USHPA PILOT

SPRING 2022
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HANG GLIDING + PARAGLIDING + SPEEDFLYING

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USHPA PILOT

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USHPA recommends pilots complete a pilot training program under the direct supervision of a USHPA-certified instructor, using safe equipment suitable for your level of experience. Many of the articles and photographs in the magazine depict advanced maneuvers being performed by experienced, or expert, pilots. These maneuvers should not be attempted without the prerequisite instruction and experience.

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EDITOR > Liz Dengler

With spring here, this is the time of year I usually feel the need to remind pilots returning to the sky that they are rusty after a winter of little or no flying. That said, I think this year I might only be talking to myself! I saw your social media posts. I'm pretty sure every U.S. pilot but me left to explore warmer air and epic conditions down south.

In lieu of flying this winter, I focused on skiing in preparation for a speedriding trip. That said, watching the personal best flights, competitions, new gear, and historic moments challenged my resolve! Your trips to Valle and Roldanillo were envy-inducing.

Sure, I could have scratched the flying itch and gone out with my big wing on those rare calm days in the mountains of Colorado, but it's not the same as sharing lifty rides to base with a few good friends.

But at last, April is here, and flying conditions will continue to improve. Maybe if you're one of the lucky pilots who got lots of practice down south this year, you don't need to hear this reminder; not everyone needs to ease in. However, if like me, you took the winter off, maybe you do.

If you've not been flying for a couple of months, it's okay (and wise) to take it easy on those first few flights of the season. It helps to have a healthy respect for your glider when you go out after a long break. It's good to get out a day or two early to warm back up and re-up your bump tolerance so you don't have to think about it on the first big day of the season. I know for me, as I trade in my skis and speedwing for my paraglider, I'll be happy to start off with some easy airtime at my local hill before I head off for an SIV to start the year right.

Happy spring! See you in the skies! Liz

△ cover photo by

ANTOINE GIRARD

Over Broad Peak in Pakistan, K2 in the background.

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Do you have questions about USHPA policies, programs, or other areas?

EMAIL US AT:

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Let us know what questions or topics you'd like to hear more about!

Interested in a more active role supporting our national organization? USHPA needs you! Have a skill or interest and some time available?

VOLUNTEER!

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ASSOCIATION > Martin Palmaz, Executive Director

As free flight pilots, we've been fortunate to enjoy flying with minimal restrictions or oversight from the Federal Aviation Administration (FAA). Training, precautions, and attention to our surroundings have helped keep us and other aircraft safe during flight. However, this is becoming more challenging with the increase in drones and other air traffic sharing the sky.

In December 2021, the first-ever mid-air collision in the U.S. occurred between an airplane and a powered paraglider in Texas. Tragically, neither pilot survived. While the incident is still under investigation, it emphasizes the need to intensify our efforts and ensure that no similar event occurs again. This is crucial to increasing all pilots' safety and preserving our FAA's free-flight privileges under FAR Part 103.

USHPA's Training & Certification committee has sent a letter to members with strategies and reminders to help individual pilots share airspace safely, from filing NOTAMs and using a strobe to avoiding congested areas. Below I'll outline an approach for chapters to support their free-flight community's airspace safety, then explain some of USHPA's ongoing efforts in this area.

One important strategy involves working with local stakeholders to improve safety for everyone in the air. For example, I participated in one such effort alongside my local chapter, the Rocky Mountain Hang Gliding and Paragliding Association (RMHPA). In 2010, RMHPA contacted the local military airspace controller to raise awareness and create procedures for a flying site north of the Air Force Academy in Colorado Springs, Colorado. The Air Force Academy provided funding, a squadron, and a horse to help us install signs and windsocks at the site. We also established a protocol to check in with them when flying to avoid any potential collisions with academy traffic and low-level, high-military jet training routes.

The experience helped us cultivate a relationship with the airspace controller while also increasing safety for all pilots by creating awareness and a protocol around our flying activities. If your local sites have any air traffic, whether from

PHOTO BY MARK LEBLANC

military jets, hot air balloons, or drones, we strongly encourage chapters to develop a relationship with groups representing those aircraft and procedures to heighten the safety of all flying activities in the area.

USHPA has also taken actions at the national level to monitor airspace changes and increase awareness of free flight as part of our mission to ensure its future. These steps include:

Providing site information to the FAA: We've submitted information about popular flying sites to the FAA to give pilots of other aircraft knowledge of our activities. Currently, we're waiting for a special designation for hang gliding and paragliding in the National Airspace System Resource (NASR) System database so that the sites can be integrated into sectionals and the B4UFly app for drone pilots.

Facilitating successful drone integration: I regularly attend the FAA Unmanned Aircraft Systems (UAS) symposium to help ensure that our activities are taken into account as new rules are made for drones. USHPA has also been working to integrate our flying site information into drone manufacturer software, as well as into the B4UFly app.

Monitoring the FAA Federal Register: We regularly check the Federal Register for changes to airspace that may affect free flight pilots, then notify local chapters. This allows chapter members to comment on the changes and lead any initiatives, if necessary, to preserve our flight activities in the area.

USHPA will continue to advance these and other initiatives to promote safety, expand awareness of our sports, and preserve free flight long term. We encourage all free flight pilots to increase their efforts to reduce risk when flying in increasingly busy airspace and to help us all continue to safely share the sky for years to come.

What's your region? **See page 63.**

CHARLY DIAMONDCROSS ST

The best steerable reserve option is here! The DIAMONDcross ST steerable square reserve parachute from Charly has a defined forward speed with a significantly reduced sink rate. Obstacles like powerlines can be avoided. Execute an emergency landing with a glide ratio of 1:1.5 to avoid unfavorable objects. The square is easier to repack compared to other steerable options and has a better sticker price too. There is no risk of "downplane" directly after opening even if it opens with the top downwards. More information at ***www.eagleparagliding.com***

WOODY VALLEY CREST

The Crest is the new compact, light, and dynamic harness from the harness specialists at Woody Valley weighing only 1.98 kg (size M). It is a reversible harness with a completely detachable rucksack. It comes in four sizes, with the S and M coming standard with a 55-liter rucksack, and sizes L and XL with a 70-liter rucksack. It is a split leg paragliding harness with an under the seat reserve container, and pretensioned airbag. Carabiners, two-step light speed bar, and built-in RECCO safety system included. More information at ***www.eagleparagliding.com***

ADVANCE WEIGHTLESS

This lightweight cross country harness was developed for hike-and-fly, cross country, and competition paraglider pilots and shares DNA with the Lightness X-Alps. The aerodynamic rear fairing is inflated with two air scoops for seamless flying and improved glider performance. The built-in reserve system compartment connects to shoulder supports to simplify harness handling. The ultralight detachable cockpit has a close-able pocket and separate battery compartment with a 20x13cm instrument panel. The Weightless is available in sizes S/M/L with three speedbag size options (S/M/L) for impeccable body fit and light carbon footboard. The harness weighs 4.1—4.4 lbs and is certified to carry up to 260 lbs. It is available starting in April, 2022 through Super Fly, Inc. ***www.superflyinc.com*** 801.255.9595 or your local dealer.

IOTA DLS

The Iota DLS (Durable Lightweight Structure) is a high-B paraglider that combines structural innovation with lightweight characteristics providing the best of both worlds. The "durable lightweight structure" was intelligently constructed with high stress areas (upper surface and ribs) reinforced by a variety of robust fabrics and weight savings in less stressed areas of the glider. The glider profile is designed to conserve energy for efficient pitch control and smooth glide performance especially in turbulent air. Well-tuned lift distributions and coordinated fabric tensions absorb turbulence while maintaining pilot feedback and predictable flight behavior. The aspect ratio for this glider is 5.6 with 59 cells and a weight range of 8.5-10.8 lbs. It is available in sizes: 21,23,25,27,29 and colors: gray, spectra, royal, and fire. It is available in May, 2022 through Super Fly, Inc. ***www.superflyinc.com*** 801.255.9595 or your local dealer.

CHARLY POLARHEAT Waterproof, insulated, and heated gloves ideal for paragliding or skiing. These black gloves come in unisex sizes S,M,L,XL, and XXL. There are two battery pockets per glove for up to 10 hours of powered heating. The short elastic leashes on each glove can be worn underneath jacket sleeves and internal drawstrings eliminate the threat of line tangles. With a micro fleece lining, outer insulation, and pliable goat nappa leather, the hands remain warm and dry. The glove fingertips are compatible with touch screens. Elastic neoprene and pre-shaped fingers allow for easy grip and reinforce areas that are heavily worn. The Charly Polarheat gloves are available through Super Fly, Inc. ***www.superflyinc.com*** 801.255.9595 or your local dealer.

FLYMASTER DISCOUNTS Registered pilots heading to any USA-based sanctioned competition are eligible for discounts on Flymaster NAV SD, LIVE SD 3G, and LIVE DS units/. Email Jug at ***jugdeep@flymasterusa.com***

NIVIUK KARGO EXPE SERIES These specialized packs come in two versions. The Standard Expe offers 40L/75L options, and the Expe Race comes in 50L/60L options. Pack your Klimber 2P or other Niviuk Plume glider in these specialized packs. The Kargo Expe series are light, durable, and ergonomic for all your mountain treks and racing. Standard versions offer extendable capacity. The pros are saying this is the perfect bag for mountain expeditions and hike-and-fly competitions. These rucksacks have been developed for the X-Alps after many hours of running and hiking tests. More information at ***www.eagleparagliding.com***

CHARLY PARALOCK The Paralock Separation carabiner enables pilots to detach from their glider while under load once they have deployed the reserve. Suitable for hike-and-fly and tandem paragliding, the Paralock weighs 73g with a breaking load of 2,800 DaN (Dakanewton) or about 6,300 pound-force. This carabiner and the Charly Quick-Out have an approved replacement interval of 8 years for mono use and 5 years for tandem. These carabiners lock and secure automatically and are easy to operate with gloves. A security cap over the release button prevents the spring force lever from opening unintentionally. This technology eliminates the need to a hook knife or pull in the paraglider during a reserve deployment which saves valuable time. Charly offers three speed bar separation systems to enable full disconnection from the glider. These are available through Super Fly, Inc. ***www.superflyinc.com*** 801.255.9595 or your local dealer.

CHARLY SNAPLOCK The Snaplock is a paragliding twist lock carabiner made from titanal. This titanol carabiner was drop-forged instead of bent, making the material ultra-strong. These connectors can bear approximately four times more weight than traditional paragliding carabiners. The approved replacement interval is five years for solo use and two years for tandem. A single Snaplock carabiner has a working load of 115 DaN or 260 pound-force and a breaking load of 3,000 DaN or 6,700 pound-force. The inside height of the carabiner is 6cm making it compatible for belt widths 25-30mm or tucked straps up to 45mm. These are a great choice for hike-and-fly at 76g compared to 150g for steel carabiners. These are available through Super Fly, Inc. ***www.superflyinc.com*** 801.255.9595 or your local dealer.

2020 Hang Gliding Accident Summary

Though it's impossible to have an accurate count of hang glider flights for the 2020 year (2021 data is still being compiled and analysis is forthcoming), we believe the annual total flights were fewer than previous years, especially in the first six months, due to COVID-related concerns. In 2020, there were 25 reported accidents, down 25% from 2019. These accidents included one fatality and 11 serious injuries (broken bone or head trauma).

Despite the general reduction in reported accidents, there was an increase in number of serious accidents compared to the three reported in 2019. All serious accidents involved H3, H4, or instructor pilots. One potential theory for the increase in serious accidents may be that these pilots had flown less and were less current than in previous years. A strong desire to fly may have led to some poor decisions and a bit more risk.

When working on getting current, risks may not be obvious since, in most cases, we are flying sites and conditions we were used to when we were current. The safer approach is to start with a site with easy launch and landing fields, fly in mild conditions, and, depending on how long it has been, work with an instructor for a more guided approach. There is no shame in flying easy sites in mild conditions and taking a sledder—it shows you are taking a more responsible approach to your flying.

Most accidents have unique circumstances, but our goal at the Accident Review Committee is to try to look for common issues to develop safety articles and statistics. Reporting all accidents/incidents, including non-injury or close calls, is important to developing accurate analysis, so please send in your reports no matter how trivial they seem.

The following paragraphs summarize the more serious accidents from 2020 and some safety comments to consider.

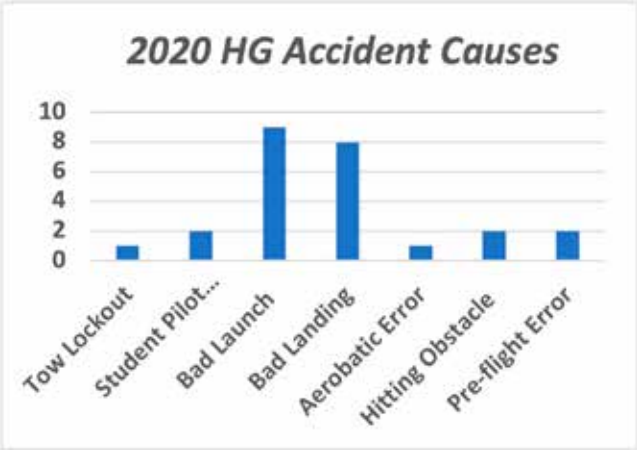
Fatality

There was one towing fatality in 2020, which involved a low altitude lockout from an unconventional tow device. Get proper instruction from a qualified towing school using high-quality towing equipment. An excellent reading reference is "Towing Aloft" by Dennis Pagen and Bill Bryden. The ARC also recently published an article in the July/August issue called "Minimizing Aerotow Risks" by Sam Washburn.

Serious Accidents

During an instructional aerotow tandem, the instructor handed over control to the student at approximately 20 to 30 feet when the tug was airborne. Right after the handoff, the student pushed out, and the weak link broke; at the instructor's behest, the student immediately pulled in. However, when instructed to push out to land, the student froze. The instructor tried to overcome the dive, but there was not enough time to out-leverage the student, and they impacted the runway. The impact bent the wheels back far enough to cause the base bar to hit the ground. The instructor swung forward and broke the keel with his head, fracturing several vertebrae; the student had no injuries. The instructor is doing well and expected to make a full recovery. The student, an experienced pilot with truck towing experience, was working on getting his aerotow rating.

The instructor said they have decided to switch to a stronger weak link for heavier tandems. The vertical



tubes supporting the wheel frames failed and allowed the basebar to hit the ground. The instructor will also contact the manufacturer and see if they can provide them with a stronger support tube.

A very experienced H4 pilot was soaring his local inland site with which he was very familiar. The site is considered easy to fly, with many new pilots getting their first soaring flights there. It is relatively easy to land on top when soaring with the typical wind direction. While attempting to make a top landing, the pilot was forced to make a downwind landing when the wind changed. Unfortunately, he could not compensate for the high ground speed and had a bad landing resulting in a broken arm. In this case, the wind shifted during the approach, so there were few options to correct the landing.

This accident shows the importance of verifying wind direction before and during your approach to avoid a downwind landing. Downwind landings have a lot of energy due to the increased ground speed—sometimes, with the right timing and an aggressive flair and runout, you can pull it off, but generally, it does not end well. If the LZ allows it, land on your wheels or make a crosswind landing but watch out for wing lift and ground loop.

A supervised H2 pilot launched from a mountain site ramp and enjoyed one of his first soaring flights, which lasted about 1.5 hours. During the flight, the weather started to change with lightning in the distance and increased wind speed. The pilot failed to recognize the danger in the changing conditions and drifted behind the ridge. He tried to get back to the ridge but was caught in turbulence and was turned 180 degrees, hitting some power lines. Fortunately, he was not electrocuted, but he did break his wrist and the glider.

This accident points out a fundamental safety aspect of free flight. We need to be constantly vigilant about the weather and be prepared to land at the first sign of deterioration.

After an extended sledder at a popular inland mountain site, an experienced H3 pilot executed a normal approach to landing. The LZ is somewhat restricted with a hill, bushes, and ditch. There is a preferred "slot" to aim for on the approach end. During a turn from base to final, a witness reported the pilot was not lined up with the slot, popped his nose, got slow, and clipped a tall bush with the left wing. The glider was about eight feet above the ground when it hit the bush, and the glider spun around approximately 120 degrees and hit a rock. The pilot suffered a broken leg, and the glider's down tube was broken from the impact.

Always maintain a good margin of clearance from obstacles, and consider room for any crosswind drift or course correction.

At a northeast mountain hike-and-fly cliff site with a rocky slot launch, an H3 pilot launched on a strong cycle and was turned to the left. His left wing tip dragged through some treetops. He was then hit by a strong thermal pitching him up into a stalled position. The glider turned 180 degrees and impacted the cliff at high speed. The pilot suffered a serious injury to his left side

with multiple bone fractures. Fortunately, a fellow pilot who witnessed the accident was able to get to the pilot and initiate first aid and call for help, though the rescue took many hours.

Pilots need to be cautious when flying sites that require a lot of effort to access. The desire to fly due to the invested effort to reach the site may outweigh safe decisions. Regardless of what it took to get there, be ready to back away if conditions are not right for your skills.

A supervised student was making an inland mountain flight at a very popular site used for training. The pilot had flown the site before and had approximately 20 flights from this launch. The flight plan was a glide to landing in relatively mild conditions. The LZ has an open approach and sits on a plateau with a 50-foot drop-off at the end. While on approach, the pilot was high and worried he would overshoot the LZ and drop down into the rougher LZ area below. To correct, the pilot tried to force a landing at the edge of the LZ before it dropped off. However, he hit the base bar and broke his arm. The glider did have small wheels, but they failed from the impact, causing a sudden hard stop.

Due to the unique plateau nature of this LZ, student pilots need to understand how to adjust their approach early to avoid an overshoot. Visual cues during the approach to judge height should be reviewed and understood with an instructor. Diving a glider to land short does not work and only adds speed and energy, which has to be dissipated somehow—in this case, by the glider and the pilot's arm. For this site, landing in the bailout area below the plateau is not a real danger if done properly.

An H3 pilot was flying from an inland mountain site. This was his first flight from the site with his new glider, and he was attempting to complete a 30-mile XC with some friends. Conditions were light to moderate, and after a good launch, soaring conditions deteriorated, and he was forced to land at a bailout LZ near a road. The pilot was high above the LZ and observed the windsock before making his approach. The wind was switchy but predominantly SW. However, during his final, the wind shifted downwind, resulting in a high-speed landing. When the pilot flared, he said the right wing stalled, turning him into the ground. He put his feet out and broke his ankle. The pilot reported he was having trouble with landings on the new glider.

This accident shows how winds can switch suddenly during approach. Even with being high and observing the wind pattern before making your approach, you can be caught downwind. Downwind landings are possible if the wind is light enough, but it may be best to land on your wheels (if the terrain allows it) or change course to a crosswind to limit ground speed.

After a long break from hang gliding, an H2 pilot flying a popular inland soaring site launched late in the day with light conditions. The pilot had flown this site before, but it had been a few years. After making several passes on the ridge, the lift died out, and he was making an approach to land at the lower LZ. Overflying the LZ east to west, the pilot made a 180-degree turn flying downwind toward the ridge. According to the pilot, he hit a severe wind gradient and was too low to make another 180-degree turn into the wind for landing. The pilot stated he completed about 150 degrees of the turn before impacting the ground, saying he had "no airspeed" despite looking like the glider was diving fast toward the ground. The impact broke his femur and the glider's down tubes.

This accident shows the importance of taking it slow and easy when trying to get current after a long break from flying. If it's been years since your last flight, it might be best to get with an instructor and complete some refresher training.

An instructor pilot was conducting an introductory tandem aerotow flight. During the approach, the instructor reported encountering sink and getting low for the normal landing. He landed short, hit a wellhead, and broke his wrist and nose; the student was okay. The instructor commented that he turned too late to base and did not anticipate the sink.

When making your approach to landing, keeping alti-

tude and clearance margins for things like sink, late turns, and obstacles is a good practice. You should constantly evaluate these margins throughout the approach and make corrections as needed to get you to the LZ.

Due to a short weather window and lack of free time, an H2 pilot with about 50 flights decided to fly the mountain site versus going to the smaller training hill for a refresher—he had not flown in the last three months. The weather was good, with about 10 mph straight in at launch. He had a good launch and flight to the LZ. The pilot reported making a box pattern for landing and, while on base to final, hit some rough turbulence. He increased his speed due to the turbulence, but when he leveled off on final, he flared early and ballooned up. Due to the increased height, he made the mistake of pulling in hard and hit the ground, breaking his arm and the glider's down tubes.

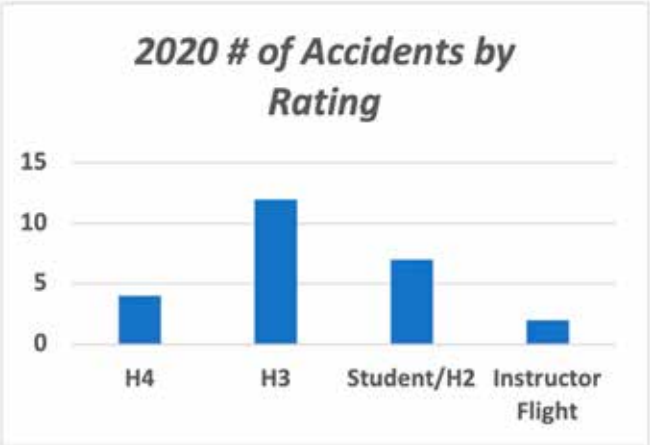
All pilots, especially new pilots, need to be cautious of currency. When you have been away for a while, play it safe and practice your launches and landings at an easy site. In this accident, the pilot did the right thing increasing his speed in turbulence but did not recognize the need to bleed off the extra speed before flaring.

An experienced H4 pilot flying a new topless glider from an inland mountain/cliff site had a blown launch. A witness reported conditions were straight in at 10 mph during launch. The pilot popped the nose after a few steps and barely had flying speed when leaving the cliff. The left wing tip clipped a bush, and he was turned into the cliff face falling approximately 50 feet to a ledge on the cliff. The pilot was seriously injured and had to be airlifted from the site; fortunately, a fellow EMS-trained pilot scaled down to the pilot to administer first aid. The pilot suffered serious head trauma and was in a coma for several weeks. This accident may have been related to the transition to a topless glider.

When transitioning to a new wing, especially a topless, get some practice at sites that allow an easy launch and landing.

Non-Injury Accidents

The reported non-injury accidents for the year had multiple reasons—many occurred during launch and landing. Two accidents were related to missing a structural issue during the pre-flight check, and one was a failed aerobatic maneuver that resulted in throwing a chute. While the outcome of these accidents did not result in an injury, some did lead to broken down tubes or impact with trees or bushes. When we have a bad launch or landing, we should analyze what went wrong and correct the behavior that led to the incident. Sometimes you can ask pilots who witnessed the incident to see what they observed or review your onboard video. These critical phases of flight can be very unforgiving to poor skills or decisions. A complete pre-flight is critical; watch out for distractions and interruptions to your normal flow.



2021 USHPA Awards

Celebrating this year's winners

by Amanda Winther

Each year, USHPA asks the community to help us recognize the individuals making outstanding contributions within the free flight community. These are the people we all know and love—our mentors and role models, members who always welcome new and visiting pilots, and those who go above and beyond to give back to our sport, to better our sites, and to make sure our community is inclusive for all. They may not be the pilots with the best flight PRs, although frequently they're that too. They need not even be pilots at all. This year, we as an organization and a community recognize these 10 individuals and one chapter for upholding the principles and values that make free flight what it is today.

Presidential Award: Matt Taber USHPA's highest award, the Presidential Award is given to someone who has made significant contributions to our sport, and it may only be awarded to a person once. This year, we honor, recognize, and award Matt Taber the 2021 USHPA Presidential Award for his contributions to the sport.

Steven Pearson, president of the USHPA board of directors, writes, "Our community is built on the efforts of thousands of volunteers, but the most important of all are those who are devoted to teaching others to fly. Our instructors and flight schools are the sources of all new members and the pillars of many local chapters. Most of what I have learned about flying has been through my association with many of these professionals. Matt Taber is extraordinarily distinguished in this group, having served as a flight school owner and instructor for 42 years, a USHPA director for 35 years, and the leading producer of new and advanced rated pilots for most of this period. His passion for flight is matched by a commitment to excellence, sharing his experience with others, and supporting new instructors. It is my honor and pleasure to award the 2021 USHPA Presidential Award to Matt Taber for his enduring and continuing contributions to hang gliding and paragliding."

Chapter of the Year Award: New England Paragliding and Hang Gliding Club The Chapter of the Year Award recognizes the USHPA club or chapter that has undertaken successful programs or activities that enhance the sports of hang gliding and paragliding, including but not limited to site procurement, development and retention, safety programs, and member-focused programming. This year, USHPA awards the New England Paragliding and Hang Gliding Club as Chapter of the Year.

Established in 1993, the NEPHC supports free flight at both mountain and coastal sites across the New England region. The NEPHC stands out for its online educational series, available to all pilots, covering topics such as using flight instruments, tree rescue, pilot injury, and XC and team flying. In his nomination, Jeff Sinason writes that NEPHC has promoted "a very positive image for paragliding and hang gliding and has been extraordinary in promoting the advancement of pilots through their

educational series. … Having flown with many of them personally, they exhibit this same positiveness and sense of community wherever they go."

Instructor of the Year Awards Many of us can remember the best teachers we've studied under, and how they not only made us confident we can and will succeed but also inspired us to do better. Surely, any of us who have tried to teach someone to ground handle realize that becoming a great teacher is a lifelong pursuit. The Instructor of the Year Award recognizes the role our truly great USHPA-certified instructors play in keeping new and experienced pilots safe in their progression while contributing to the growth of free flight. This year, we wholeheartedly recognize the contributions of Emily "Milly" Wallace and Andrew "Andy" Beem.

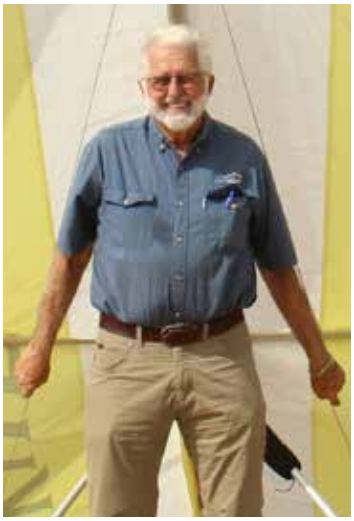
PG Instructor of the Year: Emily "Milly" Wallace Milly Wallace brings a rare combination of traits to her role as an instructor. All of her (many) letters of nomination comment on her kindness, patience, and knowledge, as well as her ability to recognize each student's unique learning style and tailor her instruction while staying both calm and "infectiously upbeat." Her focus is always on providing a safe progression to her students. According to one nomination, "[Milly] has told me that she wants her students to love paragliding and that pilots who put themselves in dangerous situations by flying beyond their skill set become fearful of paragliding, which negatively affects their enjoyment and love of the sport."

Wallace's influence as a leader and role model reaches far beyond her local community at Torrey Pines, especially for a small but growing subset—women pilots. Five years ago, Wallace created the Paragliding Pixies Gathering, the first U.S.-based women's free flight gathering. She also spreads her passion for the sport through her YouTube Channel, Instagram,

other social accounts, and her website, where she sells homemade "paragliding pixie" swag like leggings, buffs, stickers, and more. And she does all this while remaining extremely humble. As one student wrote, "It is an honor to know and be taught by Milly … she doesn't realize the impact she has on the people that she meets."

HG Instructor of the Year: Andy Beem No matter where you travel, if you mention the name Andy Beem among hang glider pilots, everyone has something glowing to say about their interactions with him. "He is both a legend and inspiration in free flight," writes recent HG pilot and long-time PG pilot, Kristen Zuraski. Beem has been flying for over 35 years and teaching people in Los Angeles County to love free flight for nearly as long.

Beem's nominations, as well as his students at Windsports, consistently mentioned his patience, professionalism, unparalleled safety record, and deep knowledge of hang gliding and free flight. Beem has an extremely tailored approach to instruction—whether it's his students' first time touching a glider or dune flights off Dockweiler or their first big mountain flights from the area's premier flying site in Sylmar. He has a keen ability to build a safe and fun progression for his students and fulfills the role of lifelong mentor to all he teaches. As one student shared, "I've had a lot of instructors in this sport, and few stick with you through your whole career like Andy." His love of hang gliding and free flight is obvious, and he wants to share it with everyone. Another student wrote, "You couldn't ask for a better instructor than Andy! He is knowledgeable, passionate for the sport, and a super patient teacher."



Rob Kells Memorial: John Harris The Rob Kells Memorial Award is one of USHPA's highest honors, recognizing an individual or group that has contributed significantly to the sports of hang gliding, paragliding, or both over 15 years or more. This award is not given annually, and to be considered, a candidate must receive a minimum of 10 nominations.

This year, the USHPA community awards John Harris the Rob Kells Memorial Award. Harris has devoted his life to sharing our transformative sport with others, a dedication that has spanned 50 years since he opened his school Kitty Hawk Kites in the 1970s. Since then, as one nominee writes,

"John Harris' school has taught close to a half-million lessons in hang gliding and paragliding. Teaching the world to fly has been his self-admitted life's calling. He believes that free flight can not only change people's perspective, but it also has the potential to awaken something inside people that they may not have ever known otherwise. The sense of accomplishment, freedom, joy, and sheer wonder can have a profound impact on people and change how they view themselves and the rest of the world."

Here are just a few of John's many efforts over the years that deserve our communities' deep gratitude and recognition:

- Creating the non-profit Professional Air Sports Association (PASA) to help develop standards for flight schools across the country (and to later deal with insurance issues that plague our sports)
- Starting the Rogallo Foundation to honor the Rogallos and educate people about their legacy, spearheading efforts to include free flight in major aviation events including the 100th anniversary of the Wright brothers' first flight
- Founding and organizing the Hang Gliding Spectacular, the world's oldest ongoing hang gliding competition
- Serving on the USHPA board and holding officer positions, and, of course, much more

"John has done more to promote the sports of free flight than perhaps any other person in the world," said one nomination. Many of his nominations reiterated this fact, with one writing, "I can't think of a more deserving recipient of the award." The USHPA Awards Committee wholeheartedly agrees.

Bettina Gray Award: Steve Callarik The annual Bettina Gray Award is presented to one photographer (male or female) whose work most exemplifies the legacy Bettina Gray. Gray—who is said to have always had a camera in hand—captured the beauty of free flight through photography.

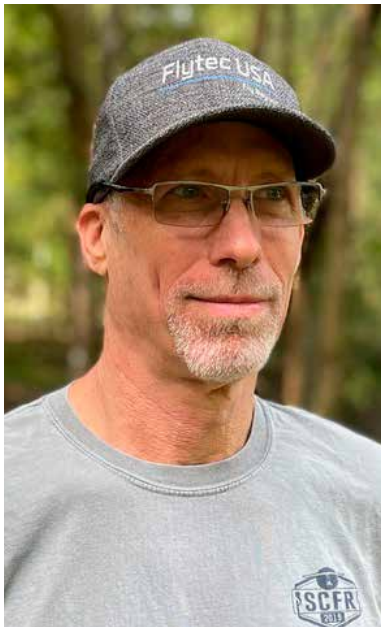
Steve Callarik, this year's awardee, spends countless hours at Bell Mountain in Hiawassee, Georgia, photographing Southern Parapilot members launching and soaring with the foothills of the Appalachian Mountains as their backdrop. "After a long day, he then spends countless hours editing and cataloging [the photographs]," said Bryan Upchurch, one of Callarik's nominators. But his dedication doesn't end there. "He doubles as a great wing spreader and traffic control and retrieve driver. He's always there waiting for us when we come to fly," said Upchurch. This award recognizes his keen eye and steady camera in capturing the beauty of this sport that we all love so deeply.

Best Promotional Film: Joseph Cochran The Best Promotional Film Award recognizes the videographer whose work is judged best in aesthetics and originality with a positive portrayal of hang gliding or paragliding. Awardee Joseph Cochran's "Experience Lookout Mountain Flight Park!" pulls viewers in immediately, with its high-quality imagery, quick cuts, different shot angles, and crisp voiceovers. As Seth Jenkins, who nominated Cochran, writes, "For me, no video captures the joy of flying as well as this one. My heart can't help but soar every time I watch it. This video captures the feeling

I have every time I leap into the air." With this award, USHPA thanks Cochran for sharing his for dedicated artistic vision to our corner of the sky.

Commendations USHPA awards commendations to members who have contributed to hang gliding and/or paragliding on a volunteer basis in any areas that enhance and promote the sport.

Commendation: Matty Senior The USHPA community and leadership award a commendation to Matty Senior for his deep commitment to free flight. Senior, who has been sending it in Chelan for many years, shares his love for the sport, promoting both the community and safety of our sports through his mentorship and clinics. He has also organized two Chelan-based competitions, introducing countless pilots to one of the country's premier flying sites while focusing on safety and professionalism. As one nomination noted, "Competitions are the glue that binds the community, and without meet organizers like Matty, our community would be significantly weaker. He puts on a fantastic competition every year that accommodates all skills of pilots." The USHPA community extends our thanks for Senior's tireless efforts to build community and enable safe progression for pilots at all levels.



Commendation: Rick Fitzpatrick Anyone who has visited Ellenville Flight Park will likely know Rick Fitzpatrick, whose love for the sport spreads to all. As an intermediate site, Ellenville requires observers or instructors to watch novice pilots, a role Fitzpatrick has enthusiatically filled. According to one nomination, "Rick Fitzpatrick has done an amazing job of serving all our novice mountain pilots, as well as any visiting pilots (of all skill levels) requesting site orientation/guidance. Without Rick, there would be many opportunities to fly lost (for novice pilots) due to a lack of an observer/instructor on launch. It is not an exaggeration to say that the huge uptick in the level of flying activity, and the number of active pilots in our flying club, is due in great part to the generous donation of time and service that Rick provides, sometimes even at the expense of his own airtime." With this commendation, we extend our sincere thanks to Fitzpatrick for all his contributions to our sport and community.

Commendation: Steve Kroop Steve Kroop, who recently finished a 20-year tenure as a region 10 USHPA director, has served on community leadership boards since the mid-1990s. These snippets from Paul Voight's letter of nomination capture the many ways Kroop has given back to the free flight community over the years. "Steve has been generously providing his time and efforts to the free flight community (USHGA-USHPA) for several decades. He was an avid participant in the development of the towing program over the

years, adding much expertise to our organization's development of those programs. Steve also has been an invaluable facilitator and supporter of hang gliding competitions. He has run, supported, and helped meet directors with anything needed. Somewhere in there, he managed Quest Air flight park for several years." Kroop also spent time helping when the Recreation Risk Retention Group was formed. (For those less familiar with the history of this vital group, the RRRG, which was formed in 2015 after USHPA's insurance carrier dropped coverage, helps ensure that insurance is available to our community.) A major thank you from all of us who have been lucky enough to benefit from Kroop's tireless efforts.

Special Contribution: Ross Wisdom (not pictured)

The Recognition for Special Contribution recognizes exceptional service and volunteer work from non-USHPA members that has significantly enhanced and promoted our sports in the U.S.

This year's awardee, Ross Wisdom, has contributed to the free flight community for over 10 years. As a CPA, he brought his expertise and wisdom to the roles of Treasurer, Trustee, and Accountant for the Foundation for Free Flight. Although he retired from his official titles in 2021, he has remained deeply involved. As one of his nominators writes, "Ross' dedication and unfailing, continuous volunteerism … via his knowledge and expertise regarding non-profit financial management was key to the successful evolution of the Foundation—especially during transitions." Our sincere thanks for Wisdom's generous contributions to free flight.

The Dune Flying Spectacular

Finding some folly at Kitty Hawk

by Sara Weaver

As a hang glider pilot who frequents FAI Category 2 hang gliding competitions, I find it's such a joy to return to the dune competition of the Kitty Hawk Kites Hang Gliding Spectacular. In 2021, the event (which is the world's longest-running hang gliding competition) attracted pilots from as far away as New York and Salt Lake City to Kitty Hawk, North Carolina, where the Wright brothers first soared. Without a shadow of a doubt, the Spectacular is unique. It is beyond fun, and it's very different from your average competition.

Structure

One of the major differences between an FAI competition and a dune competition is the structure. In an FAI sanctioned event, pilots earn points by how fast they can complete a predetermined cross-country course or how far they've made it around said course.

On the dunes, everything changes. There's no cross-country course, only a few cones in the sand that you must fly to the left or right of, some bowling pins at the bottom that you need to knock over, a ring suspended above the landing area that you need to retrieve, and a target (constructed from pool noodles) where your must land.

Let me explain. There are quite a few ways to earn points or awards during a dune competition, where the launch is only about 40 feet above the landing area. The first way is to launch before the "off-by" line, to fly around the correct side of the cones along the course (usually you only have enough height for one or two small turns), and to land as close to the pool noodle bullseye as possible. If you check all of those boxes, you earn a maximum score of 50 points. If you don't do any of those things, but you land safely nonetheless, you're rewarded with a minimum score of 5 points. For 2021, competitors were able to earn points for nine rounds on the dunes.

Pilots can earn points through some other rewarded categories during the dune competition. The

first is the bowling pins—flexible rods staked in the ground in front of the target. Knock over a bowling pin; earn a point. Bowling pins can be used to break ties.

The ring grab is the second way to earn points and is a fan favorite. A small ring is attached to the top of one of the bowling pins; grab it, don't drop it, and then control your landing, and you'll earn a point.

Then, and this was a new one for the 2021 competition, one could earn the Turtle Award. Because the competition takes place on soft sand, and pilots are aiming for a specific target, landings don't always go as planned. Sometimes gliders flip over. That's a turtle, and it's not ideal. Turtle your glider too many times, and you might be in the running to win the least desirable prize of the bunch.

Last but not least, if you've got spirit, you could be a contender for the Fly Fly Fly Award, given to the pilot who spreads the most stoke and works to build community in hang gliding. This award may be as desirable as winning the whole dune competition!

In addition to the competition on the dunes, the Spectacular takes to the skies via the aerotow comp one day over the weekend. Like the dunes, pilots have a few goofy tasks to complete. The first is the Grapefruit Drop. A pilot writes their name on the fruit, sticks it in their harness, and tries to drop in on a target while in the sky. Incoming!

Because it's hard to stay in the sky for long while flying in the ocean air, the other piece of the aerotow portion is the spot landing competition. Since it's over hard ground and not on the sand, the spot is far more generous, and there are no other distractions like bowling pins or rings. Just solid, safe landings.

▿ *Hunter Hollingshead (H4) makes his first pass along the east facing dune at Jockey's Ridge State Park during the spot landing competition. Photo by Megan Turner.*

△ *Charlie Trossbach (H3) lands successfully on his feet within the outer ring of the spot landing competition. Photo by Megan Turner.*

Scoring

In both types of competition, there are winners and losers, devastating losses and brilliant victories. However, during an FAI sanctioned hang gliding competition, the points pilots earn contribute to more than just the history books. Points earned during an FAI competition indicate one's national and international standing. These points dictate who will join the U.S. National Team to represent the USA at the World Championships, which occur every other year. On the other hand, winning the Kitty Hawk Kites Spectacular is a fleeting high, earned and enjoyed by those whose only rewards are bragging rights and a trophy.

Accessibility

Pilots from different worlds tend to find themselves at a Spectacular or sanctioned competition. Although both are accessible to all licensed pilots, there are fewer barriers to entering a Spectacular. There's a novice division for those with an H1 or H2 and an advanced category for competitors with an H3 or H4. Since entry to the aerotow competition is not a requirement, the only requirement is to know how to foot launch. There's no penalty for using an active wire crew or receiving direct coaching as you fly down the sand dune.

At the Spectacular, the number one rule is to be safe, so if you can get down the dune and fulfill that

requirement, you're good to go. Hang gliders used in the Spectacular are varied—Pulses, Falcons, Malibus, Condors, and Eaglets are all acceptable modes of transportation—the older, sandier, crustier, and more delaminated, the better. Maybe avoid bringing your speedy, topless ripstick to the party this time.

In opposition, there are a few more things to consider before joining an FAI sanctioned hang gliding competition. In the U.S., most competitions require at least an H3, and most are aerotow only. Aerotowing in active, midday conditions is frequent, so a pilot's skills must be current. And you should know how to navigate a cross country course using a flight computer, which many competitors learn from attending competitions and cross-country clinics put on by their local clubs.

As long as your glider can tow behind the plane safely, you may fly whatever you like, but double surface higher-performing wings are much more common (think Sport3, Gecko, LiteSport and Discus in the Sport Class, and T3, Combat, Litespeed, and RX in the Open Class). Your goal is to go fast and go long! Due to the additional fees associated with sanctioning, aerotowing, and organization, a pilot should expect to spend significantly more money at a sanctioned competition than at the Spectacular.

Community

If there's one thing the Spectacular has in common with FAI sanctioned competitions, it's the community atmosphere. The mood is that of contagious joy. One cannot attend the Spectacular without feeling the love and support of like-minded pilots surrounding them. I'd even argue that the sense of community is stronger since pilots aren't duking it out for a national title and are instead taking light flight from the friendly dunes; there's far less stress and anxiety on the beach.

Spectators gather at the edge of the dunes, seated on beach blankets and sharing snacks, while the pilots (who don't even have a launch order) navigate to the precipice to take flight. The crowd groans after getting sandblasted by the pilots who shake the sand from their wingtips, their delaminating

△ *Bowen Schwab (H3) launches the east facing dune at Jockey's Ridge State Park during the spot landing competition. Photo by Megan Turner.*

leading edges sparkling in the sun. The pilots are near enough that the crowd is constantly on guard to avoid gettingt bonked on the head by a stray leading edge.

The casual atmosphere of the Spectacular does have a slight undercurrent of competitiveness running just beneath the surface; competitors playfully tease each other while the few near the top genuinely gun for the number one spot. There's not another hang gliding community like it in the world.

Pilots travel from all over the U.S. to take part. There's always a large contingent of Dunies (people who used to teach hang gliding for Kitty Hawk) in attendance. I'm a Dunie myself, and the thread runs strong between all of us. Once a Dunie, always a Dunie. Although I'm in Colorado now and many others are scattered across the globe in Utah, California, Georgia, Virginia, Florida, Switzerland, and New Zealand, we're drawn to the beach each year for the celebration and joy that is the Kitty Hawk Kites Hang Gliding Spectacular.

The thing is you don't have to be a Dunie to come and fly the dunes. Aerotow pilots have a blast remembering how to foot launch the soft oceanside slopes. Competition pilots come to learn how to relax and operate on island time. Mountain pilots feel what it's like to launch while their feet sink below the sand with every step. It's the event of a lifetime, and it's one that everyone can enjoy.

This year is the 50th Anniversary of the longest-running hang gliding competition in the world, and it's your turn to be a part of it. You already know that it's going to be huge. Put it on your calendars—the 50th Annual Kitty Hawk Kites Hang Gliding Spectacular, May 19-22, 2022. Find your flying joy at **https://www.kittyhawk.com/event/hang-gliding-spectacular/**.

Your expertise as a pilot has earned you exclusive access to top brands.

Your involvement with the United States Hang Gliding and Paragliding Association and your status as an advanced or master-rated pilot have earned you an invitation to join Experticity. It's an exclusive community where you can get deep discounts and insider information from brands like Kelty, La Sportiva, The North Face, Brooks Running, Diamondback Bicycles and many more you know and love. Because brands like these recognize that experts like you know more, do more — and deserve more.

Signing up is simple and free:

- Go to the members-only section of the USHPA website to learn how to sign up
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Good Glass-Off Gone Bad

Originally published in Cross Country Magazine

Carefree soaring in widespread lift in the late afternoon is a great way to end a day. However, sometimes and in some locations, the soaring situation can evolve from carefree to worrisome in less than 20 minutes. This is because a lot of energy has been put into the system throughout the day and, due to inertia, it is possible that local winds can peak as much as six hours after peak heating. In the last issue, the phenomenon, or a combination of phenomena referred to as glass-off, was discussed. It is important to examine situations when widespread late afternoon and evening lift is best left to the birds.

Widespread lift with ascent rates that can match or slightly surpass the sink rate of soaring aircraft requires significant low-level convergence and similar divergence at the top of lift. If there are cumulus clouds present, then their tops mark the top of the lift. It is important to be vigilant of the height of the cloud tops. In the late afternoon, the scales of convection can change from a sky full of perfect fair-weather cumulus to a sky dominated by a few cumulus congestus (towering cumulus). Given enough humidity in the lower levels and a favorable environmental lapse rate through the depth of the troposphere, some of the cumulus congestus can blow up to full-blown cumulonimbus. Fighting to get down in the vicinity of a large towering cloud at sunset is worrisome at best.

Even if the towering evening cloud is not in your immediate vicinity, it is important to remain observant. The concept to keep in mind is that when even isolated cumulus congestus begin to appear, it is an indication that the scale and depth of convection are starting to transition from shallow to deep. Rather than the desired boundary layer convection, we are beginning to see hints of deep convection that encompass the depth of the troposphere. This is a much more dynamic state that is no longer reliant on surface heating. Deep convection taps most of its energy from latent heat release due to the condensation of countless tiny droplets. In a sense, the atmosphere stops caring about what time of day it is. In the vicinity of these towering clouds, late afternoon and evening might become the strongest part of the day. Mellow evening lift can increase to undesirable strength.

A wide towering cumulus in the distance is evidence of several cubic kilometers of air that has risen or is in the process of rising. This volume has to be replaced from below, and this can lead to the strengthening of valley winds in the landing area at a time of day that they would normally be decreasing. This increase in valley wind might not be evident up on launch.

Conversely, a cumulonimbus that has stopped growing and is dropping out can send a cool, dense outflow, or gust front, many kilometers down a valley. When air quality is poor and the air is humid, the cloud producing the gust front might be obscured by the haze. Whether and to what extent the gust front will affect your landing area depends on many factors, such as the strength and distance of the storm. The surrounding topography can either channel or block the gust front.

If no clouds are present, it is fairly safe to assume that the top of lift will be near the boundary layer top or just below. In desert or dry mountainous regions, this can still be several thousand meters above the surface. In less arid regions, afternoon top of lift will usually be found 1,500-2,500m above the surface. However, the absence of clouds is not an excuse to be less attentive. Watching the sunset from 2,000m above the landing zone while boating around in omnipresent lift can be mesmerizing. Nonetheless, if you want to be on the ground in less than half an hour, you will need to either

fly to the edge of this lift to glide down in time or employ more radical descent techniques.

Finding the edge of widespread evening lift can be a challenge. If you mapped out the edge of the lift in the past few minutes or if you know the flying site quite well, then you might enjoy the sunset from this high perch with confidence. If not, you might want to plan on landing before sunset.

IF YOU WANT TO BE ON THE GROUND IN LESS THAN HALF AN HOUR, YOU WILL NEED TO EITHER FLY TO THE EDGE OF THIS LIFT TO GLIDE DOWN IN TIME OR EMPLOY MORE RADICAL DESCENT TECHNIQUES.

Converging air does not always do so in a symmetrical textbook pattern. It can be sloped, and a giant invisible ramp can form in the air with layers that can sometimes exhibit strong shear turbulence. Sometimes stronger lift can be encountered as you head out into the valley to land. This band of lift can extend for many kilometers following the valley. At other times, the lift brings you into stronger wind, and the only escape path might be into the wind, which might result in gruelingly slow progress over the ground while still going up.

Once over the landing area, there can still be other surprises. For example, in Pemberton, Canada, a local late afternoon wind called the Whistler Express comes roaring in at 40km/h. Not being aware of this local phenomenon can leave a pilot surprised.

At other times, synoptic wind can increase with an approaching system. This is another situation where a lack of heating does not mean less wind. The exception can be near the ground in deep valleys where cold pools are starting to form. These stable surface patches begin to decouple from the wind above. For a pilot, this can mean possible shear down low.

Fortunately, the synoptic situation is usually fairly well resolved for 12 hours out, so a check of the forecast should alert a soaring pilot to the possibility of a tightening pressure gradient in the evening.

Checking the weather, consulting knowledgeable local pilots, and keeping plenty of escape options are vital to safe and enjoyable soaring in the late afternoon or any time of day.

▿ *Soaring conditions at the Point are possible with a 12-18 mph wind. Photo by Katrina Kirsch.*

When paraglider pilot Heather Maslowski received a notice on her door about an upcoming development, she knew it would be an issue for Utah's free-flight community.

"The plot plan showed four-story condos right in front of the South Side landing zone, which is obviously a concern," said Maslowski.

Soon after, Maslowski showed up to a public hearing to raise her concerns to the city council. She explained hang gliding and paragliding and highlighted the dangers of rotor and turbulence. "If you're not in the sport of aviation, it's hard to imagine how a building can impact flying," she said.

The issue of development overtaking flying sites isn't new; nor is the battle between developers and the area's local club, the Utah Hang Gliding and Paragliding Association (UHGPGA). The club has repeatedly rallied to protect its two iconic Point of the Mountain sites for

Saving the Point

Utah's South Side under threat of development

by Katrina Kirsch

years, which led to the creation of the Salt Lake County Flight Park (North Side) and the Flight Park State Recreation Area (South Side) in 2007. Despite this protection, the South Side site is now in danger of being wiped out for good.

To raise awareness among the free-flight community, city officials, and the public, UHGPGA started a campaign called That's the Point. This article aims to outline the campaign's efforts, detail what's at stake, and raise awareness for protecting this historic flying site.

THE SITE

The Point of the Mountain in Utah features two ridge-soaring sites, the South Side and the North Side.

The South Side is ideal for introducing students

◁ *Turtle kites with his dog, Koda. Photo by Ben White.*

▽ *Point rats parawaiting circa 2000. Photo courtesy Michele McCullough.*

to free flight because its consistent, laminar wind and gently sloping terrain allow students to safely earn their wings and practice essential skills.

The South Side's legacy dates back to the 1920s when pilots used winches, human tows, and Model Ts to launch sailplanes and gliders. The first hang gliding flight at the Point occurred in 1971 and cemented it as a pioneering site for the sport. Paragliding came soon after in 1987. This legacy, along with the safe conditions for launching and landing, led to the establishment of numerous flight schools in the area.

Today, the South Side is the training ground for local schools and a playground for hundreds of pilots. People travel from across the U.S. and internationally to fly the Point and earn the signature mark of a local—a dirt-kissed wing and exceptional kiting skills.

Unfortunately, the upcoming development may threaten safe flying because of its location directly upwind of the South Side.

THE DEVELOPMENT

The proposed "Vista at the Point of the Mountain" development will be situated at the base of the South Side, just across the road from the landing zone. It's currently permitted for 100 townhomes, 304 three-and four-story condos and apartments, and 400,000 square feet of commercial office space.

The developer, GWC Capital, is a subsidiary of the Clyde Companies—the owner of Geneva Rock, a construction company that mines aggregates (sand, gravel, and stone) from the Point of the Mountain. In other words, the company that's developing Vista is owned by the company that is mining the mountain.

Here's how GWC describes the project on its website: "Vista at Point of the Mountain is a perfect example of GWC Capital's and Clyde Companies' commitments to invest in and to build better communities. The development site is a reclaimed gravel pit that is being transformed into a transit-oriented, sustainable development that will complement the business environment and enhance the lifestyle of those who work, live, and play in the heart of Silicon Slopes."

COURTESY GOOGLE MAPS

Pilots who play at the South Side seem to be excluded from this vision, which is why UHGPGA began its "That's the Point" campaign.

THE COMMUNITY CAMPAIGN

After learning of the Vista development and attending the public hearing, Maslowski reached out to leaders of the UHGPGA for support. When the city council discussed the development for a second time, dozens of local pilots showed up to express their concerns.

The most pressing matter was conducting a wind study to prove the proposed buildings would create turbulence and, thus, unsafe launching and landing conditions. While GWC had agreed to conduct the wind study when Vista was initially planned in 2019, nothing had come of it.

"There's a conflict of interest between what's good for the developers and what's good for the club. If the flight park remains a safe place to learn, it's going to be an attribute to the community and the city," said UHGPGA President Austin Adesso.

UHGPGA leaders and volunteers met with the developers, started a fundraiser, petitioned local officials, and outsourced the wind study so the results would be unbiased. In early December, the club received the wind study results.

The next step is for both UHGPGA and the developer to analyze the results and decide on an approach. If turbulence from the buildings affects the landing zone, the building height or location may need to be changed to prevent unsafe flying conditions. Of course, this depends on the developer's willingness to make the necessary changes.

Other efforts are still underway, including a petition "requesting that the [Utah] governor put a halt on any development that may disrupt the community's ability to use the public lands for their intended purpose until the wind study can be completed and the results analyzed."

4 TIPS FOR PROTECTING SITES

Organize club efforts. Protecting a site involves a shocking amount of time from club leaders and volunteers. UHGPGA organized early on by setting up committees and appointing leaders who would meet every week to set goals, share knowledge, and stay accountable. Showing up as a united, organized club sends a message for companies and city officials to take you seriously. "It's important to ask for help, organize people, and empower volunteers to create change. The only reason we've been able to fight is because we have so many talented people in our community," said Adesso.

Educate the community. Pilots know when perfect weather is coming, but we're not always great at staying up-to-date on public hearings. Creating a way to educate the community—a website, Facebook group, Google spreadsheet, or newsletter—makes it simple to share important information. For example, Adesso posted a Facebook live video asking pilots to attend a city council meeting one evening. Dozens of pilots showed up because they got the notification and knew where to go.

Inform the public. Believe it or not, not many people know about paragliding, hang gliding, or speed flying. Part of every campaign involves educating the public about free flight. This may mean breaking down complex topics, like rotor, into a simple demonstration for city officials or holding an event and inviting people to take a tandem and learn about the sport. The goal is to attract interest outside of the club and get support from the public.

Be transparent about money. Documenting all of your due diligence efforts makes it simple for people to understand how funds are used. For instance, UHGPGA is using a majority of campaign fundraising to pay for the wind study. Any extra will be used to offset the cost of the campaign, such as lawyer fees and website hosting. Beyond that, the money will be donated to Project Airtime—a local non-profit that takes everyone for flights, including veterans, people with disabilities, and people with special needs.

Of the 5,000 signatures requested, 3,947 people have signed (at the time of writing).

WHAT'S AT RISK

The South Side isn't simply a skill-building site for pilots—it's central to the UHGPGA community and local businesses. In 2021, UHGPGA had 562 active members, a 25% increase from 2020. The Salt Lake City metro area is also home to seven paragliding, speed flying, and hang gliding schools, as well as over a dozen instructors.

If the landing zone at the South Side becomes unsafe due to rotor from the Vista development, students and schools will be at risk. The wind study highlighted how the proposed buildings will be the most disruptive in a south wind, which is exactly what flows through Utah Valley and up the training hill in the mornings.

Unsafe conditions may not stop the free-flight community from flying, but they can certainly lead to an increase in turbulence-induced accidents.

PROOF OF SUCCESS

In early November 2021, the Draper City Council voted on a development near the North Side Flight Park that would exceed the building height restrictions for the area and include a helipad.

Local UHGPGA pilot, Ian Gillespie, started a petition to inform residents how a helicopter landing pad would create a severe risk to paragliders and hang gliders due to regular helicopter traffic close to pilots and increased air turbulence created by the extra height of the building. The developer wanted to increase the building height to 70 feet, from the recommended 45 feet and 10 feet for auxiliary equipment.

The petition, "Say Heli-No; Save Draper and Steep Mountain's Peacefulness," and its supporting website educated locals about the adverse effects of the development and outlined how it would impact the community. Over 1,400 people signed the petition, and several residents showed up to the City Council vote to voice their concerns.

Ultimately, the developer's proposal was rejected, and the City Council requested that significant changes be made to the proposal before it would give approval. Not only was this a win for UHGPGA, but it also showed how organized efforts could help protect flying sites.

WHAT YOU CAN DO

UHGPGA has been working for months to meet with the Vista developers, attend city council hearings, and hold committee meetings to organize club efforts. While the future of the South Side is still to be determined, there are several actions you can take to show your support.

Share the campaign: *thepoint.mystrikingly.com*

Sign the petition: *www.change.org/p/utah-governor-preserve-utah-s-flight-park-the-point*

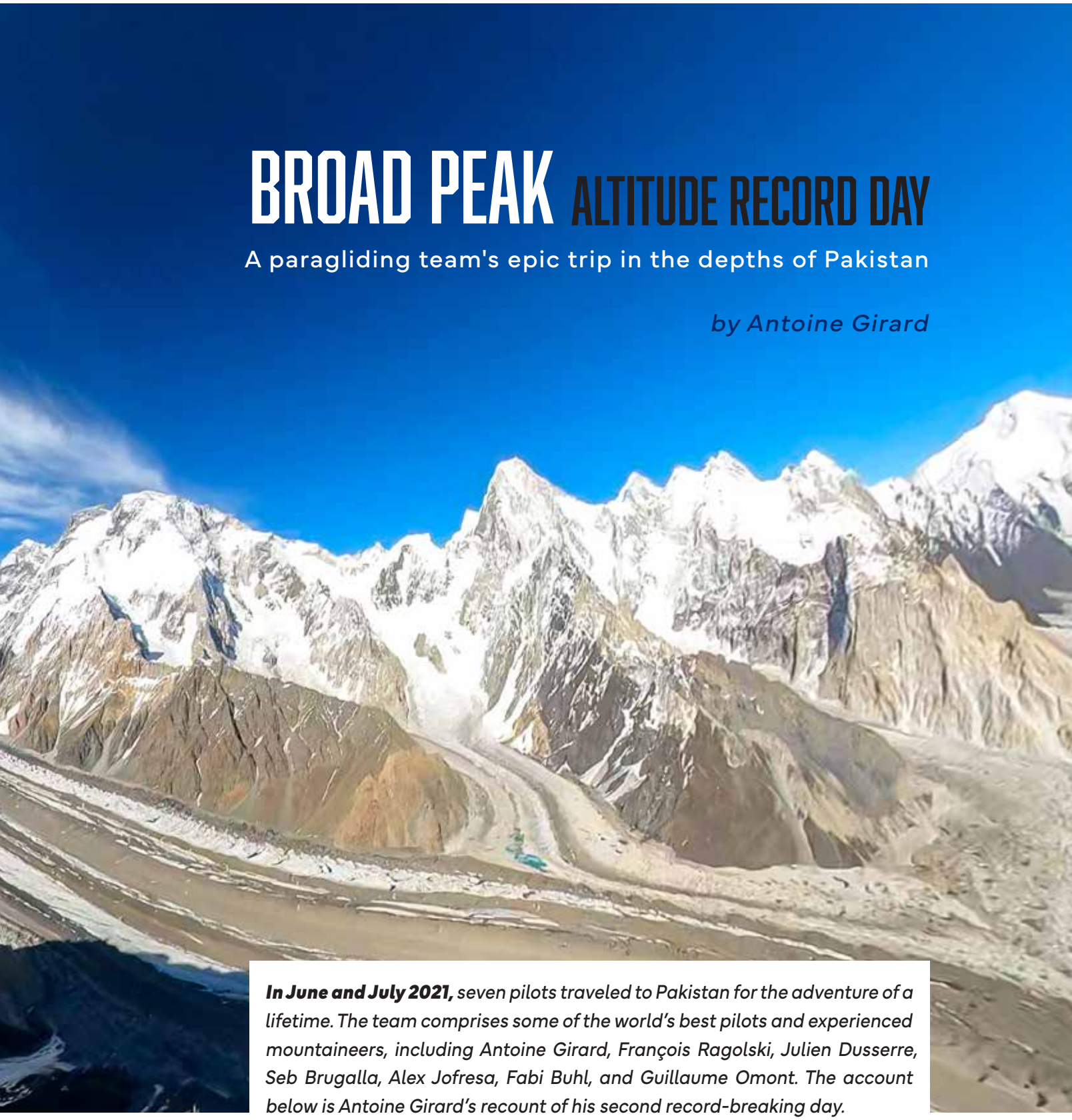
Donate to the efforts: *www.gofundme.com/f/preserve-utahs-flight-park-the-point*

Ultimately, the future of the South Side depends largely on the willingness of the developer, city, and state to respect the mission of the Flight Park "to provide a safe environment for a variety of air and land-based recreation opportunities and to serve as a hub for the local gliding community."

If safety isn't possible, the site is in danger of becoming a legend rather than a legacy for future flyers.

▿ *Cloud 9 students learning the basics on the South Side. Photo by Katrina Kirsch.*

At Concordia on the Baltoro Glacier. Photo by Antoine Girard. △



BROAD PEAK ALTITUDE RECORD DAY

A paragliding team's epic trip in the depths of Pakistan

by Antoine Girard

In June and July 2021, *seven pilots traveled to Pakistan for the adventure of a lifetime. The team comprises some of the world's best pilots and experienced mountaineers, including Antoine Girard, François Ragolski, Julien Dusserre, Seb Brugalla, Alex Jofresa, Fabi Buhl, and Guillaume Omont. The account below is Antoine Girard's recount of his second record-breaking day.*

On July 18, 2021, after almost eight weeks of adventure flying, skiing, and mountaineering in Pakistan, we were nearly at the end of our trip. Despite our original 15 flying day limit in the Concordia region, we were granted a three-day extension. For the last six days, we had been pushing to fly Broad Peak—a final attempt at setting a new paragliding altitude record, a record that a member of our team had already bested earlier in the trip.

Back in 2016, I flew to 8,157m above Broad Peak. One goal of the 2021 trip was to top that mark and break that record. Flying in this region is high altitude, high desert, and incredibly remote flying, making it extremely dangerous. Even with a dynamite team, nothing was guaranteed. Remarkably, our team managed to pull record flights off twice, bookending the trip. The first record happened on June 6, a "discovery day," and the first good flying day of the trip. François Ragolski, the 2016 Acro World Champion, climbed above Rakaposhi Peak, reaching an altitude of 8,225m, breaking my 2016 record.

Now, on the last day of our extension, just two of us (Fabi Buhl and myself) flew off towards the Baltoro Glacier, attempting Broad Peak and the record again. This was our last day and, therefore, our last chance to climb to 8,000m.

The weather forecast was not encouraging—no ceiling, stable, and strong wind (potentially even too strong at altitude). In the morning, the sky was blue, and it would remain so—the weather was stable, and the blue thermals were anemic. We did not believe too much in this day as the conditions were worse than the previous days.

We hesitated between trying one last time at Broad Peak (8,047m) or going directly to fly in the

Ultar base camp. Photo by Francois Ragolski. ▵

During his record flight above Rakaposhi Peak. Photo by Francois Ragolski. ▹


8201
10
-0.8
218
1.5

Baltoro. Trango Towers in back. Photo by Antoine Girard. △

Biafo Glacier, a region that we had not yet explored. This was our sixth attempt at this flight, and the weariness was slowly setthing in, but we chose to leave in the direction of Broad Peak and decide later.

We passed the towers of Trango around 6,000m—low for this area because the ground gradually rises to 5,000m as we advanced on the glacier. We arrived around 6,000m on Marble Peak after 35km of flight which was the starting point to transit onto Broad Peak. We needed at least 6,500m to cross the valley and as much to come back. We stayed for a while without exceeding 6,300m.

Instead of waiting for a climb, we decided to go back and fly in the Biafo. It was only 14:30, so we would have time. After five kilometers on the way back, we took our first real thermal of the day, which rose to 6,800m with weak wind! Excited, Buhl and I exchanged a few words on the radio and decided to return to Broad Peak for our last attempt.

This time we did not stop on Marble Peak, and we attacked Broad Peak directly but a little low. I arrived first, rolled up the thermal, and decided to go on the south face. I couldn't find any lift, and I returned to the thermal very low. Meanwhile, Buhl arrived and climbed to the ceiling around 6,500m on the south face.

The thermal was soft, and the gently rising air gave me the opportunity to observe Buhl, climbing slow. I no longer believed in this road and opted to try my luck on the north face. We had to act quickly; we didn't have much time left in the day to try if we wanted to make it back to base camp that night. I found a small thermal on the stop between the north and west faces that went up to 7,000m.

◁ *Trango Towers up close. Photo by Fabi Buhl.*

▽ *Ladyfinger passby in front of Hunza Valley. Photo by Francois Ragolski.*

Here, the air changed, and I was shaken. I was in thermodynamic air, and it was not fun. On several occasions, I was forced to put my hands on my buttocks to stop the glider. I could no longer roll, had trouble keeping my course, and just went up and forward. I climbed when I could and edged up to 7,500m, where the wind overtook the thermals making the air mass much more pleasant. From 7,600m, the wind was strong and allowed me to climb easily.

However, starting around 7,300m, I had marked symptoms of hypoxia—I had the feeling of ants in my fingers, and I could hardly use them anymore, so I drove with my wrists. My only thought was


can

"As I sat above the world, I had the impression that time stopped."

about trying to breathe deeply. My field of vision was drastically reduced. I had to get out of this ascending zone quickly because continued hypoxia would result in the total loss of my sight.

I tried to calm down to consume less oxygen and to breathe evenly. I passed a radio message to Buhl so he could guide me if I lost my vision. It took me some time to find the radio button with my fingers no longer responding. Descending to around 7,000m, I felt better, which allowed me to wait out the feeling. Gradually the symptoms faded.

Not wanting to waste this last opportunity, I decided to go back into the thermodynamics and fight my way back up. Knowing what was coming, I could better manage the passage through the turbulence and keep my stress levels low. Stress made me consume too much oxygen, resulting in hypoxia the first time, and I wasn't flying with an oxygen bottle to compensate for the thin air. This time around, everything was going better, and I felt perfectly fine. Around 7,600m, the thermals stopped completely—the wind was strong but laminar. I was in oil, and it went up strong!

The wind must have been in the 70km/h range, which did not really pose a problem for me—at that altitude, my glider allows me to fly at 82km/h when accelerated to the maximum. When I did not push the bar enough, I could push back up, allowing me to better place myself in the wave of wind that was blowing up and over Broad Peak. Up at 8,000m, the lift varied from 2.7 to 6m/s but moving up from there, the climb was more gradual. At 8,407m, a new altitude record, the lift finally petered out.

As I sat above the world, I had the impression that time stopped. I enjoyed the moment by contemplating all the mountains. The smoothness of the flight allowed me to escape for a few moments. Just 10km away, K2 reached out to me; I was just 200m below the summit of that legendary mountain. It was a perfect moment.

After basking in the moment, I decided that I had my dose of stress for the day. It was 16:00—if we hoped to return to camp via the east faces (our only authorized path), we had to leave right away. Buhl was now at 7,500m, not far under me, and he decided to follow in my footsteps and return.

But the headwind was strong. As I made my return, I seemingly fell from the sky, passing Marble Peak at 6,500m, just 7km away from my highest point over Broad Peak! However, I managed to sneak in a couple of small climbs and bumped my way back. A few kilometers here, a few hundred meters climb there. These were the only thermals I came across, but they were enough. Touching down in camp, I found the perfect end to a storied adventure.

◁ ***Over Broad Peak. Photo by Antoine Girard.***

Free Flight First Aid Courses

Be prepared to be first on the scene

by Lane Lamoreaux

Anyone who has ever witnessed the sudden and intense impact of a hard landing or other accident has witnessed something that will likely stay with them. Events like these can be traumatizing, especially if one is caught unprepared. Prior to the few unfortunate free flight accidents I was on scene for, I had several years working in trauma as an EMT and a firefighter.

Making free flight my vocation for the last nine years has increased my exposure to a vast spectrum of, mostly fantastic, free-flight events. If it's a flyable day,

Participants in a first aid course practice a sling carry.

Phil flying Cape Kiwanda.

Explaining how to splint a broken pelvis. ▹

I'm at the local site. However, having such a volume of exposure means that, occasionally, I'm there for an unfortunate event. Witnessing even just a handful of incidents feels like too much.

The most recent of these events occurred at a crowded flying site, and time seemed to stand still. I watched in what felt like slow motion as the wing reach a stall point with the pilot way too high. He fell hard. I ran to the injured pilot, along with a half dozen others. While we ran over, each of us shouted out our experience, certification(s), and qualifications.

Fortunately, we had a couple of doctors in the group, so I deferred scene management to them and made myself available to render support. Other unfortunate events I've witnessed have had far fewer folks on the scene, often with little to no medical/trauma experience.

Another unfortunate incident hit much closer to home. It involved one of my best friends, who was a competent and experienced pilot. He sustained a massive airsport injury when his parachute failed to open. I had the greatest level of emergency medical training, so it was incumbent on me to manage the scene and render care.

I gave others on scene jobs that redirected panic by constructively focusing energy. I needed one person to hold direct pressure to reduce the external bleeding while I performed CPR. I needed another person to call 9-1-1. Someone else needed to head down to the dirt road to flag down the ambulance. The last person who didn't have anything to do was assigned to take notes, emphasizing the time and the intervention performed. (This is often hugely appreciated when transferring care to the next level.) These directions needed to be given while I kept my friend's blood circulating via chest compressions.

There is no other way to say it—the scene was horrific. My buddy had external fractures, most notably involving the cervical spine, and his ribs were fractured, so my chest compressions were performed delicately. Fifteen minutes after calling 9-1-1, an ambulance showed up, and a life-flight helicopter was landing.

A few minutes later, the local coroner showed up, and the white sheet came out. We lost him. We did everything we possibly could. Twenty minutes of exhausting CPR at least gave his family, girlfriend, and myself assurance that everything that could be done had been done. He was unfortunately beyond savable.

I'VE MADE A BOLD AND AMBITIOUS DECISION—AS A PARAGLIDING INSTRUCTOR, I WILL NOT CERTIFY ANY NEW NOVICE PILOTS WITHOUT ALSO TRAINING THEM IN BASIC CPR AND FIRST AID.

That trauma continues to disturb me to this day. To effectively make sense of the ordeal and continue living my life, I've found value in reflecting over the series of events with a constructive mindset. The awful incident revealed a lot. It exposed the need for greater emergency medical response training in the free-flight community.

Coming to this realization, I've made a bold and ambitious decision—as a paragliding instructor, I will not certify any new novice pilots without also training them in basic CPR and first aid. I also want to offer this training to as many interested pilots as possible. Fortunately, I made a friend who supports and shares this ambitious goal.

A pilot named Phil Armstrong recently moved to my area. His experience and qualifications exceed mine.

My experience with trauma comes from my work with the Forest Service following around fire crews as a fireline medic. Most of my calls were traumatic injuries, and only a handful were purely medical.

His background comes from working with an elite unit as a U.S. Air Force pararescueman—some of the most highly qualified and skilled emergency responders in the world. Armstrong has a greater level of experience and training in the world of trauma than any other pilot I've met. He has become a difference maker, contributing his skills, knowledge, experience, and training to the flying community. Having Armstrong in the vicinity makes me feel so much more comfortable. Should anything unfortunate happen, I know we have someone on the scene who could significantly enhance a person's survival, optimizing the outcome.

I told Armstrong of my goal to contribute to our free-flight community by increasing emergency preparedness. I explained there is a noteworthy need in our flying community to be better prepared should one be

△ *Phil and Lane in Chelan, Washington.*

exposed to the worst. We can improve our community's preparedness, thereby increasing survivability, by increasing the availability of emergency medical/trauma response training.

I took the first step toward this goal by obtaining formal certification through the American Red Cross. I went through a week-long instructor clinic to become certified to teach CPR, First Aid, and AED usage. Armstrong quickly followed suit. We became a team.

I've made friends through instructor clinics in the past, many of whom are now running their own schools. My friend Ben White started instructing at Point of the Mountain, Utah, years ago, so I reached out to him, told him of the need I saw, and how, with his help, I'd like to address it. He enthusiastically welcomed Armstrong and me and invited us to put on a course at the Point. White even secured the space and recruited participants for this training.

White organized an excellent turnout for the week-long training. We made it as comprehensive as possible by covering things ranging from heat-related illnesses to trauma involving external and internal

WE WANT TO BRING THINGS TO A TIPPING POINT WHERE MOST PILOTS HAVE THIS TRAINING.

bleeding. We placed emphasis on covering time-sensitive interventions for incidents involving allergic reactions and traumatic incidents that risk hypovolemic shock. We also spent half a day putting together improvised splints.

Armstrong and I decided to call this course Free-Flight First Aid and CPR Training. We learned a lot putting on our first course. What went well was our preparation in terms of materials. We aimed to make it as realistic as possible. When it came to improvised splints, we included items like tree branches and several t-shirts to be torn.

In the future, we plan to include several scenarios for each student so more extensive practice can be carried out. Students are more likely to retain the training when it involves physical actions that build muscle memory. There's also tremendous value in having each participant take turns in becoming the incident commander. It's our goal to continue traveling the country putting on this course.

We want to bring things to a tipping point where most pilots have this training. For more information about Free-Flight First Aid Training, check out PrepAirdness.com and ExosParagliding.com.

 Dennis Pagen

TAKIN^G OFF A HANG GLIDER

Perfecting the first phase of flight

As new hang glider pilots, we have a lot to learn. Taking off, flying through the wavering air, and landing are the separate phases of flight. Each phase has its own techniques and skill sets that lead us to perfection and performance. This article will concentrate on taking off, with guidelines and tricks for beginner to intermediate pilots.

We are addressing these matters as if the reader is very new to flight, but more advanced pilots may also discover helpful items they haven't considered. Also, it should be noted that as pilots progress, they experience new sites and different days with varied conditions at launch. So it is our goal to present techniques that can be used safely in nearly all situations.

MINDING THE MIND

New pilots often feel a bit of apprehension during the launch process. We all grew up essentially moving in two dimensions (a forward and back or left and right dance). But when we enter into the realm of the sky, with three degrees of freedom, we're in new territory (and the added dimension can be down, which may be scary). But by learning in gradual steps with wise guidance, we can significantly reduce fear and boost confidence.

So our first important guideline is to learn each fundamental aspect of taking off to perfection, which will allow your confidence to build rapidly. Repetition of proper techniques will ease your anxiety, and the

more you relax on launch, the more you will be able to follow your instructor's advice. A good takeoff eases the mental dynamic tension a little more, which helps the proper performance of your next takeoff, and so on.

Most of us leave the school situation after completing enough high flights to fly safely (at easy sites, in easy conditions). But we should never consider our takeoffs a finished product. No matter how many takeoffs we have in our logbook, we should always seek feedback on our performance. You will usually be able to find pilots more experienced than you at a hill, at least for a number of years. Request their feedback and welcome their advice. Usually, everyone is eager to help. As a personal note, after 48 years of flying, I still often ask my flying buddies to rate my takeoffs. If I get anything but a B+ or an A grade, I get out my dunce's cap, think about it, and focus on doing it right on the next takeoff.

A helping observer should look for three things: your hand positions and how you change your grip, the glider attitude throughout the takeoff, and your running stride and speed. We will take a look at these three elements in the rest of this piece.

HOLDING AND CONTROLLING THE GLIDER

In most cases, students are taught to take off by holding the bar like you would hold a beer bottle. This "beer bottle grip" is comfortable for most people. Early flights often take place with a newbie pilot holding the uprights in this grip from the first pickup through the entire flight to landing. This procedure helps with orientation and vision and reduces the actions the student has to take.

However, there are a couple of problems with this grip. The first is that it's hard to hold the glider steady in a varying wind. As you begin to fly in a bit stronger wind with possibly a little turbulence from thermals or just friction over the ground, you'll find that you need

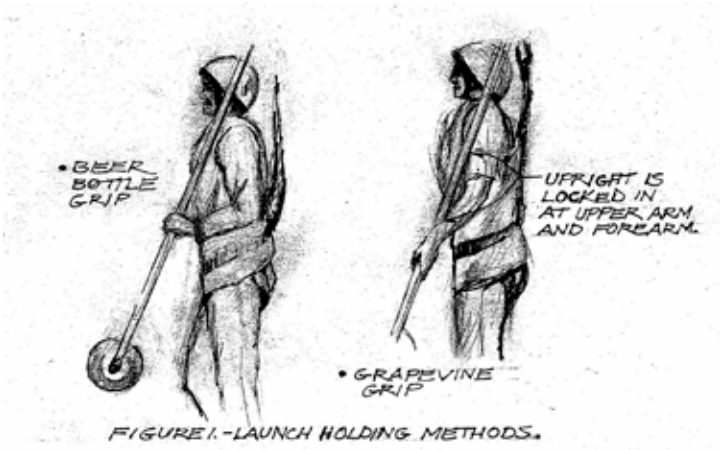
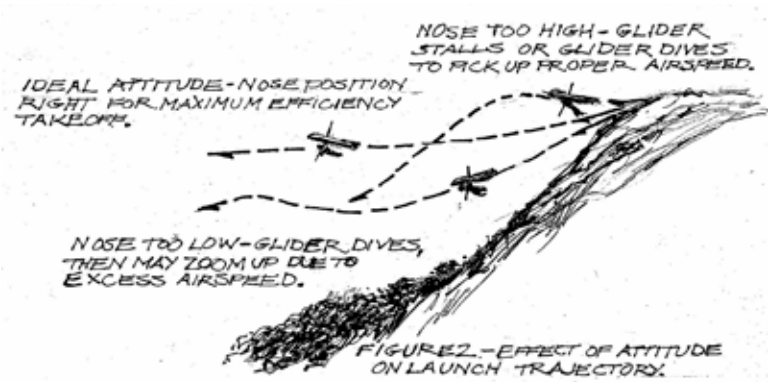


FIGURE 1.-LAUNCH HOLDING METHODS.

maximum control on takeoff. The "grapevine grip" provides this control. By now, you should be familiar with this grip because it is how we carry our gliders off a landing field. And for a good reason—it gives us the best control in ground turbulence. The two grips are shown in Figure 1.

You may feel the grapevine grip is uncomfortable at first, but it will start feeling natural after a few launches. Most schools transition new pilots to the grapevine grip before they achieve their novice rating. Since the transition usually occurs in early training, we won't describe the details here, but we will add two things. Make sure your upper arms are firmly locked in and support the glider's uprights, as shown. A small person with a large bar may have to modify this position a bit (consider having the uprights placed against their lower humerus or even in the crook of their elbow), but the main point is to lock the uprights—and thus the glider—in firmly. If you don't quite understand the concept, have an experienced pilot show you, and soon it will become second nature.

The next important matter is transitioning your hands. Typically, pilots launching with the grapevine grip will want to flip them to the beer bottle grip during their run. It is very common for a pilot to allow the glider's nose to rise during this transition. Part of the reason for this nose-up effect is that it is hard to get your arms, and thus hands, back far enough



to keep the nose down, especially if you are leaning forward to accelerate into a run and preparing to go prone. Many expert pilots keep the grapevine grip, let the glider rise as it begins to lift, then transition one hand at a time to the base tube without going to the beer bottle grip at all. In my view, this is the safest launch technique. However, if you feel you must change from the grapevine to the beer bottle, do it as late as possible in the run. We have viewed hundreds of films recorded during takeoff clinics and find that the sooner a pilot switches their hands, the more likely it is that the nose will pop up. As we'll see next, popping the nose is the most dangerous situation during launch.

Here's a tip: If you are having trouble getting familiar with the grapevine takeoff, practice it on the flat ground (perhaps in the landing area or any field), running into a 5 to 8 mph wind to help you lift the glider. Repeat until the controls are second nature. When you try it in an actual takeoff, your observer should watch for when you transition your hands, if you do, and how smooth the action is.

MAINTAINING YOUR ATTITUDE

We're really talking about your glider's attitude here (there's nothing like a bad glider attitude to ruin your day and depress your mental attitude). The glider's attitude means its nose position, up or down. And, of course, its nose position determines the wing's angle of attack, both in flight and while standing at launch.

A just-right attitude is about 15 degrees up from the slope you are running on. As the launch slope gets steeper, we hold our nose down a little lower before beginning our launch run. However, we can't strictly stick to the 15-degree rule on very steep slopes, but the idea is to vary our initial nose position as the slope steepness varies. An experienced observer off to one side can help you set the proper nose position. Eventually, setting the nose will become second nature.

If you start with your nose too low, the glider may get ahead of you and not lift; then, you may have to dive your body to catch up. The worst case is if the base tube hits the ground … scrape crash! At best, you will dive out of launch, come close to the terrain, and lose altitude and efficiency (an important point when you begin to try to soar in weak conditions). If you do launch into a dive, you will have to push out a bit to resume proper flying speed, and the result may be a zoom upward, which brings you near a stall.

Starting with the nose too high can be even more dangerous, for it may lead to a stall very near the adamantine earth. Often with the nose too high before the run, it is difficult to achieve flying speed since the glider is just plowing air. If the pilot continues running in this case, the nose may come down a little (due to its natural stability), or the pilot may be pulled off the hill early without proper flying speed. The glider will then dive to achieve the appropriate angle of attack, and the whole ensemble will fly away as long as there is clearance for this dive. In the most severe cases, the glider will stall abruptly and may point the nose down and dive into the hill. Another possibility is one wing stalls first, and the glider turns and dives back into the hill. In both cases, the slams can be life-threatening.

Figure 2 illustrates the different flight paths immediately after takeoff for the different attitudes discussed above. In my view, too high is more dangerous than too low (and the error that is seen most in new pilots). We should all aim for the perfect takeoff with a smooth transition, as shown. The only time

there should be any dropping of the glider below our natural glide path on launch is when taking off in very light or zero winds. In this case, we may not be able to achieve full flying speed on the ground but gain a few mph once we weight the glider and dive a bit.

THE RUN FOR IT

The main idea of the run on takeoff is obvious: We are trying to achieve flying speed or flying airflow over the wing. Remember that the focus should be on moving the glider to top speed, not necessarily our body (although the body comes along with the ride). To achieve that top speed, we must start gradually and accelerate continuously. If we try to get to top speed all at once, by lunging forward like a fencer thrusting a foil, we'll leave the glider behind. The main mass of the glider is above our holding point, so when it gets left behind, the nose is forced upward. Not good. Think: "Move the glider."

For the above reason, we advise all pilots to think of the takeoff procedure as a step, jog, run process incorporating long strides. We are not sprinters coming out of the starting blocks but more like long-distance runners starting out with a purpose. We should expect to continue our run until we find ourselves pleasantly in the air, flying with ample airspeed.

Sometimes we can see a pilot pounding the ground with short little steps full of sound and fury. I call that tap dancing with Tinkerbell. It doesn't do much for getting the glider to flying speed, and often a takeoff performed in this manner ends up slow, with a dive to pick up speed. So a gradually accelerating run with long strides is the key to good, fast, safe launches. You can practice your launch run on the flat ground without a glider until it becomes automatic and natural.

When you run, be sure to run straight down the hill

unless there is some reason to do otherwise, like an obstruction or a crosswind that compels you to run a bit across the slope. But note that such a challenging situation may be for more advanced pilots, and in light crosswinds, it is usually better to run down the hill to gain speed rather than to try to point into the wind. Your glider will barely notice a slight crosswind.

Here are a couple of other points to consider on launch: First, some schools or instructors have you lifting the glider to keep your harness risers tight as you run. However, when you move up to heavier gliders, this becomes impossible for normal-sized pilots. This added connection isn't necessary if you keep the glider locked in with the grapevine grip. As soon as the glider starts lifting, the harness straps will become tight and add to the glider's acceleration as your weight piles on it.

Some new pilots stand at launch way too long when conditions are good. They are perhaps trying to psych themselves up to start the run, but often such practice causes fatigue, increases tension, and reduces focus. Are they exercising some demons or exorcising some demons? The recommended technique is to check the winds before picking the glider up. If it looks good, pick it up in proper launch position, set the nose (up or down) position, level the wings, recheck the wind, and begin the run. All this should take place in a matter of seconds (not minutes) and may require just a few seconds for an experienced pilot.

In turbulence, the process may take a bit longer, especially if you have to coordinate a wire crew. Sometimes when we pick up, a wing wants to lift, or gusts shake the glider. If it doesn't settle soon, we recommend setting the glider down and restarting the process once the winds appear to have settled somewhat. Again, standing with the glider in holding position can only be destabilizing and stressful.

On a recent flight, conditions were quite rowdy at takeoff (vigorous thermals pushing through). I had to pick up and set down three times before finding a smooth enough cycle to launch. Then I was running before a second second had passed. Don't be afraid of restarting, especially in dicey launch conditions. Of course, rank beginners should not fly in rowdy conditions, but we all graduate to flying in thermals, which can mean unstable winds at launch.

At first, your wire crew should help you by telling you what to do and giving you plenty of feedback. They will coordinate and get lighter on the side wires and may advise you to start your run when they feel everything is in balance and they deem the wind is consistent. At that point, listen to them and don't hesitate. Later as you get more experienced (usually only a handful of flights), you can start taking control and telling the wire crew to lighten up their grip when you consider everything is balanced and safe for your launch. Then take off soon with a "Clear!" command and a good glider acceleration.

There are many other matters and skills to consider and learn relating to taking off, such as high-altitude launches, shallow launches, cliff launches, and zero wind, high wind, gusty wind, and crosswind launches. These matters have their own challenges, but if you learn the fundamentals well, you can easily add the minor technique alterations to perform good takeoffs in all reasonable situations.

Taking off is the first act of flying freely into the azure sky. Attending to details and getting things right from the get-go is the best way to assure your flight is excellent and your progress is steadily upwards. Flying is pleasurable at all levels, but the satisfaction only increases with confidence in your skills. Welcome to the unbounded sky.

Good Judgment

What is it, and how do I get it?

by Kate Eagle

Good judgment in free flight means having the mental capacity and awareness to make appropriate decisions for the present circumstances. Pilots begin by learning the physical skill of taking flight. Progression involves increasing awareness of factors in ourselves and the environment that enable us to sustain flight and do it safely.

Free flight is a high-risk sport. Risk is everywhere in life, but leaving our familiar earth-bound existence and taking flight is a whole new world, one where it is espe-

Oceanside, Oregon. PHOTO BY KATE EAGLE

Threat and Error Management (TEM) is an international aviation safety system used to analyze and learn from incidents. It can be used after an incident, looking backward to identify contributing threats and errors and forward to prepare and prevent errors.

Safe operations (safe flight) is the goal. To achieve this, pilots recognize threats and manage them. Unaddressed threats can lead to errors. Errors are managed by recognition and repair. Mismanaged errors can lead to a UAS (Undesirable Aircraft State), which can result in an accident or incident.

cially important to prepare and manage risk. When a pilot stumbles into risk haphazardly, without awareness or planning, it can have catastrophic consequences.

In 2017, with only three years of flying experience, I was in the infancy of building good judgment. I'd already been on the scene for several serious accidents among my flying friends, culminating in my husband's fatal accident that summer. This cumulative trauma was a strong impetus for me to slow down my goal-oriented physical progression in order to find more balance between my physical ability and my mental awareness.

Reeling from my husband's death, I returned to my instructors, looking for perspective on my own flying. As I healed psychologically, I began to analyze accidents systematically. What I learned not only changed my flying but also changed me as a person.

I came across a model used for incident analysis in commercial aviation called the Threat and Error Management (TEM) model. I began to break down incidents that I'd witnessed to identify the errors that resulted in the incident. Further analysis revealed the threats or risks present which contributed to the errors. Using this trickle-down analysis technique, beginning with the obvious incident/accident, I gained the skill to identify the errors made. Upon further study, I was then able to realize the previously unseen threats.

Threats

There are two types of threats: internal (those within our control) and external (those outside of our control). In free flight, these are generally broken down into pilot (internal) and environmental (external). Threats can be anticipated, unexpected, or latent (requiring analysis from an outside observer).

Pilot (internal)

- Lack of knowledge of site (poor or no site intro)
- Lack of understanding of conditions
- Distraction
- Intoxication
- Fatigue
- Frustration
- Ego
- Fear or panic
- Overconfidence
- Underconfidence
- Complacency
- Showing off
- Rushing
- Pressure of competition or spectators
- Record-setting goals
- Low blood sugar
- Low oxygen level (hypoxia)
- Dehydration

Peterson Butte, Oregon. PHOTO BY JOSH NORRIS

Environment/Conditions (external)

- Turbulence
- Rotor or wind shear
- Air traffic or other pilots
- Strong wind
- Light wind or no wind
- High altitude
- Cloud suck
- Fog or clouds
- Rain or heavy moisture
- Strong thermals
- Convergence
- Power lines
- Changing weather conditions/gust fronts
- Restricted landing zone
- Flying over or landing near water
- Crosswind when launching or ridge soaring
- Obstacles in launch/landing zone
- Photographers/spectators
- Gear issues (such as knots in lines, higher performance glider, etc.)

Errors: Pilot mismanages a threat, makes a mistake

- Lack of sufficient clearance from obstacles (trees, etc.)
- High energy maneuvers close to terrain
- Going too deep in the brakes for too long
- Misjudging glide angle
- Harness, speed bar, or glider not connected correctly
- Not actively piloting
- Mis-managing surge
- Not using speed bar effectively
- Turning toward terrain
- Flying over an area with no safe bailout LZ
- Launching into sink or rotor
- Flying or launching with an oncoming gust front
- Flare timing too early
- Flying in conditions beyond skill level
- Flying gear beyond manufacturer recommendations
- Course corrections on final approach
- Landing downwind
- Object fixation or tunnel vision
- UAS (Undesired Aircraft State)/Incident: any unintentional event causing variance from flight plan or undesired outcome
- Vector into terrain or obstacle (impact)

- Cravat
- Asymmetric or frontal deflation
- Stall or spin
- Landing short or overflying the LZ (missing your spot)
- High-G spiral
- Loss of penetration
- Loss of visibility (cloud, fog)

Incident Analysis

Hindsight: The Backward TEM model

The first step in building good judgment is to gain awareness. Often, especially when we are new to paragliding or hang gliding, it is difficult to identify risks and mistakes. When something goes wrong, it is easier to see the resulting incident. This gives us a starting point to work backward from to learn about contributing factors.

Incidents can be anything from a dramatic fatality to a relatively minor incident—like landing short of the desired LZ. If the outcome was not intended or desired, it is an 'incident' that can be broken down, providing a learning opportunity. Analyzing incidents is a form of hindsight. As we become proficient with analyzing in hindsight, we will become better with foresight, utilizing good judgment with flight planning and in-flight decision making.

Using the TEM model, we first recognize the incident, which is any undesired outcome or event causing variance from the flight plan. Second, we identify the errors that were made or pilot behavior that resulted in the incident. Third, we identify all contributing threats or risks, which usually fall into two primary categories: pilot and environment/gear. Even if you are not sure if a threat might have contributed to the incident, it is important to look at the incident objectively and list all details about the pilot, environmental conditions, and gear, including wing loading. An incident is rarely caused by one single factor but, rather, is the result of multiple threats lining up with pilot error (also described as the "Swiss cheese effect"). Therefore, it is important to evaluate all factors and examine the correlation and combined risk of factors.

The sidebar on page 59 outlines an example of the flow of the TEM model of analysis, beginning with incident recognition, followed by error identification, and lastly, threat/risk identification.

Illustrating the backward or hindsight TEM model in action (starting with the incident):

Incident Example

Pilot: Kate Eagle (author), P-4, approximately 400 hours experience

Setting: Hunter LZ, Woodrat Mountain, Oregon, June 2018, 13:30

Gear: Ozone Rush 4, size MS, wing loaded middle of the weight range

Conditions: Clear, high pressure, LZ thermic with west wind 6-8 mph

Incident: Pilot landed short of the LZ, failed to clear the barbed wire fence bordering the LZ, and landed in blackberry bushes.

Errors:

- Attempting to land at the edge of the LZ to avoid a longer walk to the gate
- Overestimating glide/penetration: the pilot had recently switched from an EN-C glider (Delta 3) to an EN-B (Rush 4)

Threats:

- Complacency: This strategy had worked previously without consequence (internal, latent)
- Lack of current familiarity with equipment (internal, anticipated)
- Thermic conditions resulting in sink on final (external, unexpected)

Jaco, Costa Rica. PHOTO BY BRAD HILL

Exercising Good Judgment

Foresight: The Forward TEM model

Once we understand how to dissect an incident to identify errors and threats, we can reverse the process to identify and manage risk (prepare), avoid or manage errors in flight (repair), and continue to objectively review every flight and incident for continued progression (review).

Threat/Risk Identification (Prepare)

Our goal as a pilot is not only to have fun in this sport but also to avoid incidents. As we become skilled at analyzing our own incidents and those of others, we will become increasingly proficient with identifying threats, creating reasonable flight plans, avoiding errors, and learning to use minor incidents as learning opportunities. Good judgment requires employing the TEM model with foresight every time you fly. This equates to identifying threats or risks, many of which can be identified long before you arrive at launch.

Risk assessment begins with the question, "Why do I fly?" The overall implication of this question goes deep into the psyche and is important to explore. However, more superficially, every time you fly you should ask, "Why am I choosing to fly at this moment?" The answer will vary and will help you identify unique risks in the moment, such as, "I am flying because I want to impress my girlfriend who's here to watch me fly." Or: "I am flying because I've had a stressful week, and I just want to escape into a happy place." Or one I've heard a lot recently: "It's been so long since I've flown, I just really want to get into the air today!"

Aside from identifying the risk presented by your motivation to fly, check in with yourself on your mental and physical state. Unlike many other sports, you need all your senses and brain function to be sharp in free flight. Identify factors like distraction, fatigue, recent illness, and mental stress, and their potential implication on your flying for the day.

Beyond preparing psychologically, preparation also involves sorting out "the nuts and bolts" of a flying site. Read the site guide if you're flying a new site. Make sure you coordinate with others, so you will have a site intro (if needed) and will not be flying alone. Let others know your location and flight plan. Charge your radio and plan on having it on when you arrive at the site. Use it to check in with pilots upon arrival to share information on current conditions. If flying XC, use a

EVEN WITH THE BEST RISK AWARENESS AND CONSIDERATION WHEN CREATING A FLIGHT PLAN, ERRORS ARE INEVITABLE DURING YOUR FLYING CAREER.

satellite tracking device, like the Garmin InReach.

Invest time and energy to better understand the subject of weather, especially the weather where you fly.

Inspect your equipment. It's often much easier to sort out tangles from a rushed pack job and clean out a glider at home rather than in front of an audience on launch. Set aside time regularly to go over every centimeter of your gear to identify wear and tear. Repack your reserve at least once a year.

Upon arrival at launch, be aware of the influence of bystanders and fellow pilots on your decision making. Beware of "group think." Before joining in the group, take time to observe the conditions on launch and what the behavior of pilots in the air is telling you about the environment. Take inventory of your current physical and mental state, as well as the weather, tide, and conditions in the LZ, and create a flight plan, even if you are just planning a sledder.

Error Management (Repair)

Even with the best risk awareness and consideration when creating a flight plan, errors are inevitable during your flying career. An error is a less-than-optimal decision or mismanaged reaction, given the conditions, and can have a range of consequences, ranging from negligible to an undesirable aircraft state, such as a glider deflation.

Beyond awareness of what's happening, error management involves doing the right thing at the right time. Ideally, you are more aware of the threats before you are in a situation with a pending incident. Of course, compensating for lack of awareness with error management is not ideal, but if you end up in such a situation, managing your error can make the difference between an inconsequential learning experience and a potentially life-changing injury.

Avoidance/Learning Opportunities (Review)

Hopefully, with the employment of good judgment, you will grow old as a pilot without major incidents. Although free flight is considered a higher risk sport, the risk is mostly defined by pilot awareness and decision making. While there are numerous examples of dramatic accidents in this sport, many experienced pilots, including well-known competition pilots, have flown for decades without serious incident.

Often incidents are not the result of one thing going wrong but rather multiple risks and errors lining up. Taking risk is not inherently bad, but being aware of and mindfully managing multiple risks is the key difference between tragedy and the joy that free flight has to offer.

Oceanside, Oregon. PHOTO BY CLIF WESTIN

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H1	3	Jason Willett	CA	Lynden Vazquez-Tompkins
H1	3	Long Yang	CA	Andrew T. Beem
H1	4	Robert Cronin	DC	Steve A. Wendt
H1	4	Kyle Vidano	VA	Billy B. Vaughn
H1	5	John Boyce	MD	William G. Vaughn
H1	5	Benjamin Boyce Jr	RI	William G. Vaughn
H1	5	Tamara Yaeger	NY	William G. Vaughn
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H2	1	Stephen Emmons	WA	Gordon Cayce
H2	2	Mark Budenbender	CA	Malcolm A. Jones
H2	2	Jonathan Lathan	CA	Michael Briganti
H2	2	Zach Thomas	CA	John Simpson
H2	3	Scott Dybsand	CO	Mark A. Windsheimer
H2	3	Seth Haigh	CA	William C. Dydo
H2	3	Jem Moore	CO	Timothy Glenshaw
H2	3	Damon Simpson	CO	Theodore Hurley
H2	3	Andrea Wilson	CO	William C. Dydo
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H2	4	Parnika Bhimanapati	GA	Cj Giordano
H2	4	Mallareddy Bhimanapati	GA	Cj Giordano
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H2	4	Anandatirtha Nandugudi	TN	William C. Dydo
H2	4	Fouzia Rauf	GA	Gordon Cayce
H2	4	Kelsey Taylor-Hempstead	VA	Steve A. Wendt
H2	4	Joseph Warr	TN	Cj Giordano
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H2	5	Christopher Rocco Prestia	PA	Bryon Estes
H2	5	Artsiom Shkoda	NY	Bryon Estes
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H3	4	Jennifer Copple	GA	Matthew Taber
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P1	3	Michael Greninger	CA	Emily Wallace
P1	3	Christopher McCarthy	CO	Dustin O'Hara
P1	3	Sean McCoughlin	CA	Emily Wallace
P1	3	Andrew Patrick Palmaz	CO	Alejandro Palmaz
P1	3	Michael Schaffner	AZ	Chandler Papas
P1	3	Chuyang Zhong	NM	Charles (Chuck) Woods
P1	4	Martha Echols	AR	Britton Shaw
P1	5	Ben Caiella	MA	John E. Dunn
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P3	3	William Trent Buckner	CO	Johannes Rath
P3	3	Patrick Cannon	CO	Misha Banks
P3	3	John Arthur Colantonio	CO	Misha Banks
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P3	3	David Nguyen	CA	Jordan Neidinger
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P3	3	Alexis Wheeler	CA	Juan E. Silva
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P3	4	Marty Maher	TX	Randall Shane
P3	4	Thomas Mallory	TX	Chris W. Santacroce
P3	4	Alejandro Marcuschamer	FL	William Purden-Jr
P3	4	Emily Petersen	TX	Chris W. Santacroce
P3	4	Corbin Petersen	TX	Chris W. Santacroce
P3	4	Alvaro Pidde Queiroz	GA	Kelly Myrkle
P3	4	James Race	TX	T Lee Kortsch
P3	5	Wagner Alves Pereira	CT	Marcus V. Santos
P3	5	Paulo Cesar De Faria	CT	Marcus V. Santos
P3	5	Travis Fair	AB	Calef Letorney
P3	5	Dylan Montagu	VT	Calef Letorney
P3	5	Iuliia Paleyes	NY	Philippe Renaudin
P3	5	Corey Taylor	PA	Thomas McCormick
P3	5	Cassie Young	IL	Stephen Nowak
P4	1	Josiah Brubaker	WA	Marc Chirico
P4	1	Zachary Carbo	WA	Mike Steen
P4	1	Lucas Hansell	MT	Andy Macrae
P4	1	Donald Henline	WA	Philip D. Russman
P4	1	Chris Hoyte	HI	Paul Gurrieri
P4	1	George Milheim	MT	Andy Macrae
P4	1	David L. Nutter	WA	Maren Ludwig
P4	1	John Rousselle	MT	Paul Roys
P4	1	Subir Sidhu	WA	Marc Chirico
P4	2	Kylan Browning	UT	Chris W. Santacroce
P4	2	Jorge Iriso	CA	Robert Black
P4	2	Carson Klein	UT	Mike Steen
P4	2	Aaron McDonald	CA	Jesse L. Meyer
P4	3	Chris Adelman	CO	Etienne Pienaar
P4	3	Justin Barnes	CA	Jordan Neidinger
P4	3	Amber Carney	CA	Max Leonard Marien
P4	3	Patrick Ciri	CA	Philip D. Russman
P4	3	Justin Grisham	CO	Kristen Zuraski
P4	3	An Le	CO	Misha Banks
P4	3	Paul Markham	CA	Max Leonard Marien
P4	3	Chelsea McKenzie	CA	Rob Sporrer
P4	3	Jenny O'Neil	CO	Misha Banks
P4	3	Ajay Rajamani	CA	Christopher Grantham
P4	3	Scott Rogers	CO	Austin Kasserman
P4	3	Dante Wardlaw	CO	Hayden Dudley
P4	4	Anthony J. Fabiszak	TN	Austin Kasserman
P4	4	Roland Sanguino	FL	David W. Prentice
P4	4	Mark Wagner	FL	David W. Prentice
P4	5	Brent McCoy	VT	Calef Letorney
P4	5	Bruce Prince	NH	Calef Letorney
P4	5	Jorge Humberto Rosso	RI	Zion Susanno-Loddby

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Nebraska
Oregon
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CALENDAR

Submit listings online at ***ushpa.org/page/calendar***. A minimum 3-MONTH LEAD TIME is required on all submissions. Tentative events will not be published. ***COVID reminder: Please contact event organizers regarding the status of events and any local COVID requirements.***

APR 8-10; NOV 11-13; DEC 9-11 > EAGLE PARAGLIDING SANTA BARBARA CLINIC > Santa Barbara, CA | This clinic is aimed at getting pilots familiar with the fundamentals, techniques, and theory to excel at thermal flying, and making XC moves. Clinic discussions include reading terrain features, thermal triggers, with a goal of moving from lift source to lift source flying XC. After attending this clinic you will have a better understanding of the moves necessary to get down range. The Eagle Team will lead this 3 day clinic. Clinic cost is $895 | www.paragliding.com or call 805.968.0980

APR 3-10 > GREEN SWAMP SPORT KLASSIC [NON-SANCTIONED] > Wilotree Airsports, Groveland FL. A super fun mentored race to goal event for Hang Glider pilots who want to improve their cross-country performances. "Personal Bests" yet to come. Sign up now, space is limited. Website: airtribune.com/2022-green-swamp-sport-klassic or email rmcaylor@gmail.com

APR 24-30 > 2022 PARADISE AIRSPORTS NATIONALS > Wilotree Airpark, Groveland, FL. USHPA Sanctioned HG Race To Goal Nationals Competition. Flatland aerotow competition: Open, Sport, Swift, and Rigid wing classes. Organizer: Stephan Mentler, team@hgrac.com | Website: TBD

MAY 1-7 > 2022 WILOTREE PARK NATIONALS > Wilotree Airpark, Groveland, FL. USHPA Sanctioned HG Race To Goal Nationals Competition. Flatland aerotow competition: Open, Sport, Swift, and Rigid wing classes. Organizer: Stephan Mentler, team@hgrac.com | Website: TBD

MAY 19-22 > 50TH ANNUAL HANG GLIDING SPECTACULAR > Kitty Hawk Kites Hang Gliding School, Nags Head, NC | The Hang Gliding Spectacular is the longest-running hang gliding competition in the world! We are excited to be celebrating the 50th consecutive year of this event. In addition to the dune hang gliding competition at Jockey's Ridge State Park and the aerotow competition at the Cotton Gin, we have many fun activities planned – retro glider display, video and photo exhibit, film festival, street dance, and more! | Megan Turner, (252) 441-2426 , hangglide@kittyhawk.com, https://www.kittyhawk.com/event/hang-gliding-spectacular/

JUN 5-10 > EAGLE PARAGLIDING WOODRAT MOUNTAIN CLINIC > Applegate Valley Oregon, Ruch, OR | Our 2021 Clinic at Woodrat was epic. This clinic is aimed at getting pilots familiar with the fundamentals, techniques, and theory to excel at thermal flying, and making XC moves. Clinic discussions include reading terrain features, thermal triggers, with a goal of moving from lift source to lift source flying XC. After attending this clinic you will have a better understanding of the moves necessary to get down range. The Eagle Team will lead this 6 day clinic. Clinic cost is $1795 | www.paragliding.com or call 805.968.0980

JUN 10-20 > INKLER'S POINT FLY-IN > Back at it after a 2 year absence... this time for a 10 day event! Not only great HG/PG flying but this year we're planning to offer both HG and PG USHPA Basic Instructor clinics and a Quad-tow clinic during the 10 day period. Lots of planning and site work going on right now for a spiffy event in June. Fly-In offerings will be updated as they are firmed up. | gonehanggliding@gmail.com

JUN 17-23 > 2022 APPLEGATE OPEN > Woodrat Mtn, Ruch, OR. USHPA Sanctioned PG Race To Goal Nationals Competition. This event includes two races: 1] Non-sanctioned Sprint Race for EN C wings and below; and 2] Sanctioned Open Race for EN C and higher wings as part of the national championship series. Organizer: Terri Stewart, AO-organizer@rvhpa.org | Website: www.wingsoverapplegate.org

JUN 19-24 > 2022 OZONE CHELAN OPEN > Chelan Butte, Chelan, WA. USHPA Sanctioned PG Race To Goal Nationals Competition. The Ozone Chelan Open will be an EN-C and lower event where XC pilots new to competitions get to race alongside and learn from some of the best pilots in the USA. The competition will follow the same format as other FAI Cat 2 events and include daily briefings lead by US National Champion and Ozone team Pilot Nick Greece. Organizer: Matt Senior, mattysenior@yahoo.com | Website: www.airtribune.com/ozone-chelan-open-2022

JUN 26 – JUL 2 > 2022 US OPEN OF PARAGLIDING CHELAN > Chelan Butte, Chelan, WA. USHPA Sanctioned PG Race To Goal Nationals Competition. Organizer: Matt Senior, mattysenior@yahoo.com | Website: www.airtribune.com/us-open-paragliding-2022

SEP 10-17 > 2022 Red Rocks Wide Open > Monroe, UT. USHPA Sanctioned PG Race To Goal XC Nationals Competition Reliable weather. Big Air. Bigger vistas. 4 launches that take different wind directions. HUGE XC potential through some of Utah's most incredible natural wonders. Welcome to the Red Rocks Wide Open! This is a USHPA National Championship series and Pre-PWC event that promises strong conditions and long tasks that take advantage of deep, tall mountain ranges and high-desert flatlands. Participants should be very comfortable with flying in strong thermals at high altitudes. Oxygen is highly recommended (tank refills will be available for $10 each during the comp and practice day). Garmin InReach or other satellite tracker with messaging capability is mandatory. Entry fee: $500 for the first 50, then $550. | Gavin McClurg, gavin@cloudbasemayhem.com

SEP 18-24 > 2022 SANTA CRUZ FLATS RACE > Francisco Grande Golf Resort, Casa Grande, AZ. USHPA Sanctioned HG Race To Goal Nationals Competition. Come on out and join us for some unique technical flying and loads of fun in the desert. Organizer: Jamie Shelden, naughtylawyer@gmail.com | Website: www.airtribune.com/santa-cruz-flats-race-2022

SEP 30 – OCT 2 > 2022 HSB ACCURACY CUP > Horseshoe Bend Flight Park, Horseshoe Bend, ID. USHPA Sanctioned PG Spot Landing Nationals Competition. Horseshoe Bend Flight Park is excited to be hosting our 4th annual international Accuracy competition. Visit our website for further details. Organizer: Scott Edwards, hsbflightpark@gmail.com | Website: www.hsbflightpark.com

OCT 7-9 > EAGLE PARAGLIDING OWENS VALLEY CLINIC > Bishop, CA | We fly the Owens in the spring and fall. The Owens Valley offers a variety of launch locations, and we will make a move to the launch which matches our forecast for the day. We can work as a group and team fly here as well. The area is world famous and worth a trip in the fall or spring for some classic flying, and XC opportunities. The Eagle Team will lead this 3 day clinic. Cost is $1195. | www.paragliding.com or call 805.968.0980

HANG GLIDING ADVISORY Used hang gliders should always be disassembled before flying for the first time and inspected carefully for fatigued, bent or dented downtubes, ruined bushings, bent bolts (especially the heart bolt), re-used Nyloc nuts, loose thimbles, frayed or rusted cables, tangs with non-circular holes, and on flex wings, sails badly torn or torn loose from their anchor points front and back on the keel and leading edges.

PARAGLIDING ADVISORY: Used paragliders should always be thoroughly inspected before flying for the first time. Annual inspections on paragliders should include sailcloth strength tests. Simply performing a porosity check isn't sufficient. Some gliders pass porosity yet have very weak sailcloth.

BUYER BEWARE - If in doubt, many hang gliding and paragliding businesses will be happy to give an objective opinion on the condition of equipment you bring them to inspect. **BUYERS SHOULD SELECT EQUIPMENT THAT IS APPROPRIATE FOR THEIR SKILL LEVEL OR RATING. NEW PILOTS SHOULD SEEK PROFESSIONAL INSTRUCTION FROM A USHPA CERTIFIED INSTRUCTOR.**

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It was a Friday evening when, after many enthusiastic posts from other pilots on the Villa Grove Telegram chat, I replied: "Against my better judgment, I will plan on joining you tomorrow." Almost three feet of snow had fallen on the San Juan Mountains of Colorado the night before, and all the weather models for the next day showed little, if any, lift. Added to that, the temperatures were not projected to reach above freezing.

The next morning, the thermometer outside my living room showed -18°F as I loaded my glider on the truck, shaking my head. After traversing the Continental Divide and descending the icy pass along the south fork of the Rio Grande, I crossed the San Luis Valley. I arrived at Villa Grove to find only an inch of snow, which lifted my expectations some. I pulled into the Villa Grove Trade parking lot shortly after 9 a.m. to meet up with Angie Kennedy and Kristian Sandberg.

Over breakfast, we discussed the weather and the prospects for flying at Villa Grove, Moon Creek, or Ute Pass. Sandberg, a newer P2, had recently enjoyed an evening sledder at Villa the month before. Kennedy was an H4 pilot who had lately returned from a 20-year break but had never flown in Colorado before.

After breakfast, we went to the Villa Grove LZ for a walk-through for Kennedy. We then took HG legend and LZ owner, Larry Smith, up on his invitation to stop by his place next door. After introductions, chats about mutual friends, and discussions of local flying prospects, we abandoned our plans for Villa and instead headed across the valley to Ute Pass.

A herd of over 20 pronghorn antelope trotted away as we arrived at the LZ. After parking, planting a windsock, and transferring gliders to my truck, we headed up to launch. Ute Pass is actually behind the ridge of Saguache Peak (10,550 feet). Launch lies on the west end of the ridge (38.1602438, -106.1287742) and faces SSE. The two-wheel-drive county road 46AA takes you up to just shy of the ridge top at 10,330 feet. The last turn out of the ponderosas forest onto the launch provides a panoramic view looking south into the San Luis Valley.


PILOT: ANGIE KENNEDY

Bounded a mile high on each side by the San Juan Mountains to the west and the Sangre De Cristo Mountains to the east, one can only be awed by the world's largest alpine valley. In the hazy distance, the peaks continue into New Mexico over 90 miles away. Being more than three hours from any city, Ute Pass is rarely flown, though it provides flying experiences to rival any other site in Colorado. Today would not be epic XC flights, but

flying at all in Colorado in winter is a gift.

After a site intro, Sandberg gracefully launched his paraglider first at about 1 p.m. into a 6-7 mph breeze that could not have been warmer than the high 20s. The buoyant air with small pockets of lift provided his first experience with gentle thermals to extend his sledder a few minutes. After he landed, the tone of his voice over the radio confirmed that a smile was surely on his face. No matter how long I fly, I don't think I will ever fail to join in smiling with a new pilot's joy in discovering new sites or experiences.

After watching Sandberg's flight, Kennedy decided that it was the right day to attempt her first flight in Colorado and started to set up. The light 6-7 mph cycles continued regularly with lulls to 0 in between. After setting up, we discussed the nature of the high altitude, flat slope launch, along with the site's topography and micrometeorology. At about 2:30 p.m., Kennedy hooked in and moved to launch. The cycles were further apart, with some crossing from the west. After patiently waiting about 15 minutes, she confidently launched into a smooth straight-in cycle with good form. An exuberant "Whoo hoo!" echoed across the mountain a few seconds later. Even after a long layoff from flying, her decades of flying experience showed as she made the most of the light lift of the day.

After watching for a few minutes more, I suited up looking like the Michelin Man, hooked in, and moved to launch. The cycles had mellowed but were further apart and now showed cross more often than not. As I contemplated breaking down on launch, the streamer lowest on the slope a hundred yards away picked up abruptly and pointed straight in. I did a quick hook-in check and lifted the glider to watch the progress of the cycle through the streamers up the slope from me. As the puffs of air reached my face, I saw the bottom streamer was still pointing at me, and I began my launch.

I knew this late afternoon mid-winter flight was a sledder, but I relaxed and savored it. Across the valley, the snowcapped Sangre de Cristo Mountains were brilliantly lit by the descending winter sun. Miles away, long shadows stretched down from the San Juan Mountains creeping toward the LZ. High altitude tundra capped the snowy ponderosa forest marching away north. To say my initial expectations for the day were exceeded is an understatement.

PILOT: KRISTIAN SANDBERG

After landing, the three of us chatted, reliving the day to stretch it out a bit longer, soaking in the sunset, and musing on when we would do it all over again. With the sun sliding behind the mountains and the temperatures dropping fast, we sped up breaking down and loading the gliders. With the last alpenglow on the tops of the peaks and painting the clouds above, we all headed home.

There are times in your life that as you live them, you know they will be with you forever. This winter's day at Ute Pass was one.

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