:clsar2@gmail.com).

The board will be looking at the bylaws again this year, particularly how to best incorporate the non glider pilot women members who were granted full membership (instead of associate membership as was previously the case) with the 2020 bylaws change. Currently all women WSPA members have the full membership privileges of voting and holding office. All our scholarships require the applicant to be a student (or higher rated) glider pilot. If you have an interest in the WSPA by-laws, please contact Cathy Williams, [clsar2@gmail.com](mailto:clsar2@gmail.com).

Kristin Farry urged women to apply for the Anne Morrow Lindbergh trophy. The annual deadline is April 30 for cross country soaring flights. Remember that this is a handicapped trophy so be sure to send in any flights you have made in the prior soaring year.

The next General Membership meeting will be during the Chilhowee seminar in September and will again be a Zoom meeting. The exact date and time will be determined and announced later this summer.

This meeting was attended by 27 members. Hope to see YOU at the next one.

--

Gail Schipper



## 2022 WSPA Scholarship Recipients

Alice Palmer, WSPA Scholarship Chair

We are very excited to report on our WSPA scholarship recipients this year. We had outstanding applicants for six different scholarships. With the WSPA Board's approval, we were able to award two extra scholarships this year to very deserving candidates. Thank you to everyone who submitted an application, to those who gave recommendations for our applicants, and to the clubs and commercial operations that support our scholarship recipients as they achieve their goals.

Congratulations to the following WSPA members who have been awarded scholarship funds:



**Ishitha Arekapudi**, from Evergreen Soaring in Washington State, has been awarded the \$1500 Sky Ghost Scholarship. Ishitha has soloed and passed the FAA Private Pilot Glider knowledge test, and will be working to complete her Private Pilot requirements so she can take her practical test

when she turns 16 in December. Her ultimate goal is to become an astronaut. WSPA member **Julie Kinder**, who earned her glider certificate as a teenager several years ago, will be her mentor.



**Karen Becker**, from the Colorado Soaring Association at Owl Canyon Gliderport in Colorado, has been awarded a \$1500 Mid Kolstad Scholarship. Karen has passed the Private Pilot Glider FAA knowledge test and has checked out in the club's 1-26. She will be using scholarship funds to finish her requirements

before taking her Private Pilot practical test this summer. After that she hopes to pursue badges and, eventually, Commercial and CFIG certificates. **Gail Schipper**, a WSPA Board member from Colorado, will be Karen's mentor.



**Nichole Marcus**, who flies with High Flights Soaring Club in Colorado Springs, has been awarded a \$1500 Mid Kolstad Scholarship. Nichole is a power transition pilot who discovered soaring a few years ago. She immediately became active in her glider club while also staying active in her local chapter of The Ninety-Nines. Nichole is working to prep for her Private Pilot Glider practical test

this summer. Her ultimate goal is to earn her CFIG certificate so she can give back to the soaring community. **Cathy Keller**, one of our WSPA Scholarship Committee members, has agreed to be Nichole's mentor.



**Jenna Cooper** will be graduating this spring from the Penn State aerospace engineering program and heading to the University of Colorado this fall for graduate school. During her summer months, she will be using her \$1500 Glider Girl scholarship funds to pursue her Commercial Pilot Glider certificate at Harris Hill Soaring. She has already passed her FAA knowledge test. She hopes to fly

scenic rides for Harris Hill this summer, and then ultimately earn her CFIG and progress to cross country soaring. **Colleen Koenig**, CFIG from the Albuquerque Soaring Club, will be Jenna's mentor.



**Terresa Morgan**, from the Willamette Valley Soaring Club in Oregon, will be using her \$1500 Glider Girl Scholarship funds to work on her Commercial Pilot certificate. Terresa earned her Private Pilot Glider certificate with the help of a Mid Kolstad Scholarship several years ago, and has also been a WSPA mentor. Terresa

will be mentored by CFIG and former WSPA Board member, **Elizabeth Tattersall**.



**Jennifer Hunt**, from the Seattle area, has been awarded The Flying Montagues Scholarship, which will provide \$1000 for flying at the Women's Soaring Seminar at Chilhowee Gliderport in Tennessee in September. Her goal is to earn her Commercial Pilot Glider certificate. She looks forward to giving commercial rides at her club, Evergreen Soaring, and

eventually earning a CFIG. I have the privilege of being Jennifer's mentor this year.



**Becky Kinder**, from the Black Forest Soaring Society in Colorado, has been awarded the \$1500 Maria Faber Scholarship. A former Mid Kolstad Scholarship recipient, Becky will be working on her Bronze Badge and getting some cross country training. Becky is active as a board member and committee chair at her club, and is looking forward to spending more time in the air. Her future goals are to earn her Commercial Pilot and CFIG certificates.

**Kristin Farry**, WSPA Board member and Scholarship Director, will be Becky's mentor. They hope to meet in person at the 1-26 Championships in May, where Becky will be spending a few days meeting new people and getting exposed to the contest atmosphere.



**Judith Galbraith** has been awarded the \$750 Competition Scholarship. Judith is currently from the Pittsburgh Soaring Club and also recently joined the Finger Lakes Soaring Club near her future

home in New York. Judith will be using her scholarship funds to compete in the 1-26 Championships at Chilhowee in May. Judith is a former Maria Faber Scholarship recipient and has also been a WSPA mentor herself. She continues to be mentored by WSPA President **Cathy Williams**.

I wish all of our scholarship recipients the best as they work on achieving their goals this season. I want to thank the many WSPA members who have stepped forward to be mentors. Thanks also go to our awesome WSPA Scholarship Committee members **Cathy Keller**, **Phyllis Wells**, **Elaine Ernewein**, and **Susan von Hellens**, along with our Scholarship Director and WSPA Board liaison, **Kristin Farry**, for their time and dedication to the scholarship evaluation process. I also want to express my appreciation to the WSPA Board of Directors for allocating the funds for us to award two additional scholarships this year.

For those of you who are taking glider lessons or know of a woman student glider pilot, don't forget the Briegleb Scholarship is available for a student to attend the Women's Soaring Seminar to expand her soaring skills in a new place. Application deadline for 2022 is July 15 for attending the Chilhowee Seminar in September. Information and the online application are available on the WSPA website at: <https://womensoaring.org/scholarships/>. Please contact me if you have questions about any of the scholarships: [scholarships@womensoaring.org](mailto:scholarships@womensoaring.org).

### From the WSPA Facebook site by Sara Stearns

I'm now a certificated glider pilot. I have earned the private pilot add on endorsement for gliders on my airline transport pilot certificate. This is the only add on I've ever pursued in my 45 years of professional flying. I've had more fun than I can recall, ever, learning to fly these quiet, graceful, magnificent flying machines. I was privileged to fly with the legendary Dan Gudgel, with him acting in the capacity of DPE (check pilot). It was one of the most fun, relaxed, amazing check flights I've ever done. And then there is Travis Smith, CFIG extraordinaire, whose patient tutelage brought this old woman along to reasonable proficiency in what was really record time, just eight flight hours and thirty three flights. And now, the real learning and fun begins! I'm out of the nest.





## News from Florida

By CarolAnn Garret

In the last edition of Hangar Soaring, we read an article from Ava Shelly about her first solo. She is one of a number of young people taking glider instruction at New Hibiscus Airpark near Vero Beach, FL. Last year a DPE arrived for a weekend and five students, including two young ladies, took their check rides and all passed. This club is certainly doing something right!!

I recently met Ava to congratulate her. What an accomplishment, soloing on your 14<sup>th</sup> birthday. Well, I also met Kat Watkins who was taking lessons with Dr. Tommy Augusston. Tommy was recently named SSA Instructor of the Year due to having instructed more student pilots than any other instructor in the US.

Kat just turned 14 on March 28<sup>th</sup> and it was a beautiful day to fly and she soloed. See picture. I love that solo smile!!

There's another young teenager, Coral, who is 13 and a student with Tommy and other instructors. With hard work and good weather, she should solo in July 2022.

Ava and Kat are already members of WSPA and will be applying for scholarships to continue their training. Coral will be following in their footsteps.

Congratulations to all these young women on their accomplishments. Welcome to WSPA and good luck with your check rides when you turn 16.



Kat after her first solo



CarolAnn and Ava

## In the News

### Note for the upcoming Seminar

The Red Roof Inn in Etowa, TN (about 8 miles from the Chilhowee-gliderport) offers special rates to glider pilots.

**Tell them you want the glider rate. Their phone number is: (423) 781-7459**

Sarah Arnold

### 2021 Majewsk Medal



The 2021 recipient of the Pelagia Majewska Medal, the highest international award for a woman glider pilot, is the Italian Marina Vigorito Galetto.

Excerpts from the nomination form:

For the last 25 years, Marina has been the main reference point for the Italian gliding movement, concerning sporting rules or organizing events when needed.

Marina became a glider pilot in 1994, is a silver badge holder. She is a member of the FAI Exec-

utive Board and previously a member of the IGC Executive Board serving as Trophy Manager. She has been the Chief Steward at the 7<sup>th</sup> Women World Gliding Championships (WWGC), steward at the 6<sup>th</sup> Junior World Championship (JWGC) and 29<sup>th</sup> World Gliding Championships. (WGC) Since 2010, she has been four times President of the International Jury at WGCsJWGC and European Gliding Championships (EGC)

She has been Event Manager in Rieti 2007 JWGC and 2008 WGC and 8 times Team Manager and/or Team captain for the Italian Team and has been a long time President of the Italian Sporting Committee.

Congratulations Marina.

## World's longest Diamond Mine no more

With great sadness I learned that the beautiful Ridge Soaring



gliderport in Pennsylvania does not exist anymore. The land was sold and I heard it was going to be turned into a horse farm. What ever remained was auctioned off.

Doris Grove and Tom Knauff created this gliderport in the mid 70ies. Many Diamond and 1000 km flights originated from there. And therefore, a plaque inside the clubhouse declared it the "world's longest Diamond mine". In its early days it was quite primitive -we flew there the first time in 1979- but Tom and Doris turned it into a soaring paradise. When Wolf and I drove to the 2014 WSPA seminar in Canada, we spent a night at Ridge Soaring. Not only did they have a very nice clubhouse with bunk rooms they also had a very nice place for RVs with hook-ups, which we made use of.

Tom and Doris are in their late 80ies now and had hoped to find someone to buy it as a gliderport and keep it operating.

Tom and Doris twice hosted the WSPA seminar, 1980 and 1985

**Thank you, Karl Striedieck for a  
\$10,000.00 donation  
to WSPA**

## Women's 2022 XC Camp

The dates for the 2022 Cross Country Camp in Moriarty, NM have changed to July 3-8, 2022. These dates are now firm.

Daily activities include morning lectures and SeeYou flight analysis, and afternoon soaring with mentor pilots doing a lead-follow task. Some dual flights will be available.. Course participants should have two years of soaring experience and good thermaling ability. This is not for newly minted glider pilots.

The registration fee to cover documentation and preparation costs will be \$225, and total costs for the week including hotel, tows, oxygen, food and registration will be roughly \$1,600 plus travel expenses.

If you are interested in attending the 2022 XC Camp, send an e-mail to CarolAnn Garret [cagarratt@gmail.com](mailto:cagarratt@gmail.com) with Women's XC Camp in the subject line.

## Memorable Land Out So unbelievable, I don't even believe it when I tell this story

### By Tammie Searles

The day was a typically beautiful day to fly Cross-Country in the middle of Texas and in the big fat middle of Summer. It happened on August 5, 2007, just west of Midlothian, Texas. If you aren't familiar with Texas Soaring Association, you might not know that (most of the time) you can keep an anvil airborne on a booming day. My cross-country partner and co-owner in a DG-300 (41:1 glide ratio) and crew Paul Searles and I decided to fly to the west that day. The clouds were strong, flat-bottomed and mercilessly beckoning us to head in that direction. I was flying the club ship which was a PW-5, which even though it underperformed the DG-300, it was a reliable gatherer of lift. Since I'm short in stature, the PW-5 (34:1 glide ratio) fits me like a glove and I have always felt very comfortable flying anywhere with her. Approximately 10 miles (half of the distance required) to reach the first line of big, beautiful clouds. I had released at 2,000' agl and had climbed to a semi-decent height of 4500' agl. I knew it wasn't a great altitude, but I could also see what amazing lift was in the distance. As I headed west, I kept getting lower, and lower and lower. Paul and his DG-300 did not get lower and lower and lower and wisely called on the radio that he was heading back to the airport. He recognized from his position that we were definitely in a sink hole. I'm not sure if it was my stubbornness, my lack of judgment or my pilot pride, but I had decided to not turn around. By the time I had reached 2,000' agl, I had picked out my field. It was brownish, recently harvested and looked soft and kind. Also, there appeared to be no machinery and no obvious obstacles. "Land in Dirt, don't get hurt" had been pounded into my psyche from The Dean Carswell. I was working the small amount of lift I had left but was being blown away from my field of choice. I made the critical switch from "working minimal lift" to setting up for my pattern. I made an uneventful landing. Opened the canopy. Climbed out of my glider and realized I was in the middle of nowhere, in flip flops.

I walked out of the field, and immediately a man on an antique motorcycle with a side car came driving up with a doggy sitting in the side car. The gentleman asked me if I needed help. I said "Yes, I just landed in that field and I needed a place to hang out until my crew arrived." He had his doggy get out of the side car, and told me to jump in. I have to say, I was more terrified riding in that side car than I was landing out in that field. I'm not sure what the weight limit was for that thing, but I could feel adverse yaw as we drove down the country road. As we turned left into his driveway, his wife was in the garage and there I was riding with her husband. Her mouth opened, but no sound came out. I am the ultimate ice breaker, so I said: "Hi Honey, we're home". This lovely couple welcomed me into their home and offered beer, homegrown tomatoes and a friendly place to wait for my crew to come with a trailer. As life goes, this gentleman's name was Richard Brown and his sweet wife's name was Fran. Richard had taken a ride in a glider a few years earlier with Paul Searles so he was familiar with the glider port and helped us derig and load the glider. As a thank you and homage to their sweet doggy that gave up his sidecar seat to me that day, I sent him a pair of Doggles and a thank you note.



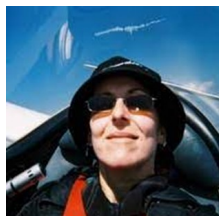
Tammie Searles flies gliders at Boerne Stage Airfield - San Antonio Soaring club and lives with her husband Paul Searles in Fredericksburg, Texas. She soloed on her 14th birthday, is a CFIG, SEL, MEL and glass artist. [tammiesearles@me.com](mailto:tammiesearles@me.com)

## April 12, 1962—My first flight by Frauke Elber

There I was, strapped in the front seat of a tandem double seater glider, just inches above the ground with only some steel tubing and some fabric separating me from mother earth. The long slender wings were held level by a wing runner, ready to start his short run until the glider was able to fly on its own. His eyes scanned the sky in front of him and his attention was focused on the winch at the other end of the airfield. The telephone man, who had voice contact with the winch driver half a mile away, gave the signal that the glider was ready for launch: "Ka7, double seated ready for take-off, tighten cable." We could hear the big V8 engine at the other end of the runway coming alive and watched the steel cable to which we were tethered slowly straightening. We heard the command: "cable tight, start take-off." The engine at the other end started roaring and the glider slowly started moving forward, first straight and level which gave me a bird's eye view of the landscape in front of me with the ridge that separated the hilly part of northern Germany from the flat plain that extended all the way to the North Sea. And then in about 150 ft altitude the winch really sprang into action, turning the glider into a kite and shooting it skywards in a very rapid ascent. My ears started popping. I held my breath. All I saw was sky in front of me. When we reached the zenith of the tow, the glider leveled out and a loud bang indicated that the towrope was released. It became dead silent inside the small, narrow cockpit, except for the voice of my pilot in the back seat, who pointed out landmarks and explained what he was doing to fly the glider. He was aiming for the ridge. A strong southerly wind would enable us to soar up and down the crest of the ridge. I finally relaxed and started to enjoy the ride. Splitting this long east-west ridge the River Weser had cut through the rocks on its way to the North Sea and had formed a gap that was dominated by the enormous Kaiser Wilhelm Monument. This was a very popular weekend destination for tourists. And there we came with our big, white bird, so close over the ridge crest that we could almost see the tourists' eyes. Up and down the ridge we went and every time we turned around at the monument people waved to us. We played that game for about an hour before we turned the glider back towards the airport. My pilot deployed the divebreaks, and we descended like a rock towards the landing strip. Touchdown was smooth, but the rollout was bumpy and noisy. After we came to a full stop we opened the Plexiglas canopy and I sat there motionless for a short while. Wow, this was my first flight in a glider. Little did I know then that this would become a life-long love affair that by now has lasted more 60 years. .

*This story was published as a blog of the British Women's group. Hangar Soaring was given permission to publish it here. Sarah Kelman is one of the outstanding British (and World) pilots being the first one to fly 750km in the UK and the first one of either gender to do so in a Standard Class glider. She also was known under previous names Harland and Steinman. I met her at the 2005 Women's World Championship, where she finished 3rd.*

## Famous Women Gliderpilots Sarah Kelman



I always wanted to fly. We often have dreams of flight but too few of us get to make that a reality. My obsession with the sky began on our first overseas package holiday to the Med, aged three. Despite, or maybe because of, my mum's terror of flying, my dad would have a word and get his little girl (and him, of course) an invitation to the flight deck. Before long, I'd worked out it was far more fun to spend an hour or so with the

pilots rather than sitting bored in Dan Air economy, and soon I blagged a ride through to the landing. My goodness – this was an amazing way to earn a living, but how on earth does anyone even think about starting?

My increasing obsession with aircraft led to joining the Air Training Corps at age 15, but although I learned a lot more about piston engines (and polishing boots, shooting and generally being shouted at), there was little flying to be had at our large Squadron. I passed all the RAF aptitude tests only to be told there was no place for a woman other than as a load-master – glorified cabin crew. No thanks. Flying Scholarships were only available to the boys at that time.

Approaching Sixth Grade, I was convinced I wanted to be a pilot and maybe join something worthwhile like Mission Aviation Fellowship, but obviously had no money to learn. I applied for a cadetship with British Airways but, yet again, I was rebuffed – I am very short sighted (and so, it could be argued, was BA at this time) and the Powers that Be not only declined my application, but they also implied I was too short sighted to gain ANY commercial license, ever. Distraught, I thought “if I can't fly them, I'll learn how to build them.”

Hence, I turned to Aeronautical Engineering, much to the visible repulsion of my teachers. “That's merely a ‘trade’ and no subject for a Young Lady and anyway, it can't be a good course as OxBridge don't offer it.” Come 1989, I was off to Imperial College – one of three women on a course intake of 60. I was fortunate at Uni that I suffered no discrimination whatsoever – I think this was mainly because I had also discovered the joys of the alternative night life scene and I think everyone was just a bit scared of me.

Three women dwindled to two, then just me as the other two dropped out. But it was a chance conversation with a classmate in my third year that changed my career path again. His father worked for the CAA medical branch and he showed me I could get a Class 1 medical despite my myopia. My goodness – I needed to make up for lost time, but now, as a student, I was penniless. At this point, I discovered the Imperial College Gliding Club flying out of Lasham. My trial lesson with the club Captain involved cloud surfing (at my expense of course) and a side slip on approach. It was just soooo exciting. The exhilaration and three-dimensional liberty of aviation was second to none. I was back the next weekend, and the weekend after that. I saved every pound from my week-day job in the college café and progressed quickly, first on the K13s and then, just when I was on cable breaks, I was shoved into the College's brand spanking new Grob 103c “496”. This was a bit of a beast after a K13 but the setback was short and I was sent first solo by Pete Reading just two months after that first trial lesson. I spent the Christmas holidays at Lasham, helping at the launch point, flying anything and everything so was nearly ready for my Bronze and Silver by the spring

As a bit of an airfield groupie, I cadged a lift to Aboyne in late March,

despite being newly solo, and this became another pivotal moment. The weather was poor with little flying and CFI Terry Joint went home a day early leaving tow pilot and equally inspirational glider pilot, Norman Smith in charge of the Lasham contingent. I'd previously had my first ever thermal flight with him in the Lasham K21. “What do we do when we get to the bottom of the cloud?” I'd asked. “Just switch on the Turn and Slip and keep going!” he replied. My first soaring flight now became my first cloud flying experience too. Anything is possible! On our last day, blowing a gale, he grabbed me for the only wave flight of the expedition. Below us, SAR helicopters searched for a missing light aircraft examiner and his student who had taken a wrong turn on a licensing Navigation Flight Test into Glen Muick with fatal consequences.

That summer, again I lived at Lasham, having gained my Silver as soon as the fields were cut in June (thanks to Terry Joint again for giving me a rollocking for wimping out on the first attempt) and then the Junior Nationals rolled around. Another instructor suggested I enter – but I'd only ever done two cross countries, my Silver C and my 100k Diploma. He offered to crew and off we went to RAF Halton. Needless to say, the weather was wet, and I struggled even to stay airborne locally whilst the likes of Steve Jones were completing tasks. How on earth do they do that? Still, it was free flying and great fun.

The following year I was finishing my Master's degree and was sent by the University onto an Air Experience Instructor course so I was now the person who got to take the freshers up for their first flights, just one year after starting my own gliding journey. I still would much prefer to muck about in aircraft for a living after Uni and I saved enough from summer jobs to finance my Private Pilot's License. Back then, you could fast track it off a Silver C with a handful of solo flights and the two flight tests. I still remember my General Flight Test engine failure – I was on Super Cubs and decided to take advantage of a nearby thermal to gain height instead. The examiner humored me for a while before pointing out that I was paying by the minute and wouldn't get a Pass until I did the forced landing.

By March, I was to relocate to Bristol for my final project with Airbus – conveniently close to Nympsfield, and this is where I first met G Dale, although the pressure of trying to demonstrate a perfect circuit on my check flight with him culminated in me completely forgetting to round out. Ho hum, lucky it was just another K13 (yikes!). Both our backs and the aircraft survived.

By the summer, it was time for the Junior Nationals again. This time I was in Imperial's top cross-country machine, their ASW19 “96” (still with no averager!) and did a lot better. I managed to tailgate Steve Jones a couple of times and started to see how he ran the energy lines. I even beat him on one day, mainly through naivety as a warm front approached.

All this time, it never really occurred to me to ponder on how few women there were in gliding. The male to female ratio was similar to that I recognized at Imperial and we were all united by a common desire to fly, regardless of gender.

September brought a reality check. I'd adored my time as a carefree student, but now I'd graduated and needed to join the real world. My degree suggested the traditional career in aerospace and I was indeed offered a post at GEC-Marconi to work on the flight control system for the B777 for a salary lower than I could have got working a supermarket checkout. But I still wanted to fly. I joined the biannual Lasham pilgrimage to Aboyne again with the intention of staying as long as I could get away with it. One evening at the club bar, I “let slip” that I'd got my PPL on Super Cubs and had even been down to Challock to do a spot of aerotowing, and so the hoped-for invitation to stay and do a season as resident tug pilot was offered. This was my dream placement – the chance to fly in the best soaring area in the UK and the chance to get myself improver hours towards the coveted Commercial Pilots Licence.

So began the best 18 months of my life. To be fair, I was more interested in the soaring than the power flying. Deeside paid for me to get my



Assistant Cat instructor rating which I loved little better than sitting in the back of the Puchacz, exploring the wave, and also got use of the BGA's SZD55 for the winter whilst it wasn't doing much else. I got in trouble mid-summer when I eloped down south to fulfil an obligation to crew for the Open Nationals in return for that loan, but again the Deeside committee saw fit to give me a second chance, and I certainly pulled my weight by the autumn. The visitor season at Aboyne is mental, with the visiting clubs wanting the tug out and ready before dawn and towing through until darkness every day.

November saw a return to Lasham to study for my CPL exams (again self-studying), then it was off to Staverton for the IMC and Night Rating. I was still saving for the Instrument Rating but the first sponsorship opportunities had started to trickle through after the Gulf War dip. I was dispirited enough by a rejection from Air Atlantique that I nearly jacked it all in and went back to Engineering, but my referee, Lemmy Tanner, let slip that Atlantique had considered me "overqualified" for them and thought I wouldn't stay the course. I applied to AirUK – one of 1000 applicants – and I was accepted into the Cabair Concrete Contract.

As I already had self-financed my CPL exams, I was fast tracked onto the previous course and started as a flight instructor at Elstree in June 1996. I almost cried that first week – I had no students and was stuck doing office work whilst Chris Rollings and Pullen flew the first ever UK 1000k. I was desperate to get my first 500k.

As I was being paid £250pcm, and still had a gliding habit to finance, I lived in a camper at Dunstable, instructing there on my days off or flying a loaned ASW20. Despite my experience, I was still terrified of going properly cross country. I'd local soar all day, from the first thermal to the last, but never really go anywhere. I bought an ASW24 with my boyfriend so had a retrieve crew if I'd really needed it, but still couldn't cut that umbilical cord outside the Junior Nationals.

I was now too old to be a Junior so entered the Eastern Regionals at Tibenham. My boyfriend came as crew and, despite freezing easterly winds and many a grid squat, we flew seven days and I won. I'm still unsure how as I never saw anyone and the conditions were really awful, but all those hours clinging on to the sky, local soaring, had served me well. The other established (and all male) competitors seemed a bit suspicious of my success but again, I sort of didn't really notice and just got on with the flying. I really was hooked.

I'd now qualified for Nationals, and someone mentioned the Women's European Gliding Team. I applied and got a place, but, oh my, what a case of imposter syndrome! I was off to Leszno with amazing veterans of gliding – Gillian Spreckley, Lucy Withall etc, all names with a long history of UK soaring. I was terrified as I drove out to Poland. Would I even be able to recognize and interpret the foreign skies? Gill and Lucy flew a fantastic and experienced campaign, despite my constant bleating on the radio as I seemed incapable of staying with them or making a decision on my own. The situation changed on a POST task day – a pilot selected distance task and precursor to the dreaded AAT. All the available turn points were towards a catastrophic thundery airmass, but the British Team led by Brian Spreckley, realized that if we could fly just far enough into the storms to turn the closest point, we could then turn tail and fly away until the time ran out for a maximum score. It worked, and after several hours, I landed a few hundred kilometres away in the Polish countryside. Now, coming into the last day, we had a shot at the podium. Again, Lucy and Gill shepherded me around the racing task and we finished with Gold, Silver and Bronze in the Standard Class. I was European Champion at my first International.

Professionally, I graduated into AirUK (now KLMuk) onto the ATR72, then Fokker 50 and BAe146, and they too supported my gliding so I secured time off for summer competitions. I borrowed a PW5 for the World Air Games in Spain and basically flew it like an ASW24. I led for most of the week, dropping to third on the penultimate day, then daftly did an "all or nothing" attempt to regain the gold that actually resulted in a horrible,

lonely day in the blue to fifth overall. However, I redeemed myself later that summer at the first Women's Worlds in Pociunai, Lithuania. Again, there were many super racing days but several tricky and marginal ones, and it was those days that I could show my talents. At home, I still had a penchant for winch launching at the first hint of a thermal and this meant I was very confident at scrabbling around in 1/2kt thermals under an overcast sky. I got a lead, I extended it and by the last day, I had a 600pt buffer. I won comfortably.

My chance to defend my title was taken away in 2003. KLMuk was sold off and I was on the receiving end of a redundancy letter. Unlike many of my colleagues, I was accepted by easyJet but this new, large airline was not able to accommodate my requests for a month's peak summer leave so I missed the chance to fly in Czech Republic. This year was also monumental for meeting my future husband and by the time of the 3<sup>rd</sup> Women's Worlds in 2005, I was now also a mother to a small baby. The upside of this was that I was still on maternity leave for the competition held in Klix, Germany, but the downside was that my daughter was only four months old. My husband and parents helped but the pressure of competing as well as mothering was immense. Despite this, I managed the Bronze medal that year.



Photo: Frauke Elber  
Sarah, her husband and their 4 months old  
Baby girl at the WWGC 2005 in Klix, Germany  
During the Babjaga Ceremony

2006 was back to Nationals and by July I was seven months pregnant with our second child and again on maternity leave from easyJet. I rashly entered the UK nationals thinking it would be another week of rain, grid squats and token 100k triangles. I was wrong. 2006 was fabulous and after seven days of long, gruelling flights in hot, blue conditions, I was quite unwell and had to retire on medication to not risk my pregnancy. Despite this poor result, on paper, I still qualified for the fourth Women's Worlds at Romorantin in 2007, now having upgraded to an ASW28.

This would be my final Women's Worlds. I struggled with the pressure at first and landed out after a silly mistake on day 1, but was relieved to discover that many others also landed and the day was devalued. I got my head in order and made steady progress again with the amazing help of my teammates, especially Gill Spreckley again (this time she was flying 15m class) and we both finished with a gold medal in our respective classes.

For 2008, I was offered a wild card to the mixed World championship in Rieti. This is where my gliding story started to tarnish. The women's team had been feisty but the men proved very resentful as I hadn't qualified by the traditional path. This was the first time I really felt discrimination and I felt like an outsider. Even the local tow pilots spent all week telling me that women shouldn't fly, and should be at home raising their children. This affected me really quite badly mentally and by the start of the competition, I felt I wasn't worthy of the place and had to somehow prove myself to my teammates. As a result, I made a very bad decision on day 1 to deliberately press low into an unlandable area with only the "hope" of lift (my team mate ahead had said it wasn't pretty but it was OK), and the

pressure of showing I was bold enough for this team weighed heavily on me. Well, it wasn't pretty and it wasn't alright. I ran out of height and had to make a controlled crash into an inappropriate field. I was fine, the glider was a mess, but all I could do was sob, thinking I had nearly left my two children without a mother.

Zulu Glasstek did a fantastic job at getting me back in the air with a replacement ASW28 and I got to fly at the World Air Games in Turin 2009, but I think the competitive edge was somewhat blunted by my experience. The psychological pressures of parenthood continued to build. I still loved soaring, but every time I flew, I had the guilt that I was busy enjoying myself instead of being around for my kids. I started coming back off tasks early so I could be home for the end of school.

As the children grew, they relied on me more to drive them to friends and their own social events in the afternoons and it became harder to justify long hours at the airfield to myself. Despite this, I was still sharp enough to stay competitive. When I won the UK Standard Nationals, I really felt I had finally showed that I was a top glider pilot, not "just a woman pilot." The unspoken stigma of being "just a girl" eats away at your confidence.

Many of my peers think they are just being funny when they joke that I only won the gold medal for the "pilots with boobs" but it means us women end up always trying harder to prove ourselves and justify our place in the teams. Also the decades of pressure to secure leave for qualifying competitions was also showing.

For people with conventional jobs, it might be more straight forward to get five days off in June, or even August, but in the travel industry, summer leave is gold dust and our roster pattern means that we have to spend our entire annual leave allowance to just ensure those nine days for a UK National.

Now my children were in school, my options for a family holiday were constrained by their availability too and I had to decide between spending my leave with my family once a year or selfishly at a gliding competition. I chose the former. I'm very goal driven, and once I no longer had the incentive of competing, I found it difficult to maintain momentum for everyday club cross country flying. As an instructor, the commitment to spend my rare weekend days away from work fulfilling my club obligations also began to weigh heavily as again this detracted from the equally limited family time and so I drifted away from gliding altogether and finally sold my ASW28 shortly after the Brexit referendum.

Despite this I've found a new outlet for my competitive nature. I've always loved cycling and swimming, and so I fell into triathlon. I've gone on to win the Gold Medal in the Age Group European championships and still hope to medal in the Worlds. Triathlon is more time-friendly as it's easier to fit in training around the school day and it's less weather dependent. However, I still gaze at the cumulus and increasingly pine for the freedom of the skies.

Throughout my flying career, I've always done my best, shown complete commitment and left little room for gender bias, yet women pilots remain the minority in a male orientated field. At work as an Airbus captain, I still have to smile sweetly at the daily "woman driver" witticisms from passengers and still wince at the sexist japes thrown about by my male colleagues. It's so fantastic to see the work being done by the Women Gliding group to empower and enable all of us to enjoy this fantastic privilege of flight, regardless of our race or gender. Women still suffer from "imposter syndrome" but we shouldn't – flying remains one of the most amazing experiences any human can have. Don't let anyone discourage you from your dreams.

## Recognition

by Frauke Elber



*A former TSS member after learning about my award wrote the following:*

You truly deserve this wonderful recognition, and although I've only known you for a short time, I want to thank you for your service to the soaring community, and for your personal friendship to me. Do you know, my favorite hat is the one I wore the first time we met. I had just sailed from Baltimore to Norfolk, and I bought a souvenir cap at the Marina where we docked in Portsmouth. I had only had it a few days when I came to Garner for a FAST ride. Nearly everyone was away at a soaring event. Fortunately, you and Wolf were there, as well as Jim Clark, who was able to give me my FAST ride. After ground school, we went out to pre-flight the airplane. You came up and removed my new cap and broke off the button on top. Then you smiled and said, "The canopy is more valuable than your head!" I have retold that story a hundred times. It was truly the most delightful way to meet you. I wonder how many marvelous first impressions you've made over the years. I'm sure there are hundreds of wonderful stories.



Ulrike Franz, our "artist in residence" has designed the seminar logos before: Airsailing in 2010, and 2012 in Chillhowee. The t-shirts have become collector items



## The Weather Machine: A Journey Inside the Forecast by Andrew Blum

Book Review by Dan Ernst

(first published in the Spring 2022 1-26 newsletter. Reprinted with permission of author)

As a soaring pilot, the weather and especially the weather forecast is very important to you. Is it a good day for a cross country, could I earn a badge today, or should I even go to the field today? Moreover, if you aspire to make a cross country flight, is now a suitable time to mobilize a crew in anticipation of heading out? I will bet that you are a subscriber to a soaring forecast (or two, or three...). While we look to the skies to see if forecast conditions will support our recreational goals, ground-bound people depend on the forecast for a wide range of needs from "should I wear a jacket today?" all the way to "should I be ready to evacuate in the face of an approaching hurricane?" The weather these days is big science, bigger news, and big business. So where does all this weather forecasting come from? Whose idea was it anyway? How has it grown over the years and who is in charge if anyone? Andrew Blum answers these and other questions in his pleasant to read and not too long (181 pages) book. The book is in three sections: Calculation, Observation and Simulation.

Blum outlines the foundations of weather forecasting based on the transformational technology of the telegraph, which then was combined with map graphics. The telegraph made it possible to collect weather observations from far flung stations and create a visual representation of the weather. It was the earliest geospatial information system. For a century, the global apparatus for observing the weather grew and methods of observation were gradually standardized. By the late 19th century, the call went out to understand more than what weather conditions were and had been, but more truly forecast the weather and understand why it came about. It was suggested that physics and mathematics were the answer to the question. The man that seriously accepted that challenge was Vilhelm Bjerknes, a Norwegian physicist and mathematician. Bjerknes was studying the practical applications of physics and in particular atmospheric circulation. He posited that areas of unequal density or pressure would interact with each other seeking equilibrium. He thought this might apply to the weather but was not sure how. A series of events and supporting actors led him to write equations that might calculate the weather forward in time and not just in the next few hours. But, as one might expect, those equations were complicated and in fact were partial differential equations that were functionally impossible to solve with pencil and paper without days of work. While not practical at all, the concept of calculating the weather was born.

Blum adds that it was a man named Lewis Richardson, a British mathematician who served as an ambulance driver in France during World War I, developed a way to tame Bjerknes equations and actually proposed a scheme for human calculators (I will let you read in the book to see how many!) to do weather forecasts based on mathematical analysis. And there the ideas of Bjerknes and Richardson sat until the invention of the computer.

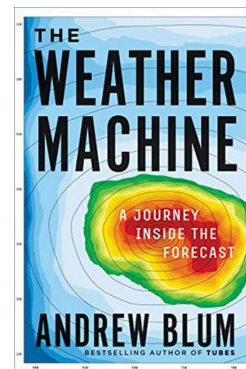
Following his Calculation section, Blum explores the worldwide observational network and how it developed along with the political impetus for linking the numerous national weather observation systems. Weather knows no national boundaries. Britain's weather today is Germany's tomorrow! There is a gargantuan infrastructure that spans the globe with stations in all kinds of places from airports to roadsides. But it was the advent of satellite observation of weather that turned it into a global enterprise and, although it was the rich nations that could afford to build and launch satellites, all nations share the data. It was to be the satellites that made weather observation truly global with their overhead vantage point and continuous coverage. Filling in all the gaps in coverage increased the accuracy of forecasts immensely.

So now that we have the all-seeing satellite eyes to observe, and the equations to understand the behavior of the atmosphere, we need Simulation, i.e., actual running of the models on computers. Here Blum takes us on a tour of the various weather services and their modeling efforts from Boulder, Colorado to Reading, UK. Not surprisingly, super computers are involved. Blum interviews the people that develop and maintain the weather models and oversee their execution daily. The models are being constantly tweaked using the constant feedback loop of how the forecast compared with the observed weather. Make no mistake, accuracy is a passion and a competition with these folks.

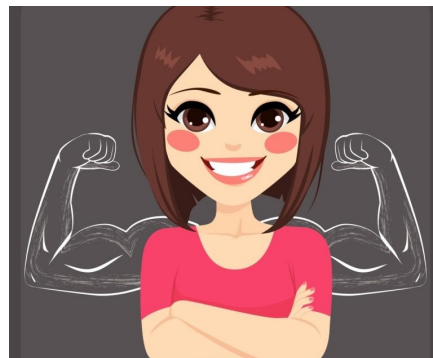
Like others in soaring, I subscribe to Skysight. I wondered how Skysight might use the forecasts made by the models to do their soaring forecasts. I reached out to Skysight's Matthew Scutter whose answer made me realize I had the wrong idea altogether. Here is what he wrote:

*"We use observational data and global model data to start our own models, running on our own supercomputer (run dynamically in the cloud) to produce the forecasts. Our supercomputer is roughly equivalent to ~1000x your personal computer. This is much less powerful than the computers used by NOAA or in Reading, UK, but only a small fraction of those enormous computers is actually used for their day-to-day forecasting and they do all kinds of things with them."*

Matthew is running his own model, descended from Bjerknes and Richardson, (and others to be sure) that gives us our niche forecast for soaring. That sounds like a tremendous achievement to me. The book is richly detailed, but not wordy, and Blum uncovers new (at least to me) insights on modern weather forecasting and adds a few of his own. Perhaps my idea of a good time is a bit warped, but I was informed and entertained by this book. Once you have read it, you will not look at a weather forecast the same way again.



### Quote of the day:



'Whatever you give a woman, she will make greater. If you give her sperm, she'll give you a baby. If you give her a house, she'll give you a home. If you give her groceries, she'll give you a meal. If you give her a smile, she'll give you her heart.

She multiplies and enlarges what is given to her. So, if you give her any crap, be ready to receive a ton of shit.'

## WSPA DUES

WSPA Dues - Due Date: July 1<sup>st</sup> of each year (except for LIFE Members and Honorary Members)

Full Members (women) and Associate Members ( men/ or women who are not pilots) = \$25/yr.

Youth (young women 18 yrs. and under) = \$10/yr.

Life Membership = \$350 (one-time)

### Can be paid:

By personal check written to “WSPA” and mailed to: Margaret Roy - Treasurer, PO Box 1197, Central Islip, NY 11722-0950

By Pay Pal on-line at our website [www.womensoaring.org](http://www.womensoaring.org) , or you can go to your own on-line PayPal Account and send us the dues amount plus extra \$2 for PP Fees to: [treasurer@womensoaring.org](mailto:treasurer@womensoaring.org)

Note: If you use your business PayPal account or another family member's account, please put a note on your electronic payment with your full name, so we will know who to credit.

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