Official Publication of the Idaho Transportation Department – Division of Aeronautics

RUDDER FLUTTER

Fall 2015 | *Serving Idaho's Aviation Community for over 65 Years* | Vol 61, Issue 3

Big Creek Lodge rises from the Flames

By Colleen Back, Vice President, Idaho Aviation Foundation

"Mission accomplished for 2015," exclaimed Jim Davies, President of the Idaho Aviation Foundation (IAF). He was referring to the success the IAF had this year in erecting a 3,500 square foot log structure that will be Big Creek Lodge when complete. The original lodge, located 40nm northeast of McCall, was destroyed by fire in 2008 and most pilots and visitors thought it was gone forever. The IAF and the US Forest Service thought otherwise. In a unique partnership that formed in 2012, the two organizations have worked diligently to bring the lodge back to life again for pilots, hunters, fishermen and other visitors.

Big Creek in 1937, Right to left: pool hall-bar, store, hotel, and house. The hotel, built by Dick Cowman, did a thriving business at the time because of extensive mining avtivity.

The IAF and Payette National Forest (PNF) officially broke ground on July 18, 2015, to signify a new beginning for the iconic lodge. "The reconstruction of the lodge is becoming a reality," said IAF President Jim Davies as he addressed the 45 attendees at the ground breaking. In the next three months, the project moved rapidly with completion of the footings, basement, initial mason work for the fireplace, log structure, first and second floors, insulated ceiling and tin roof. The beautiful lodge structure is ready to weather its first winter.

Fire ripped through the buildings in 2008.

Windows and doors have not been cut in yet so that the structure can settle accordingly. When operational, the lodge will include four rooms to rent, a common area with fireplace for gathering, a large wraparound porch on two sides, a comfortable dining area, and expanded kitchen and caretakers' quarters. In addition, the Lodge will have a more rustic 'duplex' cabin on site, plus a beautiful 8-person backcountry yurt for rent about a mile from the lodge site.

Big Creek Lodge construction in 2015.

This milestone in 2015 is cause for celebration—it is clear that a new Big Creek Lodge will once again serve the aviation community. The unique nature of the project is starting to get media attention across the US. *AOPA Online* wrote a feature about the project in October, as did *Pilot Getaways* magazine. Boise State National Public Radio also featured the project in two radio features this summer. "We have gotten tremendous feedback on the 'look' of the lodge—people are amazed," Davies said. "We want to continue to make our donors and followers happy by completing the project in 2016, but we need some more help to do that."

See Big Creek

Continued on page 3

INSIDE

From the Administrator:

My Kind of Guy

All public agencies receive, shall we say, "advisory" phone calls from constituents with heartfelt suggestions of how to best spend their tax dollars.

Early this year a vocal pilot called the Division of Aeronautics with an inquiry about aircraft registrations. He insisted on speaking with "the manager!"

When I picked up the phone, 97-year-old George Eldridge of Nampa asked me to explain the benefit his $122 aircraft registration fee on a 1957 Beech Travel Air creates for Idahoans. I proceeded to tell George of our challenge in maintaining 31 backcountry airstrips, the importance of providing grants to so many Idaho public airports, the pilot-safety programs we offer and the importance of a first-rate search and rescue program.

Perhaps I'm not as good of a salesman as I think, because George flat out refused to pay his registration fee. "This aircraft is no good to me anymore," said George, "so I'm just going to give it to you instead." And that's how the State of Idaho received a donated airplane. Now, N2737Y is being used to train future pilots and mechanics at the Idaho State University Aviation Maintenance program in Pocatello.

The following week, I met George at his regular breakfast place, the Sunrise Diner in Nampa, and listened intently as he described his 75-year flying career. George enlisted in the Army Air Corps in 1941. During pilot training, George was washed out after running his PT-13 trainer into another airplane. "It was the colonel's fault," reminisced George about the accident, "but what they really needed were bombardiers."

George moved on to serve as a B-26 Marauder bombardier, flying as the second B-26 over the Normandy beaches during the 1944 D-Day invasion.

After completing 45 missions in Europe, George moved to Idaho, transitioned into a 70-year GA flying career, owned numerous aircraft and raised five children in Caldwell. On his 98th birthday last month, George Eldridge became Idaho's oldest flying pilot and generously gave his aircraft to his community. Now I know why George's generation has been dubbed the greatest generation.

I invite all my aviator friends to stop by the Sunrise Diner in Nampa at 8:30 a.m. on just about any day of the week. George will be there, wearing a B-26 ball cap and a smile on his face. Shake his hand and say "thank you!" George Eldridge is nothing less than a treasure to Idaho aviation.

Tailwinds-

Mike Pape

ITD Aeronautics Administrator

Editor's Note:

I received this email shortly after the airplane was delivered to ISU. I think they are happy!

Tammy,
Attached are a few pictures of this awesome plane. We just love having this plane. We ordered it a cover and a bunch of goodies to protect it from the weather. It is our new baby!
(in a second email)

If you need some other pictures I would love to take them. Our "baby" is in the hangar all shined up!

From Tonya Bolliger,
Instructional Assistant, ISU

Big Creek

Continued from page 1

Items to be completed next year include major systems and furnishings such as plumbing, electrical, fireplace, porch, fire suppression system, hydro electrical system hook-up, commercial kitchen and room furnishings. Rebuilding in the west central mountains of Idaho is challenging. The site has no public utilities. Electricity is generated off tiny

Anthony Botello and Jim Davies 'Dig in' for the Groundbreaking - July 18, 2015.

McCorkle Creek or via portable generator; no landline phone or cellular services exist, and dirt roads and mountain passes make the reconstruction logistically difficult. The IAF has raised about 80% of the funds required, but needs about $250,000 in funds or donations of goods to complete it.

"We are now working with a few large donors, and multiple craftsmen/trade professionals who are willing to donate time or material for the project. We will get all that finalized during the winter and spring—because by July 1, Profile Pass will be open and we will need to get material into Big Creek to complete the project," Davies continued. "We would greatly appreciate the names of those who can help us get things like windows, doors, bathroom/bedroom furnishings at reduced costs or donated for the project."

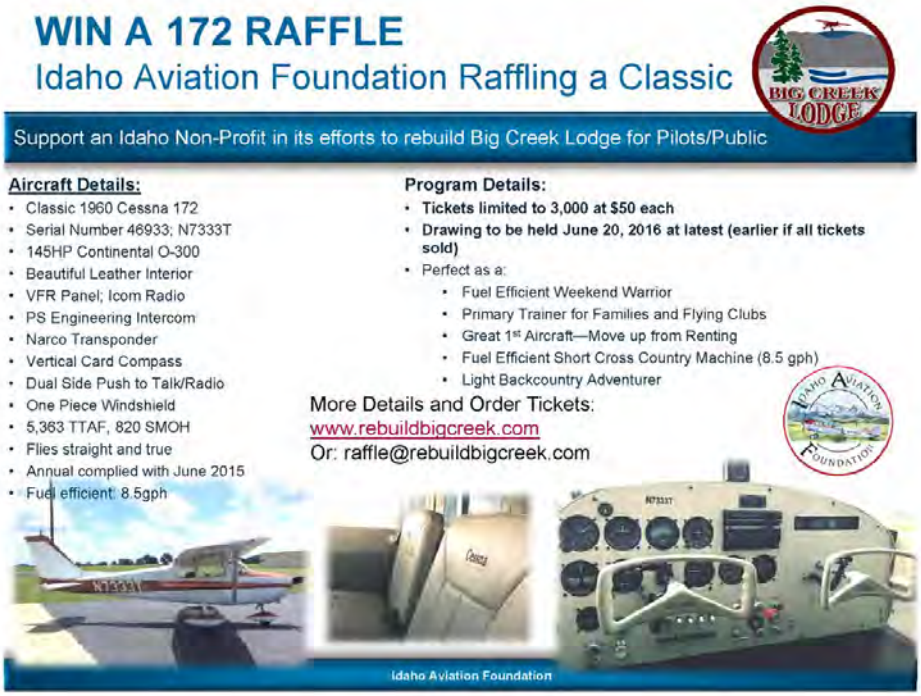
For donors, several options are available:

- Donate any amount
- Buy a $50 raffle ticket for a nice Cessna 172, which will be raffled June 20, 2016 (only 3,000 tickets being sold). To buy tickets, go to our Donate page, simply enter the dollar amount you want put toward tickets, then write in "Raffle Tickets" in the Comments/Requests field, and fill in the other needed information fields. We will send you your ticket stub (we keep the contact information section) within a few weeks. Questions or wish to order via email? Email raffle@rebuildbigcreek.com or call 208-859-2471.

New Big Creek Lodge Rendering

- Become a "Log Lifter" with a $1,000 donation and get one of 174 logs needed for the structure assigned to you. Naming recognition is also available for larger donors.

For more information on the project, the raffle or other ways to donate, go to www.rebuildbigcreek.com, email info@rebuildbigcreek.com or call 208-859-2471. The Idaho Aviation Foundation is a 501(c)(3) charitable non-profit organization and donations to the IAF are tax deductible to the full extent of the law.



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Cockpit Conversation

Stay Humble, Stay Safe

Lessons and Confessions of a Professional Pilot

By Cade Preston, ITD Division of Aeronautics

Note: In the airline industry, the first 30-50 hours of operating an aircraft after initial simulator training is called Initial Operating Experience (IOE). A check airman is a captain authorized to train new captains and first officers.

On the first day of my very first trip as a regional airline pilot, I was overwhelmed. Many times I mentally found myself about 10-30 seconds behind the airplane. The largest and fastest airplane I had flown, to this point, was a Piper Seminole. And here I was flying an Embraer Brasilia, with a maximum takeoff weight of more than 26,000 lbs. — and twice the speed of the Seminole. Sure, I had trained and passed a checkride in the simulator. But this was the real deal, in a real airplane, with a real flight attendant, and a load of real passengers. Luckily, the check airman I was flying with was very patient and helpful. I looked to him as the true, professional, expert of the operation and the aircraft.

It is important to understand that in an airline-crew environment, a policy known as Standard Operating Procedure (SOP) determines which pilot performs each task. On the ground, the captain performs the tasks assigned to him/her, and the first officer performs the tasks assigned to him/her. In the air, the pilot flying (PF) performs the tasks assigned to him/her, and the pilot monitoring (PM) performs the tasks assigned to him/her. One should not perform the task of the other without being asked or directed by the other. However, it is all right and encouraged to back each other up so that no item is missed.

It was during this first day of IOE that the check airman kept reminding me of a task that I was skipping. During the legs when I was the PF, he said that upon starting a descent, it was my job to set the pressurization system for landing. From training, I was pretty sure it was supposed to be the PM's task. But who was I to argue? It was my first day, he was an experienced check airman, and I must be remembering it incorrectly. So each time, I apologized and performed the task. On the second day, during the legs when I was the PF, I continued to miss the task. Again, I was pretty sure it was supposed to be the PM's task. Finally, I spoke up and told him.

What happened next was one of my biggest lessons in leadership and humility. The check airman said, "I am pretty sure I am correct, but let's look it up in the SOP together." Upon looking it up, he discovered that I had indeed been correct. The check airman then said, "You are right! I have been teaching that incorrectly for over a year. I am sorry. Thanks for speaking up and setting me straight."

The lesson I learned from this experience wasn't that even professionals make mistakes. I already knew that. It was that the best of professionals are humble enough to admit when they are wrong. They will not hide their mistakes. They will not try to explain away their mistakes. This check airman accepted the possibility that he could be wrong. Upon discovering that he was wrong, he owned the mistake by admitting it. And then he apologized and thanked me for the correction.

Fast forward about seven years. I had become a captain and check airman. One day while performing my preflight checks in the flight deck, the first officer spoke up and said that I had missed a small step in checking the Traffic Collision Avoidance System (TCAS). For the year and a half I had been a captain on this particular aircraft, when performing the TCAS check, I had listened for the AURAL annunciation "TCAS SYSTEM TEST OK" or "TCAS SYSTEM TEST FAIL" as the only indication of a passed or failed test. The first officer pointed out that, in addition to that annunciation, the TCAS page was to be displayed on the Multi-Functional Display and I needed to look for passing indications there also. For a split second, I thought, "I don't think so!" But what kept me from saying it out loud was remembering that experience from my very first trip. Following the example of the check airman from that trip, I looked it up right there, and sure enough, he was correct! I don't know how I had not known that; it was written pretty clearly in the SOP, which I had read through several times. I said something along the lines of, "Wow! I didn't know that. Thanks for setting me straight." After the trip, I sent a letter of recognition in to the company describing the experience and I commended him for his dedication to safety and standard operating practice.

It has been my observation, especially in aviation, that others will not lose respect for you for not knowing everything. And nothing will lose you the respect of your fellow pilots faster than acting as if you know it all, or not admitting when you are wrong. The biggest incentive to staying humble is keeping you and those you love safe by admitting your faults, and continually learning.

Tech Talk

Be Found!

Helping us find you!

By Tim Henderson, ITD Division of Aeronautics

One task that each of us in the Aeronautics office takes very seriously is that of Search and Rescue for over-due and missing aircraft. This task is written into Idaho code by our State elected officials. We conduct and coordinate these searches out of our office in Boise.

The Division of Aeronautics has a long history of locating missing and over-due aircraft. We have files going back to the 1940's for each search that has been conducted. Over the years, the methods have become markedly improved and we are having greater success finding lost aircraft.

I'd like to share some of the sources we use to solve the mystery of an overdue aircraft and give some tips on what can be done to help us find you!

Let's start with an old and familiar item, the Flight Plan! When properly filed, flight plans give details as to the route of flight, fuel on board, souls on board, ETA, etc. We use the details in your flight plan to establish your intended destination and ETA. Typically 30 to 60 minutes after your given ETA we start asking questions. We call airports along your route and talk to people who may have seen you or have knowledge about where you might have gone, including family members. We also call the phone number given on your flight plan. Once past the time when given fuel on board should be exhausted, we initiate a full search. At this time the Air Force Rescue Coordination Center (AFRCC), the FAA, Flight Service Station (FSS) and other agencies get heavily involved.

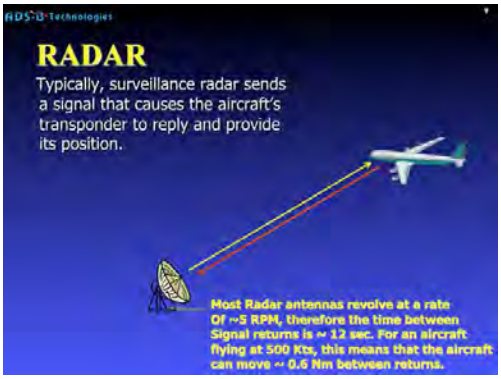
- Tip: File an accurate flight plan and relay any deviations to a responsible party. Provide a phone number for your responsible party on your flight plan as well as the number of the phone in your pocket. And always close your flight plan when arriving at your destination!

Flight Following with an FAA Center is another source we use to ascertain your last known position and helps verify information found in the flight plan. The FSS can be the responsible party to report any deviations to your intended flight as well. Especially if weather forces a change in your intended plans.

- Tip: The FSS and FAA Centers are there for you. Use them! Report your position often enough to give an accurate location.

Flight Planning and Flight Following only give us your intended actions. Any unreported deviations in this plan may cause a delay in initiating a search.

Next let's talk about the electronic sources which are becoming increasingly more accurate and time-saving once a search is initiated.



One of the main tools we use when in search mode is the radar track which is provided by AFRCC. This data comes from the FAA and other radar sources and is filtered before we receive it. With this track we can really narrow down your last known position. The disadvantage is that it is a line of sight service and radar typically cannot detect you when you're flying in a canyon.

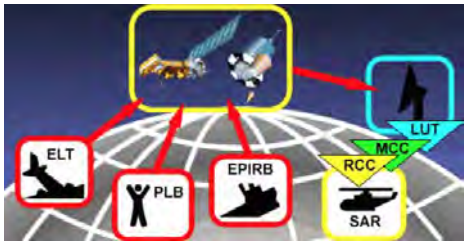
- Tip: When possible, fly above ridge lines to help the radar see your aircraft and always fly with your transponder in the on position! That flickering orange light on the transponder indicates the unit has been 'interrogated' by the ground radar.

The Emergency Locator Transmitter (ELT) is a dynamic source as it transmits from your position. ELT activation starts an immediate search. Since February 2009 the 121.5 MHz frequency has not been monitored by satellite, however, the 121.5 ELT is still in use by many aircraft owners. Search personnel at Aeronautics rely on aircraft flying overhead, usually airliners monitoring 121.5 MHz to alert us of these transmissions. The 121.5 signals are tracked by equipment in search aircraft and that of our volunteers. Even though we can track a 121.5 signal from the ground and air, we no longer get the alert from the satellites, resulting in further delays.

The newer 406 MHz ELT is monitored by AFRCC through satellite and usually includes a 121.5 MHz beacon for direction finding purposes and is activated by G-Switch upon impact, as are all ELT's. The 406 MHz transmission is a digital data burst… it transmits a 15 digit hex code assigned to that ELT every 52 seconds. With this code, the AFRCC looks up the registration which includes a great deal of information,

points of contact, and phone numbers if it is registered. This information is very helpful in a search. The location accuracy of the satellite-based 406 ELT is between 1 and 3 nautical miles, which is close to your position and when we direction find the 121.5 signal, we can drive right to you. The 406 is capable of even greater accuracy however. Tied to a GPS, a 406 will send a data burst that includes your Lat-Long location and is accurate to within 10 meters.

- Tip: Upgrade to a 406 MHz ELT and, if possible, a 406 with GPS capability. Be sure to register the ELT with NOAA and keep it up-to-date with your latest information as it changes.



Now let's take a look at the differences between the personal locator beacon (PLB) and a SPOT locator. Though both work well, with accuracy to within 10 meters by the use of an imbedded GPS, it is the operation that is different. A PLB works very similar to a 406 ELT except it has to be activated manually. When the PLB signal is received by satellite, the AFRCC knows the Lat-Long immediately. They pull up the registration with all your contact information. The difference is they then look to see if the PLB is associated with an aircraft or something else. If an aircraft, then they call Aeronautics. If something else, they call the county sheriff where the signal originated.

The SPOT is a subscription based locator service and sends a Lat-Long to satellites. It is manually operated like the PLB but also has a "bread crumb" tracking function. With the manual operation you can send a distress signal from which a message is then generated and sent to an email, cell phone text, or the SPOT emergency response center according to your instructions. The disadvantage to a SPOT is that there could be a delay in the alert if no one is monitoring your progress. The "bread crumb" is a tracking feature which offers 2 1/2, 5, 10, 30, and 60 minute tracking intervals.

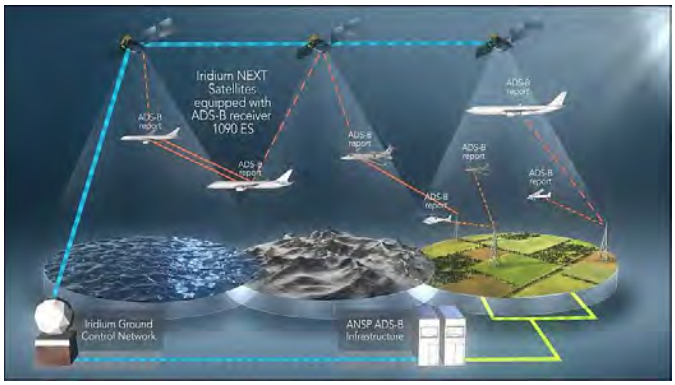
- Tip: The PLB is monitored by AFRCC which provides immediate alert. Be sure to register it with NOAA and keep it up to date. Place it within pilot's reach at all times. Make it part of your emergency check list to activate it when in distress before impact. The SPOT should also be placed within your reach. Be sure to have your messages sent to a responsible party that is monitoring your progress. Set the tracking feature to its minimum time as an aircraft can travel a long distance in even 2 1/2 minutes. Use the "I'm OK" button when you have arrived at your destination.

The cell phone is becoming increasingly useful in providing data to establish a location. As a cell phone moves through an area it pings the cell tower near it. The towers hand off the signals as this movement continues. In the case of emergency, we can request this information through the Air Force and usually comes as a plot with the radar track previously discussed. The accuracy is less than previously discussed methods with only a general area plot given. I believe this will improve in the future. This area is useful to us however. Only the Air Force and Law Enforcement can access this data and only in case of an emergency, to ensure privacy.

- Tip: Add your cell number and that of your passengers to your flight plan or give them to the responsible party monitoring your progress. Always keep it fully charged.

The Future:

With the coming of Next Gen (next generation) the FAA is implementing the Automatic Dependent Surveillance – Broadcast (ADS-B out) as one of the many changes to the



way they monitor and provide separation to aircraft. As of January 1, 2020 the FAA requires ADS-B out be installed in aircraft operating in most airspace. FAR Part 91.225 provides ADS-B out equipment and air space requirements. As a search coordinator, I'm excited about this new technology. ADS-B out equipment is GPS enabled which operates on 1090 MHz, transmits once per second and provides data including Lat-Long location, altitude, airspeed and ICAO Mode S hex code for identification. Within the next two years we should see satellite technology that receives the ADS-B out signal. With the aid of satellites, each one second beacon transmission will provide your location even in mountainous terrain. As a separate source, this data will enhance the radar plot we receive from AFRCC. Having ADS-B capability will help take the "search" out of search and rescue.

With the methods described from the old flight plan to the Next Gen of the future, we at Aeronautics strive to provide a timely and efficient response to a call for a missing aircraft. We are dedicated to improving our methods to provide this service to the aviators that reside and visit our great state and its many adventures. I am hoping you have found these tips helpful as I know that they will surely help us find you!

Aviation Medical Matters

Vision at Night

By: Paul Collins, MD, AME and Mike Weiss, MD, MPH, AME, CFII

But at night, over a stratus layer, all sense of the planet may disappear. You know that down below, beneath that heavenly blanket is the earth, factual and hard. But it's an intellectual knowledge; it's a knowledge tucked away in the mind; not a feeling that penetrates the body. And if at times you renounce experience and mind's heavy logic, it seems that the world has rushed along on its orbit, leaving you alone flying above a forgotten cloud bank, somewhere in the solitude of interstellar space.

— Charles A. Lindbergh
The Spirit of St. Louis, 1953

Flying at night is not something often done, and for some, not at all. While it has many advantages, such as smooth air, cooler temperature, no sun glare, there are also some disadvantages. Most of these disadvantages come from limits in our sight, due to our evolution to a predominately daytime creature.

In fact, human eyes are not really designed for use at night. Compared to cats, human vision is fairly limited when the sun goes down. Cats are superbly adapted to night vision, as they have eye retinas designed for night, with more rods (receptors for nighttime vision and sudden movement) than cones (for daylight vision and processing color information).

As we age, our eyes become less able to change the receptors from viewing daylight to darkness. In fact, it usually takes 20 minutes or more to make this visual shift. Some people have no ability to make that shift and are essentially blind at night. With fatigue and other stressful influences, this shift to night vision can take even longer. Since most of us work and play during the day, this means we are already tired when the sun goes down and that can influence our night vision. This means going from a bright office out to pre-flight an airplane at night puts us at a visual disadvantage. Indeed, it is my observation that more pilots hit their heads on the props at night than at any other time!

In addition to physiological limits, there are also perceptual limits for night vision. The night-vision limitations include:

- Loss of dark adaptation is mainly due to the function of rods in the eye. The rod receptors are

responsible for night vision. High light intensity breaks down the pigment rhodopsin in the rods, and lower light intensity allows it to be replenished. This rhodopsin regeneration takes 20 to 30 minutes - thus the delay in night vision returning once you see a bright light.

Also, the rods, unlike the cones, are insensitive to the color red – light frequencies above 640 nanometers correspond to the color red. Thus, wearing red goggles or only using red lights in the cockpit means that the rods continue to function well, and vision is maintained. That said, only using red light means that color discrimination for things like charts and maps is severely limited. Anything colored red is virtually impossible to see when the only light is red. Thus, it is common to use low-density white lights to save as much rod function as one can while allowing one to see all colors. It is a compromise between preserving dark adaptation and maintaining an adequate level of color discrimination.

It might be better to have the bright lights on if thunderstorms are around. The intensity of lightning flashes can completely destroy night vision. Let's not fly around thunderstorms anyway!

- Monochromatic vision is where a person can only effectively see one color. The ability to see different colors depends upon at least two types of functioning retinal receptors. There are three types of cones, but only one type of rod. So, the loss of color vision at night means colors are seen as shades of grey - maps, and charts, can be very hard to see. Humans have monochromatic vision at night.

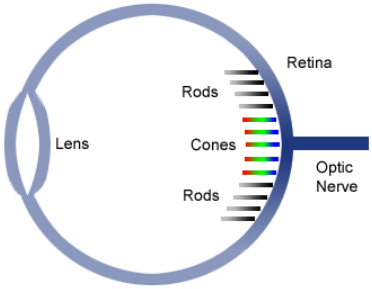
- Central-vision blindness - The ability to discriminate detail is maximal at about two degrees either side of the center of vision or the fovea. Since these cones in the fovea are shut down during pure night vision, looking directly at an object at night essentially makes you blind. You have to move your eyes to get the rods to see. Another reason for lower visual acuity at night is because the cones have a one-to-one connection to the optic nerve while there are 100 to 1000 rods to each nerve. Thus the rods give much better sensitivity but much less acuity. In fact, this is why, with a fully dark-adapted eye, you can see a candle light up to 15 to 20 miles away, but your ability to read a word is limited even up close. There are just fewer signals going to the brain at night.

- Depth perception is another critical flight function that is limited at night due to the high ratio of rods to nerve fibers. Since so many rods send signals to one neuron, there is loss of exact direction and the size of retinal images.

- Dark-focus, or night myopia - Because there is no target to focus on at night when looking from the cockpit, the eyes focus on their resting state two feet to two yards ahead. The effect is a nearsightedness that blurs objects in the distance, making them appear smaller, farther away - and less detectable.

- Visual hypoxia is the loss of eye function due to less oxygen at higher altitudes. The use of supplemental oxygen is recommended, but not required, for flight at or above 10,000 feet elevation during the day and 5,000 feet at night. This is due to visual hypoxia. The retina – rods and cones – have the highest oxygen demand of anywhere in the body, even higher than our brains! This condition is exacerbated because the cornea does not have direct vascular supply. The oxygen must diffuse into these structures, so even mild reductions in available oxygen are exaggerated in the cornea. This reduces the eye's ability to get oxygen, even while the rest of the body is functioning essentially normally. The effect of carbon monoxide produced with smoking makes this much, much worse – another reason to stop smoking. Eating a snack to increase blood sugar will actually make night vision better, so it is medically OK to eat that Payday candy bar at night.

In fact, night blindness can at least, in part, be improved by eating vitamin A.



Thus, eating carrots can be good for your night vision. Vitamin A will improve the function of rods or the night vision cells. Studies have shown that night blindness can be caused in 60 days by putting people on a diet low in vitamin A. So, eat your carrots!

- Presbyopia - Presbyopia means "old eye," and we all get it. This means night-vision adaptation takes longer, light sensitivity increases with age, and the lens of the eye ages. The lens gets bigger, loses its elasticity and this make focusing more difficult. A 60-year-old-person usually has near-point focus 10 times that of a young person. In other words, the 60-year-old can't focus up to 10 times as close as he or she could as a kid. Peripheral vision also decreases with age, and the crystalline lens yellows with age, making blue-colored objects harder to see.

Technology can also help us as we fly at night. The Synthetic Vision type of panel system can actually give you effectively a day-time look, even at night. There are also night-vision systems and night-vision goggles that can literally turn night into day. Remember though, you will be in the dark if the lights go out (if the battery goes dead). Here are some websites to look at:

- http://www.max-viz.com
- https://www.foreflight.com/products/foreflight-mobile/synthetic-vision

Although flying at night is visually exhilarating, it is also visually limiting. The accident record unfortunately reflects this. We need to understand our limits, take precautions to improve eye function and keep our eyes functioning as well as we can. Eat your carrots, don't get near smoke, allow your eyes time to adapt to night-vision, don't get tired, and let your cat be your copilot.

Annual ACE Academy

By Nola Orr

The 24th annual ACE Academy took place in Boise on June 15-17, 2015. This is a self-funded state program designed to introduce high school students to aviation and space- related careers.

My granddaughter, Emily, was accepted to the Academy, so I volunteered to be a chaperone. I had a fine time. So did she. I would HIGHLY recommend that any high-school student with an inkling for a career in aviation attend this academy. The academy gives a serious look at the possibilities many of the kids (myself included) had never considered.

One item of note — of the 24 attendees, nine were female. Good! Flying is fun and fascinating, no matter who you are.

Emily's ideas before she got there:

"The schedule is well planned out – I love the organization. The arrival times are good – it's a good time because it's early enough to have a productive morning, but not so early that people will be falling asleep." In case you are curious, the arrival time is 7:20 a.m. and this Gramma thought that was rather tough, but we managed.

Monday –

Opening remarks were made by Mike Pape, administrator of the Idaho Division of Aeronautics. I liked his comments very much; not only did we all feel welcome, but it was clear what standards of behavior were expected. Given the caliber of young people in attendance, it was probably unnecessary. On the other hand, given their ages, well … I felt it was appropriate.

One student, Nate, mentioned that this is his 3rd time attending. When I asked him why, he said he likes to keep his options open. He pointed out that universities give presentations during the lunches and he is very interested in what they have to say. I had initially wondered if these young people realize how many potential open doors are represented at this academy, it's clear that this young man is keenly aware.

During the first two hours, J.C. Worthen and Rick Bier, who have been friends and building rockets together for years, walked the youngsters through building a rocket and a glider, to be launched on another day. Each person got to assemble their own.

The tour of the National Interagency Fire Center (NIFC) was a big surprise. I had no idea that this center has nationwide control of wildland firefighting and orchestrates the efforts of a host of other agencies. This tour included a video on smoke jumping, and an up-close and personal discussion of parachutes. Did you know they not only pack their own chutes, they make them? The kids were allowed to try on the Kevlar suits the smokejumpers wear. They can weigh, when complete with equipment, well over 125 pounds.

NIFC gear weighs a lot.

The tour guide, Jennifer, had been a smokejumper and a helicopter pilot herself and was able to give the kids a glimpse of how she went from smoke jumping in the summer during college, to a satisfying career with the forest service. Among the items discussed at NIFC were: careers in the use, maintenance and repair of emergency-communications equipment and information-gathering tools; the science of fire mapping; resource management; and a host of other tasks and challenges.

There is an interesting opportunity available through NIFC allowing young people to put themselves through college by smoke jumping. If a person can qualify physically for the program, all they need is to be enrolled at a university.

During lunch, the kids were presented with information about educational opportunities from Amy Hoover, Professor and chair of the Department of Aviation at Central Washington University, who was the lunch sponsor.

Some of the information early on had mentioned that the ACE Academy is fast-paced. Wow, is that ever true! It's fast and furious, and no opportunity to educate the kids is lost.

Next, a quick bus ride took us to Gowen field, which houses both the Army and Air Guard. We examined

warfare planes and helicopters and the students were allowed to fly the A10 flight simulators. Lectures were given on the effects of G-forces on pilots, the equipment used to protect them, and night-vision technology.

Tuesday -

We started our day with a short walk to the airport and went behind the ticketing counters to see the belts that handle baggage. This is a secure area so no photos were allowed.

We used the "employees only" passages to move to the terminal concourse and got a glimpse into airport security. After the security introduction, we were told that the majority of traffic isn't private pilots or commercial- passenger flights, but rather it is flights like FedEx (their biggest customer), that keep them busy. This tour was conducted by Sean Briggs, marketing manager at the Boise Airport and Greg Myers, airport operations manager, who is a proud graduate of the ACE Academy.

Next we jumped on a shuttle and traveled to the Airport maintenance shops, which are neat and clean. Topics included airport snow removal, lawn mowing, and equipment maintenance.

Back at Aeronautics, we were introduced to Steve Edgar who is currently a captain on a 747 and is at the forefront of the UAS movement as the owner of ADAVSO, the 13th U.S. company to receive an FAA exemption to fly agricultural operations commercially. Steve's career began as a fuel-boom operator, and then he went to college and became an air-traffic controller, then a pilot trainer. He was an F-4 pilot and actually flew the Stealth aircraft out of Las Vegas during a time in which the very existence of that aircraft was still officially being denied. He did some flying for the military out of Baghdad and Kuwait and was a test pilot for Lockheed.

He has flown an unmanned craft to Japan from California, and helped monitor the nuclear disaster and assisted with search-and-rescue as an observer. His enthusiasm is infectious, and his credentials impeccable. What a spokesperson for aviation! He pursued the kids with zeal, as he is convinced that there is a great future available in both manned and unmanned (AKA drones), flight. He also had quite a story for us: just a few days before his visit with us, he had lost an unmanned aircraft to a hawk. The bird knocked his craft out of the air, damaging it, and they still hadn't found the camera.

Next we heard from Cade Preston, the director of flight operations for the Division of Aeronautics. He reiterated what everyone else had said – GET A DEGREE! He said that one does not have to stick strictly to a degree in aviation-related fields. Business management, for instance, could be just as useful in aviation as anywhere. He explained that as a junior pilot, you might have to fly whatever schedule you are given, but after you achieved seniority, you can arrange your work schedule to fit your needs.

Western Aviation was our next stop and our guide, Lou Gravel, began the tour with a question, "Do you stop what you are doing when you hear an airplane and look up? Ah, for those of you who responded yes, you are an aviator and belong in this business."

Western Aviation uses several large buildings to repair and maintain some impressive, private aircraft. They even have their own carpentry shop for maintenance of some of those fine wood interiors. We ended the tour at their Fixed Base Operations (FBO) lobby, a nice reference point for those of us who fly. You'll find an FBO at many airports that cater to general and business aviation. If you are a private pilot, you'll want to know where the FBO is.

Lunch was provided by Idaho State University, and our speaker was Mike Evans. He is passionate about flight and had some fun tales of parachuting over football fields with American flags attached to him. What a rush! He also spoke about ISU's program for those interested in maintenance, and briefly covered calculus, physics and backcountry radio frequencies.

One of our speakers was Leslie Weinstein of True-Lock. He too has

See ACE Academy

Continued on page 21

Fond Memories of the First Work Parties at Johnson Creek Airstrip

By Laura Adams, ITD Division of Aeronautics

It's no secret: Johnson Creek is Idaho's premier backcountry airstrip, located three miles south of Yellow Pine. Most of us have been there, but can you imagine building that airstrip? Beverly La Brie (Ginger) and her little brother Bob Wells (Bobby) were 12 and eight years old, respectively, when their father, Robert A. Wells, enlisted their help in the summer of 1958.

Robert Wells had flown as a cadet in World War II in 1944. He was an Ada County deputy and friend of Chet Moulton, the director of state Aeronautics, credited with gaining public access to the airstrip located on a portion of the Bryant Ranch. In 1957, the strip was expanded as a utility-emergency field between Big Creek and Landmark on the natural route of traffic from southwest Idaho to Chamberlain Basin. After the trees were cleared by Duane Peterson, Moulton opened the strip in 1958 and solicited volunteers for a June work party in the very same Rudder Flutter you are reading right now. The event was sponsored by the Ada County Aerial Sheriffs, with an invitation to the Flying Farmers, 99s, Air Tramps, and anyone interested in joining the effort.

Bobby and Ginger remember traveling with their family to Johnson Creek on three occasions, in addition to Warm Springs Creek once, to help out. These work parties were family affairs because the locations were accessible by ground vehicle.

Ginger was excited about going to Johnson Creek because there was a real Dude Ranch – Cox's Ranch -- located at the end of the strip. One of Bobby's most vivid memories was the wonder of climbing out of his sleeping bag, peeking his head out of the tractor shed, and staring into the eyes of a whole herd of elk surrounding the campsite and shed.

There were at least eight families in attendance at each of the work parties. Most of the fathers belonged to the Aerial Sheriffs, and the mothers to the 99s. So young back then, Ginger and Bobby couldn't recall everyone, but they remember Vern Boslin, the jeweler, being there. He gave Bobby his first airplane ride in a Cessna 120 at Bradley Field. In addition, the Gamble, Hornback, Ridgeway, Chittenden, and Wissman families showed up along with Hank Rednour, Sheriff Myron Gilbert, and of course, Chet Moulton.

Moulton flew in with a generator from Army surplus. It took six men and two boys to offload it from the Cessna 195. Lights bulbs were strung from it throughout the camp and around the canvas dining canopy. Although the lighting was appreciated, the generator could be heard all the way to Yellow

Rudder Flutter

Official Publication of the
IDAHO STATE DEPARTMENT OF AERONAUTICS
CHET MOULTON, Director • MUNICIPAL AIRPORT • BOISE, IDAHO

Vol. 14 November, 1958 No. 8

New Airport for Flyers

A new airport (left), equipped with recreational facilities, has been completed by the Idaho Department of Aeronautics on Johnson Creek in central Idaho.

The field, to be known as **Johnson Creek,** is three miles south of Yellow Pine at a position directly opposite the mouth of Riordan Creek.

Camp stoves, picnic tables, garbage pit, powder room ,and a well, were installed by Ada County Aerial Sheriff's volunteers and the Department during the summer and final leveling and seeding was completed during October.

The facility is approximately 4000 feet long and 200 feet wide with estimated elevation of 5000′ and will offer fly-in picnickers an excellent place-to-go as well as tie in as a utility-emergency field between Big Creek and Landmark on the natural route of traffic from SW Idaho to Chamberlain Basin.

Airman and Aircraft Registrations Due In December

Annual registration of Idaho airmen and aircraft will be due during the month of December for 1959.

Application blanks will be mailed all pilots and owners in late November. Those desiring special numbers should indicate their preference in advance.

FAA Administrator Named

E. R. (Pete) Quesada was appointed by President Eisenhower to head the new **Federal Aviation Agency** on September 30.

Quesada's appointment will become effective November 1, and 60 days later the new agency will come into being.

Pine, Bobby recalled. To this day, Ginger cringes when she hears the song "You Are My Sunshine," after initially hearing it sung off-key over and over again around that campfire.

"As kids, we were all slave labor," Bobby fondly chuckled. He remembers hauling what seemed like endless buckets of paint from the shed for rock boundary markings, and like every other kid there, he took turns pumping water from the old red hand pump for what seemed like hours at a time. "We all loved to ride behind the grey Ford tractor as dead weight on a piece of chain-link fence used for leveling. Filthy dirty, we were happy as can be until our mothers made us take an ice-cold bath in the creek," he winced.

Bobby also lost his eyebrows that same trip when someone decided to pour five gallons of gas on the brush pile. Of course, the idea of a big blaze was like bees-to-pollen for the children huddled around it. When the blaze ignited, a scorched Bobby jumped and landed on Don Gamble's feet. Although the whole gang worked like junkyard dogs, work ended by mid-afternoon each day, and the men all went fishing. From its inception as a state-owned airstrip, recreation has undoubtedly been the main attraction to Johnson Creek.

Bob Wells and Sheriff Gilbert drive in the posts for the fence.

Moulton acknowledged the volunteer efforts and increasing popularity of the strip by enlisting caretakers and stationing a courtesy car there in the 1960s.

Ginger's first airplane ride was with Chet Moulton. Later in life, she joined the 99s and earned her pilot's license in 1974. Ginger returns to Johnson Creek every summer with her husband Rex, who is also a pilot and aircraft mechanic. Rex was just getting his pilot's license when they met at Bradley Field.

"He built me a Super Cub, but the day I soloed, Rex bought back my original Champ," Ginger exclaimed gleefully. She is still in love with her Champ, relishing its simplicity and slow speed. Bobby jokingly teases her about being able to spend a whole afternoon flying without leaving the airport.

Bobby was licensed to fly at 16. "He could fly before he could drive," Ginger said. "I remember driving him to Bradley Field in my old Mercury. My mother couldn't handle watching the stall training." Although Bobby can no longer fly, he enjoys every opportunity as a passenger and employee of the Bureau of Homeland Security, especially the flights back to Johnson Creek.

When Bobby and Ginger were youngsters in southeast Boise, Parkcenter was still an island and Garfield Elementary was the only school on that end of town. Floating the Boise River was just beginning to gain popularity. Their summers were spent at the river, the Natatorium, ballgames, and at the Varney hangar located at Boise State, where they enjoyed using it as a roller-skating rink. Their mother would allow the children to roam anywhere in town if the protective family dog was with them. Those were the days!

Bob Wells and two of his children snaking logs while superintencents Sheriff Gilbert, Kenny Ridgeway and Red Merrick look on.

Flat View from North of 4000' airport

Hank Rednour loading truck with rounds for two camp stoves and open-fire grill.

Over the last six decades, Boise has experienced significant change. Folks like Bob Wells and Beverly La Brie continue to visit Johnson Creek because it provides an escape from all the change. Visiting a place where time seems irrelevant is refreshing and a rare opportunity. That's a simple, raw charm of Johnson Creek, yesterday and today.

A Mentor in Every Pilot

By Santiago Guerricabeitia, ITD Division of Aeronautics

Pilots are great at passing on stories and experiences that stand out. This is actually a mentoring of sorts.

To be a good mentor, we must be able to pass on our whole experience. By this I mean even the things we take for granted, like operating procedures, sources of information and things to look out for specific to a location or flight.

Passing on this knowledge is a great way to allow others to share the experience without having to learn by making mistakes, or even worse, learning from grave errors (i.e. accidents).

When someone, especially an inexperienced pilot, asks us about flying to a backcountry strip or performing a maneuver in an airplane, make it a learning experience that covers the joys as well as the potential perils or 'gotchas' of that flight.

In the flying community, the experiences we remember most are those that were positive and fun, like fly-ins. These experiences stand out in our minds because we plan them out carefully. Planning could consist of; reviewing your aircraft performance, checking weather, flight planning or obtaining instruction beforehand to mitigate the risks.

One way to share your experience and knowledge is to place a "younger" you in their shoes, and tell them everything the way you would have wanted to hear it when you were at their experience level. This is not to say that the experienced fliers can't learn from the less experienced. I, for one, am grateful when experiences are shared with me, especially when that experience had never even crossed my mind.

If we work to pass on knowledge in this way, we can help reduce the problems caused by the unknowns of this flying world of ours.

Blue Skies!

Do you want a FREE subscription to the Rudder Flutter?

Contact the Division of Aeronautics at 208-334-8775 or email laura.adams@itd.idaho.gov

Calendar of Events

ONGOING EVENTS

First Tuesday of every month: 10 am - Warhawk Air Museum hosts WWII conversation and friendship. All veterans welcome, 208-465-6446

DECEMBER

12 **Clearwater Valley Aero Club** Annual Fly-in Breakfast, Kamiah (S73), 9:00 a.m. to Noon. Adults $7.00, Kids $5.00. Flying events include spot landing, flour bombing and YOUNG EAGLES events. Kamiah Airport, 208-935-0089

12 **Fly-in**, Gooding (GNG), 10:00 a.m. – 2:00 p.m. Static displays, lunch, aerobatics and more! Randy Quigley, randy.soundtrax@gmail.com

19 **Ride or Fly Fundraiser** for Mission Aviation Fellowship, Garden Valley (U88) Jack Erdmann, 920-207-5173, jerdmann@mat.org

DECEMBER (continued)

27 **Gold Star Mother's Day** - A special day of recognition of the sacrifice given by mothers who have lost a loved one in service to their country. Admission is free for all Gold Star Mothers on this day. Nampa (MAN) Warhawk Air Museum, www.warhawkairmuseum.org or 208-465-6446

FEBRUARY

20 **Winterfest** - Skiplane Fly-in, Stanley (2U7). Free shuttle for pilots, static aircraft display, hosted coffee and snacks. 208-412-8343

*For the most recent list of aviation events, please visit our website at www.itd.idaho.gov/aero. Email your calendar event information to tammy.schoen@itd.idaho.gov for inclusion in the **Rudder Flutter** and the Aeronautics website.*

Letter to the Editor

Position Reporting

Dear Editor,

Position reporting is critical to safe flying, and the negligence of it in recent years has been weighing heavily on me. As a charter pilot with more than 25 years in Idaho's backcountry, I believe I've heard it all, and sometimes not anything at all. I remind my Idaho friends and all the "tourists," that it is up to each one of us to communicate in the most consistent, and efficient manner, following the same standards.

In central Idaho, the IFR altitude is generally above 11,000 MSL. Anybody below that is VFR, and has the legal obligation to see and avoid other air traffic.

While some experimental aircraft have some pretty nifty uncertified TCAS systems, most regulars out here operate on the Mk1 eyeball. A position report helps us search and locate other conflicting traffic.

Additionally, it provides a situational awareness as to when other traffic may become a collision hazard.

The position report should simply include: identification, position, and next position or destination. That's it. For example "Islander 19V, Thunderbolt Look Out, 9,000, northeast bound Taylor."

1. **Identification** is officially an airplane type and N number. There could be hundreds of "blue and white Skywagons," but only one "Skywagon N1234V ("34V for brevity"). As it pertains to a potential mid-air, the color of an airplane cannot be determined until you are much closer than you want to be. As it pertains to search and rescue, "Skywagon 34V" is pretty definitive as opposed to "blue and white Skywagon." On numerous occasions, I have been able to help the Division of Aeronautics look for an aircraft such as, "Skywagon 1234V;" because as I was flying in the area, I heard that aircraft properly report its position. When aircraft are properly reported, it will often help limit the search to a smaller area, saving time when every second counts.

2. **Position** is your location over the earth, including altitude, and "climbing," or "descending," if appropriate. A position report without an altitude is relatively useless. Altitude separation is probably the best solution to any possible mid-air, and once established, there is a much better opportunity for the two aircraft to pass safely. Airplanes operate in three dimensions, so remember to use all three. Also, altitude separation guarantees a relative motion between the two aircraft. Aircraft on a collision course will have no relative motion between them. Without relative motion, our eyes may not perceive the other airplane until it is probably too late to avoid the collision.

3. **Next position or destination**: When you are changing direction of flight after overflying a point, use that as your "next position/ destination." Draw a line in space for any listening aircraft, so the other pilots can determine if you are a possible collision hazard.

As a rule of thumb, I listen more than I talk. Flying out here is a great adventure, but as pilots, we are legally bound to see and avoid. If I am showing a visiting pilot a new airstrip, I do all the teaching on the ground before we both take off. I realize the other traffic does not want to hear my "How to find Cabin Creek" lesson over 122.9, and I do not want to be distracted from collision avoidance while carrying on an extraneous conversation.

When cruising at 10,000 feet, I can hear almost everybody, and I'm careful not to walk on somebody else's position report. Conversely, I don't expect many people to hear my position report from down in a canyon.

Finally, formation-flight lead responsibilities are critical to collision avoidance. Even though GA-formation flying is discouraged, many pilots seem to think it is a cool thing to do in our class E airspace. Formation flight is defined as two or more aircraft operating in such close proximity that they essentially constitute one aircraft. Hence, a formation is treated as one aircraft by air traffic control. Under VFR, we are the air-traffic control. The formation-flight lead is required to see and avoid, as well as navigate. This requires more than one radio. The flight lead must remain on 122.9 or they cannot report the flight's position, and simultaneously monitor other air-traffic positions to fulfill their duty to the rest of us out there. Doing follow-the-leader on "fingers" takes every airplane involved in the formation out of the see-and-avoid loop. It also denies every other aircraft in the vicinity critical traffic information.

None of us want to come within 200-feet of another aircraft because they are not on frequency or making position reports. Committing to the same communication standards will benefit everyone out there, reducing the number of close calls and accidents.

Fly Safe,

George W. Dorris, G&S Aviation

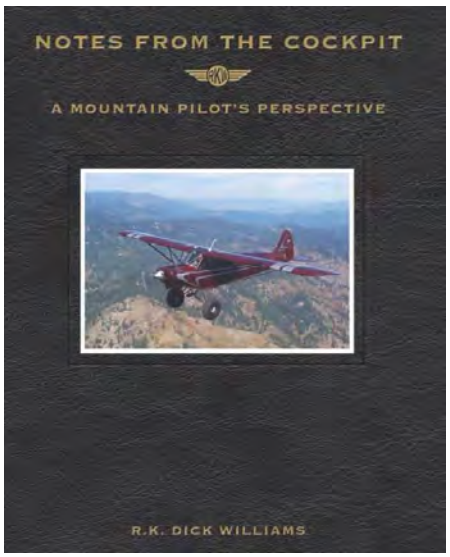
Bookworm

Notes from the Cockpit: A Mountain Pilot's Perspective

By Cody Hall, ATP/CFI

As a college student in the late '80s, I would return home each summer to work at Empire Airways in Coeur d'Alene pumping fuel and learning to fly. My father was my instructor in our old "rag wing" Cessna 170. As I gained experience, my father made every effort to expose me to all types of flying, including backcountry flying. My father and I would have the unique experience of working together several years later, flying a corporate jet as a father/son crew. Sadly, my father was killed in a backcountry flying accident in the summer of 1996.

Fast forward to today. While I no longer live in Idaho, it will always be my home. I continue to make a living as a corporate pilot and I still fly our old 170. The joy of flying has not diminished. During my travels, I am always reading a book of some sort — usually one about aviation. This summer, as I searched for a new book, I came across "Notes From The Cockpit: A Mountain Pilot's Perspective" by Dick Williams. Dick has a long history as one of the pioneers of backcountry flying in Idaho. The book covers Dick's lengthy career in aviation, and specifically, his many experiences flying the Idaho backcountry. The reading moves along quickly and the stories are both entertaining and informative. I really enjoyed reading about people I have met through aviation in Idaho, the history of Idaho aviation and



especially about flying the backcountry. Dick's effort to promote backcountry-flying safety during his career is commendable. The end of the book has a detailed appendix where Dick rates the various backcountry airports of Idaho based on difficulty.

See Bookworm

Continued on page 20

Who Doesn't Love a Beech Party!

By Tammy Schoen, ITD Division of Aeronautics

As the self-appointed Aeronautics Fly-in committee, Melissa Kaplan and I flew with our boss, Mike Pape, to attend our first Beech Party. No Hawaiian shirts or sand would be found, however. We were on our way to Smiley Creek to attend the Staggerwing Club's annual Round Engine Round-Up, a breakfast hosted by the Recreational Aviation Foundation (RAF), and the Glastar/Sportsman annual fly-in. Over 65 airplanes and 100 people planned to attend.

On our route, we crossed beautiful mountain peaks capped in snow and riddled with lakes, I couldn't believe this was actually work! When we were asked to attend the events being held at Smiley Creek airport that Saturday, we jumped at the chance.

As we came across Alturas Lake and beautiful Smiley Creek came into view, I knew it would be a great day. The airport was already lined with airplanes from the Glastar/Sportsman group and the RAF was laying out what would be a terrific breakfast. We landed on grass that was covered in dew and, as we exited the plane, there was an excitement felt in the crowd gathered at the airport.

Smiley Creek Airstrip

As we helped transport people from their airplanes to the breakfast area, I watched the sky in anticipation of what I expected to be a spectacular sight. 122.9 was alive with in-bound aircraft making

position reports. As I spoke to the pilots on the ground, I got the feeling they were as eager as I was to see these glorious flying machines. We didn't have to wait long before they arrived: six beautiful Beech Staggerwings, a Twin Beech and a hand-full of other planes. As they made their way around the pattern and landed one by one, I felt like I had just seen the definition of "Poetry in Motion."

As beautiful as they all were, I couldn't stop taking photos of the orange Staggerwing that belongs to Bill Cutter from Phoenix, AZ. I gladly shared the photos with him afterward. As I walked around and looked over each and every one, it was obvious that a lot of time and care went into these aircraft. Several of the owners stated that their maintenance is endless, but it's a labor of love, and they wouldn't have it any other way.

This was the fifth year for the Staggerwing Club's Round Engine Round-Up. The group gets together twice a year, once in October at the Beechcraft Heritage Museum in Tennessee, and again at Aero Mark in Idaho Falls. Aero Mark, the FBO owned and operated by the Hoff family, plays host to 30 to 40 Round-Up aircraft each year. According to Thomas Hoff, this year's event drew about 35 airplanes, including many Beech models, such as six Staggerwings, a couple of Twin Beeches and a whole bunch of Bonanzas, a Howard, C-195, a couple of classic Murphy Moose, a Beaver, and many others.

The RAF is an organization of like-minded aviation enthusiasts who strive to "Keep the legacy of recreational aviation strong by preserving, maintaining and creating public use recreational and backcountry airstrips nationwide." Led by Sarah Chandler, the RAF team hosted a delicious breakfast including dutch oven eggs, hashbrowns, and cowboy coffee, accompanied by fun pilot stories and history lessons from the crowd.

As the temperature crept upward, the crowd dispersed and returned to the skies for a new destination. Maybe this time, there will be sand and Hawaiian shirts.

Considerations for Buying and Selling Aircraft

By Aeronautics Administration

We do not buy and sell aircraft often enough for most of us to remember all the details involved. The two most common questions that arise are about registration and taxes.

According to Idaho Statute, "Every aircraft operating within Idaho shall be registered with the Division of Aeronautics prior to or during each annual registration year in which the aircraft is operating in the state." There are few exemptions beyond government use and aircraft engaged principally in commercial airline or freight flying.

In 2013, pilot registration was eliminated. Now there are only two state aircraft registrations, one for general-aircraft owners and the other for aircraft dealers. The fee for each aircraft is three cents per pound of maximum certified gross weight, with a $20 minimum and $600 maximum. Dealer registration is $41, including one dealer decal.

Many of you have been confused about the yellow Aircraft Registration Status form included with each aircraft renewal notification. This form should be submitted if you have sold your aircraft or if one of the following applies:

- The aircraft is not housed/stored in Idaho and is not operated casually or continuously in Idaho for more than 90 days in any annual registration period.
- Aircraft in non-airworthy condition that are not operated during any part of the registration year are not required to register but may, at the owner's discretion, be registered in lieu of personal property tax.
- Aircraft held "for sale" by a dealer which are only flown for purposes of sales demonstration. It is unlawful for any person to carry on or conduct the business of buying, selling, or dealing aircraft unless registered with the department, as a manufacturer or dealer. Aircraft flown for personal use must be registered individually under the owner's name.

The Idaho Division of Aeronautics does not collect property tax, sales tax, or use tax. Personal property tax on an aircraft is collected by your County Assessor's office when the Idaho registration fee is not paid annually. Sales and use tax are collected by the Idaho Tax Commission.

No matter what type of affiliation you have with an aircraft, it is imperative to know the tax implications as an:

1. Owner
   a) Sole owner
   b) Part owner
   c) Fractional owner
   d) Member of an aircraft flying club
   e) Owner or member of ownership co-operative
   f) Other type of ownership arrangement (partnership, LLC, etc.)
2. Aircraft dealer; as registered with the Idaho Division of Aeronautics
3. Flight student
4. Qualified intermediary (broker)

On the Idaho State Tax Commission website at http://tax.idaho.gov/i-1178.cfm you will find the answers to the following:

- When aircraft can be sold or purchased tax exempt
- What you can buy tax exempt
- When use tax is due
- Purchases by aircraft dealers
- Aircraft leases
- How tax applies to aircraft used for flight instruction
- How tax applies to aircraft used for flying services

If you need additional use or sales tax assistance, please contact the Tax Commission at (208) 334-7660 in the Boise area, toll-free at (800) 972-7660, or by emailing aircraft@tax.idaho.gov.

For information regarding aircraft registration, call the Idaho Division of Aeronautics at (208) 334-8775 or Idaho.aeronautics@itd.idaho.gov.

Bookworm

Continued from page 17

What a great resource for pilots of all skill levels. I found the book on my Kindle, and it's also available in hard-copy format. It's definitely a 5-star read!

Next summer will mark 20 years since my father's flying accident. Reading "Notes From The Cockpit" reminded me how much I have missed flying over Idaho as I once did with my father. With this in mind, my oldest son Owen and I are planning to fly the 170 from our home in Arizona to Coeur d'Alene next summer. I can't think of a better way to remember his grandfather and hopefully continue passing along a love of aviation to another generation. We hope to see you out there in the Idaho backcountry!

ACE Academy

Continued from page 11

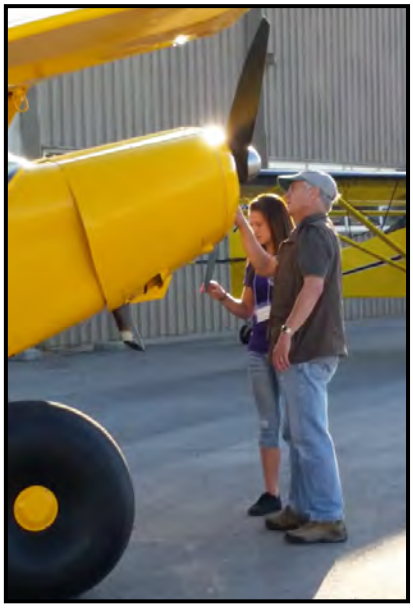
had an exciting career in aviation that has opened many doors. He has patented noteworthy devices for the A-10 Warthog and the M-1 Abrams tank. He addressed the interesting challenges involved when dealing with the FAA – something the youngsters need to know.

Our tour of the Boise Airport tower started downstairs in the radar and training area. There isn't enough traffic at the Bozeman (Mont.) facility, so these folks handle Bozeman too. As we headed up the elevator, thanked heaven for elevators – at 290 feet tall, it is far too high to climb! We watched several flights take off and land. The kids were entranced.

Wednesday -

Breakfast Wednesday was sponsored by the Ninety-Nines, the International Organization of Women Pilots.

The students and chaperones were divided into small groups and each group was assigned to a pilot. The pilots were volunteers! My group went with Stacey Budell, who is great! She handled the kids very



Preflighting the plane before takeoff.

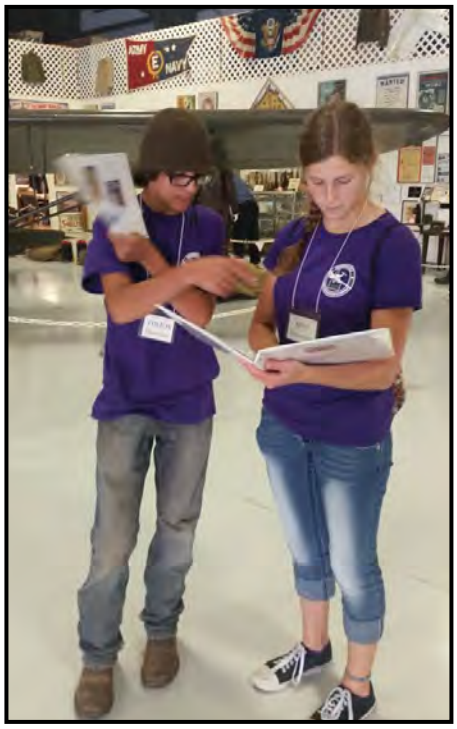
well. She said she's been flying backcountry Idaho since before she was old enough to understand how dangerous it can be.

Each group flew to two backcountry locations of the three choices — Garden Valley, Smith's Prairie and Idaho City. I had been to none of these places and neither had most of the students. I believe each pilot let each student do a few minutes at the controls. What a rush!

We all landed at the Warhawk Air Museum in Nampa by 10:30 a.m. The kids took part in a scavenger hunt that took them all over the museum.

Lunch was served at the park near Skyview High School, where the youngsters got to launch their rocket packing gliders. Most successful!

On to the Ponderosa Aero Club that offers flight training, maintenance- and repair facilities, planes used by members, and planes that can be rented. The presentations here were well done; it seemed like the youngsters enjoyed the mechanic's

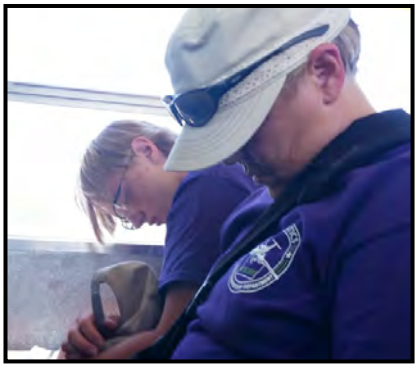


Scavenger hunt at the Warhawk.

presentation the most. The kids were aching for hands-on stuff and these guys opened the cowling and let them peek, up close and personal.

Lastly, one more bus ride to Borah Park for a picnic and barbecue, and closing ceremonies. The food was provided by the Idaho Aviation Association and was very tasty. The picnic was very well done. The kids were still very well behaved and cooperative; I think most of them had a lot to think about.

It would be interesting to find out how many of these young people choose a career in aviation. It's hard to imagine that they will not have been positively impacted by this experience.



Students were worn out by the third day.

Run, Melissa, Run!

By Melissa Kaplan

Have you ever woken up from a dream where you were suddenly falling out of control? That is the exact feeling I felt the first time I experienced a spin in an aircraft, thankfully in a training environment at a safe altitude. Even though I had been told what was going to happen, it didn't prevent my uncontrollable gasp and instinctual reaction of wanting to pull on the yoke. (Big no-no!!!) Looking at the ground spinning like a top was so unsettling, I'm really surprised I only gasped and that I didn't scream at the top of my lungs.

My first experience with spin training was about 13 years ago while living in South Dakota. My husband, who is also a pilot, thought I should do some training to help with my fear of stalls and spins. Just to clarify, I'm not exactly scared of them in practice; I'm scared of the ones that can happen if you get complacent or maneuver the airplane in a way to cause an inadvertent loss of control without realizing you're even doing it. You know, the ones we all read about in accident reports, when you hear someone say they're surprised it happened to such a good pilot.

As strange as it may sound, I was not comfortable having him be my instructor for this type of training, so I decided to go with one of his co-workers. This particular instructor taught the way all my previous instructors had before in that first he demonstrated the maneuver while talking me through it and then he handed the controls over to me to try. After that training, I felt substantially more confident in my skills and comfort level. However, only about a year later, I found myself having to give up flying due to financial constraints and ended up taking seven years off from this hobby. Once I started flying again I discovered two things: 1. I forgot a lot of important lessons (they were refreshed with my BFR) and 2. My fear of stalls and spins had returned.

In June of 1949, the requirement for spin training for private pilots was deleted. Many instructors and other aviation professionals predicted that accidents resulting in loss of control would increase. But contrary to that belief, this type of accident actually decreased substantially.

Since starting my job with the Idaho Division of Aeronautics more than four years ago, I have had the opportunity and privilege to fly the state planes and receive continual training each year. This has undoubtedly built my confidence back up, but I still had that exaggerated fear of the spin.

This past summer, my co-worker Tammy asked me if I'd take her place in an upcoming event she was unable to attend. She told me she had been invited to go fly with Rich Stowell and

do stall/spin-awareness training at the McCall Airport Fly-in and Open House. While I knew this would be a great experience, I couldn't help but break out in a cold sweat as my deep-seated fear resurfaced. I was absolutely terrified, but also excited. Then, it dawned on me that I had no idea who Rich Stowell was. Was this someone that I could trust with my life? Well, if you don't know who Rich Stowell is you should take the time to look him up. Among many CFI accomplishments, he was designated the first Master CFI-Aerobatics in February 2001, and has served on the Master Instructors LLC Board of Review for Master CFI-Aerobatics applicants ever since. After doing my Rich Stowell research, I was comfortable putting my life in his hands for an hour or so.

On Saturday, Aug. 1, I flew to McCall to meet this famous pilot and go for my wild ride. I expected him to instruct like every other instructor I had ever had. It started out along those lines with a very thorough pre-flight briefing. We reviewed the maneuvers we would be doing, each one start to finish in great detail. Rich emphasized the procedures, and how important it would be to follow each procedure and to "ignore what it looks like." I expressed my fears and he kindly and patiently listened and helped ease some of my apprehensions. We walked out to the airplane, where he asked if I wanted to sit in the back and observe or the front and fly. Of course, I wanted to fly if that was an option. Who wouldn't? With that, he introduced me to the front seat of his immaculate 2005 Super Decathlon and all the locations of the controls and instruments I would be in charge of manipulating. After folding myself into the front seat, Rich strapped me in using a five-point harness and away we went!

Unbeknownst to me, this is where things started to look much different from any previous instruction. Rich asked me if I was ready to do a few stalls. I expected him to take the controls and demonstrate one first, but that was not the case. He again described in detail what we would do, told me, "just listen to my voice, and do what I tell you to do. Don't panic, just take the time to listen and do. You have plenty of time." He also emphasized that I needed to stay extremely active on the rudder peddles like I was running as fast as I could and that that still wouldn't be fast enough. Not stomping on them, but just actively engaging them.

I was instructed to decrease the power and gently pull the nose up until the stall. Rich was in my head calmly but authoritatively saying, "Run Melissa, run. Keep running. Faster Melissa. Run, run, run." However, even after being told what to expect, I must admit when I felt the wing suddenly drop and the plane stall the first time, I loudly gasped, to my immediate embarrassment, but continued to fly the plane and recover successfully.

Run Melissa

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Run Melissa

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Comfortable with simply stalling the airplane, it was time to do my first spin. I told myself I would remain calm and listen to Rich's tranquil voice in my head through the headset, and just think before doing as the instructions were given throughout the maneuver. "Okay, Melissa, bring the nose up, slow and steady pull to your belly button, that's it, Melissa, kick full left rudder, stick back, hold it, hold it right there, right rudder, full right, relax the stick, wriggle your feet," and just like that my first spin was complete and the airplane was set right again.

I had done these before many years prior to this, but it still came as somewhat of a shock to be staring at the ground spinning before my eyes. This time I didn't panic, but listened to the voice of reason seated behind me and talking in my ear.

In an article by David Jack Kenny called "To spin or not to spin," he states, "The great majority of spin-related fatalities result from uncoordinated stalls in the traffic pattern or overly aggressive low-altitude maneuvering. The chief safety benefit of spin training would therefore seem to lie in improving the ability to recognize an incipient spin and prevent it from ever occurring."

There are many reasons someone may want to get spin training. My reason was to overcome my fear of stalls and spins. Other reasons may be simply for emergency training, to increase mastery of the aircraft and unusual attitudes or simply for the fun of it. I admire the latter.

According to "Stall/spin: Entry point for crash and burn?", an article in AOPA magazine, "Pilot Operating Handbooks for various typical GA aircraft estimate average altitude loss during stall, assuming proper recovery technique, as between 100 and 350 feet." While, "recovery from a spin is a far different matter, and takes much more altitude, even with skilled pilots."

In a study done by NASA in the late 1970s, "the average altitude loss in spins done with a Grumman American AA-1 (Yankee) and a Piper PA-28R (Arrow), two popular single-engine aircraft, was nearly 1,200 feet."

While spin training is no longer required for private and commercial ratings, I personally feel the training was invaluable. However, during my debrief I expressed my fear of that base to final predicament we hear about and wanted to confirm with Rich what I'd been told before…that as long as you stay coordinated (ball centered) you can keep yourself out of trouble. According to Rich, this is not the case, so he has offered a part two training event to educate me on this.

Stay tuned for part two!