



It's a Bird, It's a Plane, It's a ...

By Rebecca Burghy

Most pilots in the Northwest are accustomed to seeing agricultural aircraft going about their daily work, flying low passes over crops and fields to spread seed and crop protection products to maximize our food, fiber and biofuel supplies. Non-pilots, however, often are startled by what looks like daring or dangerous flying without realizing those activities are necessary to keep our grocery stores and restaurants supplied with a wide variety of quality, fresh and healthy foods. Our ample food crops rely upon the tireless efforts of farmers and the invaluable services of crop dusters, or agricultural aviators, as they are known today.

Idaho's agricultural aviators are professional pilots and businessmen who make sizeable investments in high-performance aircraft, equipment and training to support high-yield agriculture, protect forests, rehabilitate wild-lands, and protect the public from disease-carrying pests.

Pilots devote countless hours to the science and practice of precise aerial applications. The high elevations and

heavy loads create unique challenges, and crop-friendly critters such as bees, necessitate night application flights to ensure they are not harmed by applied substances.

Today's herbicides, fertilizers and fungicides are much less toxic and much more effective than they once were, requiring less of each while increasing crop yields. Superior pilot technique and improved aircraft equipment and avionics have vastly improved a pilot's ability to apply the exact quantity of material when and where needed, thus minimizing waste and runoff.

Agricultural aviation plays a significant role in large-scale farming and ever-increasing crop yields in the United States. Our farms not only feed the U.S., but a good portion of the world, and ag pilots take their part of that responsibility very seriously.



Photograph courtesy of Katie Baker

pilots and engineers at McCook Field in Ohio fashioned a crude metal hopper, attached it to a Curtiss Jenny, and loaded it with powdered lead arsenic. Lt. John Macready spread it over a nearby fruit grove infested with Catalpa sphinx moths.

The experiment was a complete success, and farmers were soon clamoring to have their cotton fields, corn fields and fruit groves "dusted" to kill pests and increase plant growth and yield. Pilots of that era rushed to convert aircraft to meet agricultural demand, often flying as both crop dusters and air mail pilots. As the industry evolved and farm size increased, those aircraft gave way to the surplus Cubs and Stearman Kaydets of WWII. Soon after, Grumman, Leland Snow and others began designing and building aircraft for the sole purpose of aerial application.



Photograph courtesy of Katie Baker

Looking back in history, airplanes played an integral military role in World War I, but the aviation industry was still a novelty to most civilians in 1921 when

See Plane

Continued on page 2

INSIDE

Safety Wire	4	Color of Aviation	10	Radio Chatter	13
Medical Matters	8	Compass Rose	11	Bookworm	15

Crop Dusting: An Agricultural Ballet

By Jim Freeman

Any traveler in Idaho farm country has seen them – crop duster planes that seem to rise out of the earth as they reach the end of a field and pirouette for another pass. Their vital service to agriculture begins in the early spring with the application of dry fertilizer. As the crops become established, the planes return with herbicide. Later on, they spray fungicide to crops that need it. Next, they apply insecticide. In the winter, they sometimes seed grass on top of the snow.

Some farmers use ground applicators with their enormous booms. Those who favor aerial application say it avoids crushing the crops and compacting the wet soil, as often happens with the use of ground rigs. Farmers make their individual choices based on cost, time and convenience.



Courtesy of Jeff Zenner Photography, www.jeffzenner.com

A Camas Prairie farm boy who dreamed of flying, Ken Kuther hung around legendary Grangeville airman, Frank Hill, until he earned his private pilot's license under the tutelage of Tom Gehring of Cottonwood. He watched Frank's crop dusting technique and eventually purchased a Cessna 188 Ag Wagon. He progressed to a radial-powered Ag Cat and finally to his present plane. Ken now makes his living flying the rolling wheat fields of the Camas Prairie in his Super Ag Cat with a Garrett-1 turbine.

In the spring, his ritual begins at 4 a.m. with the essential preparation of a pot of coffee for himself, his helper, Dave Denson, and their frequent visitors. Dave consults the day's schedule and

begins loading the plane with material and fuel for the first job, while Ken carefully checks wind, weather, field locations and field dimensions for the day. He plans on a fuel burn of Jet A at 37 to 40 gal/hr. By 5 a.m. near spring solstice, the sound of the big Garrett on the strip in the heart of town awakens the sleeping residents.

As he ferries to his first job, Ken programs his GPS for the field he plans to spray. A triangular field of 40 acres takes about as much time as a rectangular field of 80 acres because of

the turnaround time. His ferry speed is around 130 mph, and his application speed varies from 100 to 115 mph. He eats small frequent meals and drinks coffee to remain alert through a flying day that extends to 9 p.m. during the peak of the season. He takes advantage

of windy days by working on an exercise routine to combat the endless hours of sitting in the cockpit.

Ken cites weather and natural- and man-made obstructions as his biggest headaches. Unlighted cell towers and meteorological test towers are especially hazardous. He says Nez Perce Tribe officials have been great to work with, in regard to their towers. He praises local chemical representatives for keeping him abreast of the characteristics of the newest materials. His list of "don't miss" events is annual seminars and conventions with PAASS (Personal Aerial Applicator Support System), PNWAAA (Pacific Northwest Aerial Applicator Alliance) and IAAA (Idaho Agricultural Applicator Association).



Courtesy of Jeff Zenner Photography, www.jeffzenner.com

Ken grins about his greatest pucker factor moments and says, "Oh, I broke a prop bolt and one prop blade went flat while the other stayed at pitch, and I broke an elevator servo, and I had two cylinders bust, and a turbine plenum split ... but that's about it."

About the future of aerial crop dusting, Ken says the challenges constantly change. Endless judgment calls: Balancing the farmer's urgency against the pilot's safety, protecting peonies from drift at a dream home built on the edge of wheat fields, dodging the new cell tower erected under the minimum height for FAA-required lighting, keeping up with the latest chemicals. Fuel costs rise. Improved equipment must be purchased. Aircraft repairs must be made. He pauses, and quietly says, "But I love my job. Flying's my life."

Plane

Continued from page 1

Today's Air Tractors and Thrushes are rugged and dependable, with large engines and hoppers, and modern avionics to accurately apply the required crop protections and enhancements, seeding and weed control. Many of those substances now are in liquid form rather than powder (or dust), and the moniker has evolved to better reflect not only the items applied, but also the level of professionalism of the men and women involved in this small, but vital segment of aviation.



From the Administrator:



The Drones are Coming!

Aviation entrepreneurs are looking to hire employees who will fly without pay, can stare ahead for 30

straight hours without blinking, never utter a complaint and are easily replaced if they crash. That, my friends, is a pilotless aircraft – one that likely will be sharing airspace with you soon.

Over the past ten years, military UAS (unmanned aircraft system) use has grown from a few experimental aircraft to more than 10,000 flights annually. They are currently training more UAS pilots than traditional ones. The same technology explosion the military has seen is about to transform the civil aviation industry to support agriculture, law enforcement, forest fire management, pipeline patrols, search and rescue, and hundreds of other applications.

The 2012 Congressional reauthorization of the FAA budget tasked the FAA with safely integrating drones into the U.S. airspace by 2015. To study this process, the FAA will select and monitor six national test sites to provide the data required to accommodate both manned and unmanned aircraft into the national airspace system. I am happy to announce that Idaho is on its way to becoming a player in this inevitable UAS industry.

Last year, the governor's office asked the Idaho Department of Commerce to lead a task force that would ensure our state is given serious consideration. Director of Commerce, Jeff Sayer commissioned a working group comprised of representatives from the Division of Aeronautics, private UAS businesses, the state universities, and local aviation and aerospace companies.

Our group developed a foundation that could prove pivotal in building a UAS/Aerospace industry in Idaho. We worked around the clock, identifying the advantages of locating an FAA test site in our state. The advantages identified include: available airspace, favorable weather, a strong military presence, UAS experience at Idaho National Laboratory and a wealth of retired military personnel with the knowledge and skill in UAS technology.

Also, combining all the engineering research under way at our state universities will result in a synergy of aerospace excellence.

In May 2013, Idaho was one of 24 states that applied to become a coveted FAA UAS test site. We flew to Washington D.C. to promote Idaho to the FAA and the industry at the annual Association for Unmanned Vehicle Systems International (AUVSI) conference.

We emphasized Idaho's favorable business climate, our history of promoting a strong aviation industry and the fact that we currently house the largest UAS test area in operation. However, what I really believe could win them over is the "can-do" attitude and teamwork displayed by the aviation business professionals in Idaho; one that is poised to stand out nationally.

When I hear pilots communicate how threatened they feel by UAS presence, I remind them of the two ways we can react to technology; we can either embrace and integrate it, or we get run over by it.

It's encouraging that once again, Idaho aviation is preparing for the future. We proudly hosted the nation's first commercial airmail flight in 1926; and likewise, I believe we have a good shot at hosting the first UAS test flights next year.

The national UAS industry will see an economic impact of \$82 billion between 2015 and 2025 creating more than 100,000 high paying jobs. A Texas study determined that a single FAA test site would have an economic value of \$802 million and more than 8,000 jobs.

Buckle up and hang on, we're in for an exciting flight ... with or without a pilot!

Tailwinds-

Mike Pape

ITD Aeronautics Administrator

The **Rudder Flutter** is published by the Idaho Division of Aeronautics. Articles appearing in this publication are the opinion of the writer and do not necessarily represent the views of the Staff, the Administrator, or the Department. All reasonable attempts are made to ensure the accuracy of the articles contained herein. The **Rudder Flutter** is published quarterly. All articles must be submitted to this office for review.



Idaho Transportation Department

Governor C.L. "Butch" Otter

Director Brian Ness

Administrator Mike Pape

Aeronautics Advisory Board

Chairman Rodger Sorensen

Members Colleen Back, Chip Kemper, Dan Scott, and Mark Sweeney

Division of Aeronautics

3483 Rickenbacker St., Boise, ID 83705

Website: <http://www.itd.idaho.gov>, Ph: 208.334.8775

Rudder Flutter Editor: Tammy Schoen

Email: tammy.schoen@itd.idaho.gov

Assistant Editors: Mel Coulter and Steve Grant

Graphic Design: Pauline Davis

The Idaho Transportation Department (ITD) is committed to compliance with Title VI of the Civil Rights Act of 1964 and all related regulations and directives. ITD assures that no person shall on the grounds of race, color, national origin, gender, age, or disability be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any ITD service, program, or activity. The department also assures that every effort will be made to prevent discrimination through the impacts of its programs, policies, and activities on minority and low-income populations. In addition, the department will take reasonable steps to provide meaningful access to services for persons with Limited English Proficiency.



Safety Wire

Wind and Terrain Analysis

By Dan Etter
ITD Division of Aeronautics

Wind flows over and around obstacles in a consistent and predictable manner. The ability to predict the flow of wind is the result of understanding and practicing wind and terrain analysis (WTA) principles, rules and methodologies that have been developed through research and experimentation, in both the laboratory and field.

The first requirement to achieve this skill is to believe it can be accomplished. Pilots may dismiss the notion as unnecessary or believe it's far too complicated to understand, especially when it comes to Idaho's mountainous terrain. However, airflow responds to the same laws of fluid dynamics as water or any other gas. While we often cannot see the movement, we can always detect it directly or indirectly. It is this ability that allows us to develop the skill to predict, and ultimately, "see" the wind.

Air flows much like water, and has characteristics that aviators should note and test while flying in the backcountry. Air follows the path of least resistance, just like water in one of our Idaho streams. Air will always take the shortest and/or least-obstructed route to fill any lows created by high winds over rugged terrain. In canyons and drainages, the wind accelerates in the resultant venturi because of increased pressure differentials. In winding turns, the wind accelerates to the outside of the turn, just like water in a stream, leaving eddies on the inside of the turns. When colliding with an equal and opposing force, pilots can expect an opposite and turbulent flow. This opposite reaction can take the shape of the face of a cliff or another air current.

In order to understand and apply the cornerstone of mountain-wind predictions, it's important to combine the principles above with the characteristics of stability and the mechanics of prevailing and valley winds.

The five zones are updraft, downdraft, turbulent, dispersal and stable zones (diagram 1). The demarcation line is the line that separates the updraft and

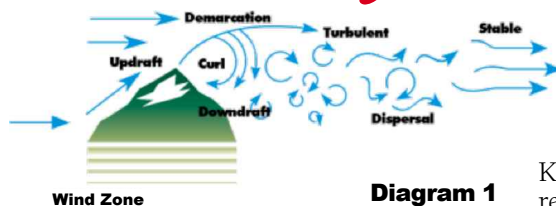


Diagram 1
downdraft zones; and the curl, or low pressure, is created by the wind passing over or around an obstacle. The demarcation line's angle and height is established by three factors: the velocity of the wind, steepness of the slope and angle at which the wind strikes the slope. It is often considered the extension of the slope as it rises above and beyond the obstacle. The demarcation line bends downward and horizontally as it interacts with winds aloft. Its actual location becomes important in cross-country operations (diagram 2).

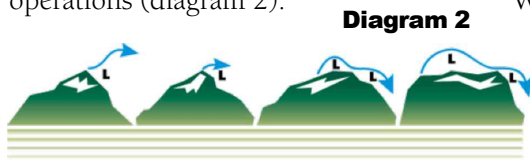


Diagram 2
The low-pressure area is created on the leeward side of the obstacle by the very passage of that wind, and it is the "engine" that drives the ensuing turbulence. The wind will attempt, via the path of least resistance, to fill the low. The wind must come back from the downdraft zone to attack the low-pressure areas. This initiates a pattern of turbulence rotating on a horizontal axis, which extends leeward until frictional interaction with other air molecules slows the swirling pattern, allowing the air currents to sort themselves out (dispersal zone) and return to a stable flow/stable zone (diagram 3).

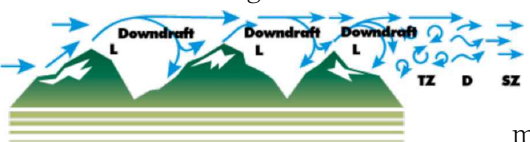


Diagram 3
The updraft and downdraft zones are a result of the intervening obstacle. The remaining three zones are a result of the creation of low pressure leeward of the obstacle. If the obstacle has sharp drop-offs on either side, then the movement to fill the low is lateral, or "wrap-around," and the rotational plane of eddies and ensuing turbulence changes to reflect this direction. The rotational axis moves from horizontal to vertical and all points

in between. This is particularly noticeable around isolated, sharp peaks, shoulders (abrupt change in terrain relief) or buildings.

The zones expand with an increase of velocity, slope angle or impact angle, and they contract when the aforementioned decrease.

Knowing this is important for two reasons. First, if the upper wind's direction and velocity are known, pilots with a little experience can judge the effects of the wind by simply studying a topographical map. To avoid the worst of the zones, they can plan safe routes. Second, while en route, the pilot can judge the severity of the zones by how far leeward of the obstacle, the dispersal zone (light turbulence) is encountered. The farther the dispersal zone is from the obstacle, the greater the severity of the turbulence and downdraft zones.

When additional obstacles follow immediately after the initial obstacle, then some zones may be eliminated altogether. This is often the case in a series of peaks or ridgelines (diagram 3). In this situation, the turbulent, dispersal and stable zones can be eliminated on the initial and middle ridges since most of the turbulent zones are abbreviated or absent. The key is discovering if and where the downdraft zone impacts the subsequent obstacle. The ensuing updraft zones can be compressed due to the strength of the downdrafts.

Because of compression, the ensuing updrafts become very powerful. This has serious implications for aircraft transitioning narrow valleys. In high winds, there is minimal safe maneuver room in narrow valleys, except within the narrow confines of the updraft zones, or the "curl," or low pressure. Pilots who need to execute or to maneuver in this confined airspace must use great caution and have intimate understanding of the environment and their airplane's capabilities. Powerful rotational patterns are trapped between the downdrafts and the upwind ridges (diagram 3).

In this diagram, the point where the downdraft descends and impacts subsequent terrain is known as the

See Wind

Continued on page 5



Your Tax Dollars at Work

Idaho Airport Aid Program (IAAP)



**By Bill Statham,
Project
Manager, ITD
Division of
Aeronautics**

During the past year, Idaho airports invested nearly \$26

million to maintain and improve facilities. The Division of Aeronautics, through the IAAP, contributed to that effort. The IAAP provides for the discretionary allocation of grant funds to Idaho airport owners. Only public entities are eligible to participate in the Idaho Airport Aid Program.

The funds are derived from Idaho's Aviation fuel tax. The IAAP is a "trustee and benefit" program that provides

matching funds to municipal governments for public airport improvements.

Allocations must meet high-priority needs and achieve maximum benefit and use of available funds. The allocation program is designed to provide the greatest and best use of limited Idaho Airport Aid funds and maximize availability of federal funds.

The primary goal of the allocation program is to further the proper development of the statewide airport system and facilitate fair distribution of aviation tax money. It is a modest program with a budget that varies from year to year. There are five airport types where assistance can be provided:

- Primary (Commercial Service)
- General Aviation (Federally assisted)
- General Aviation Community
- Small (Emergency) Projects
- Small Airport Planning Studies

During state fiscal year 2014, which corresponds to federal FY-13, airports received the following funding assistance:

- Primary Service airports received \$15,108,607 in FAA grants, which each airport owner matched, for a total investment of \$16,115,847
- General Aviation airports received \$8,852,423 in FAA grants and \$467,213 in state grants, which each airport owner matched, for a total investment of \$9,836,026
- An additional \$7,787 was identified for Small (Emergency) Projects
- The total statewide investment is \$25,959,660, of which the state provided \$475,000.
- There are insufficient funds to provide State funding to primary and community airports and planning studies.

		GRANT AMOUNTS			
AIRPORT	PROJECT DESCRIPTION	TOTAL COST	FAA-AIP (90%)	Local (5.25%)	IAAP (4.75%)
BEAR LAKE COUNTY (PARIS)	Rehabilitate Runway and Taxiway	\$ 913,657	\$ 822,291	\$ 47,967	\$ 43,399
BLACKFOOT (McCARLEY FIELD)	Rehabilitate Runway, Taxiway, Apron	\$ 474,566	\$ 427,109	\$ 24,915	\$ 22,542
BONNERS FERRY (BOUNDARY COUNTY)	Acquire Land For Approaches	\$ 677,000	\$ 609,300	\$ 35,542	\$ 32,158
CALDWELL INDUSTRIAL	Rehabilitate Runway, Taxiway, Apron & Wildlife Hazard Assessment	\$ 306,052	\$ 275,447	\$ 16,068	\$ 14,537
CHALLIS	Conduct Environmental Study	\$ 166,667	\$ 150,000	\$ 8,750	\$ 7,917
COEUR D' ALENE AIR TERMINAL	Rehabilitate Taxiway and Apron & Sustainable Management Plan & Wildlife Hazard Assessment	\$ 764,097	\$ 687,687	\$ 40,115	\$ 36,295
COUNCIL MUNICIPAL	Rehabilitate Runway, Taxiway, Apron	\$ 209,797	\$ 188,817	\$ 11,015	\$ 9,965
GRANGEVILLE (IDAHO COUNTY)	Rehabilitate Runway	\$ 790,707	\$ 711,636	\$ 41,512	\$ 37,559
JEROME COUNTY	Rehabilitate Runway and Taxiway	\$ 145,178	\$ 130,660	\$ 7,622	\$ 6,896
KELLOGG (SHOSHONE COUNTY)	Conduct Airport Master Plan Study	\$ 137,434	\$ 123,691	\$ 7,215	\$ 6,528
PRIEST RIVER MUNICIPAL	Construct Taxiway and Apron, Rehabilitate Apron, Improve Access Road	\$ 728,400	\$ 655,560	\$ 38,241	\$ 34,599
REXBURG-MADISON COUNTY	Rehabilitate Runway, Taxiway, Apron	\$ 474,292	\$ 426,863	\$ 24,900	\$ 22,529
SALMON (LEMHI COUNTY)	Rehabilitate Taxiway, Extend Runway	\$ 2,358,496	\$ 2,122,646	\$ 123,821	\$ 112,029
SANDPOINT	Rehabilitate Apron & Update Airport Master Plan Study	\$ 1,530,362	\$ 1,377,326	\$ 80,344	\$ 72,692
WEISER MUNICIPAL	Rehabilitate Apron and Taxiway, Install Miscellaneous NAVAIDS	\$ 159,322	\$ 143,390	\$ 8,364	\$ 7,568
AERONAUTICS	Small Emergency Projects	\$ 7,787			\$ 7,787
GRAND TOTAL SFY-14 IAAP PROGRAM		\$ 9,843,814	\$ 8,852,423	\$ 516,391	\$ 475,000
APPROVED BY AERONAUTICS ADVISORY BOARD 20 JULY 2013					

Wind

Continued from page 4

strike point. Because of the lateral resistance of other air molecules, the airflow at this point can only go up or down. In freshly fallen snow, this area is visible. If there are no visual indications and the goal is to remain

above the strike point, then a pilot needs to fly at altitudes equal to the ridge tops. When the updraft zone is compressed as indicated in the previous paragraph, then the pilot needs to fly laterally, as close to the terrain as safety permits, to remain in the updraft. In these conditions, the route and altitude are dictated by observed or suspected conditions.

Having an understanding of the wind and its interaction with terrain can mean the difference between success and failure.

Note: The information in this article was presented as part of the HAATs curriculum at the High-Altitude Army Aviation Training Site held in Gypsum, Colo. in 2003 and 2009.



**Precision
Aviation
Maintenance
is located at
the Magic
Valley
Regional
Airport,
KTWF, in
Twin Falls,
Idaho.**

Precision Aviation Maintenance, Inc. Twin Falls, Idaho



**Aircraft
Maintenance & Repair**

Phone: 208-736-3374
Fax: 208-735-1291
E-mail: mx@paviation.com

Our mechanics have over 40 years of aircraft maintenance experience providing maintenance and repair services for all general aviation aircraft. Our services are offered to the owners and operators of both piston and turbine aircraft. We are a Standard Aero Customer Support Center and a factory install center for Ice-Shield. Call or stop by to meet our staff and schedule your next service or visit our web site at www.paviation.com. 208-736-3374

BILL WHITE INSURANCE

WE SUPPORT THE IDAHO AVIATION ASSOCIATION

A small propeller plane is shown on a sandy beach with mountains in the background. The plane is white with blue and red stripes. The background features a rugged, hilly landscape.

FREE HAT!

A dark blue baseball cap with a logo that reads "A Pilots Life".

With Your Quote Request
Use Promocode IDAHO

GIVE US A CHANCE TO SAVE YOU MONEY!
BWHITEINSURANCE.COM - 800.666.IFLY



Cockpit Conversation

Night Flight



By Cade Preston,
ITD Division of
Aeronautics

Recently, here at the Division of Aeronautics, a co-worker and I were

preparing for our next day's trip by reviewing our itinerary and ensuring all our bases were covered. Airplane fueled...checked. Flight plans filed...checked. Passengers and destination confirmed...checked. As I reviewed the departure and arrival times one more time, I developed a funny feeling in the pit of my stomach. Pilots current for night flight...Oh snap! NOT checked!

"How did I overlook that?" I thought. The long days of summer had caught me off-guard. Daylight during Idaho's summer lasts more than 16 hours, giving most pilots little opportunity to maintain night currency. Now that we are in the fall flying season, and rapidly approaching winter, let's review some considerations for night flight.

Federal Aviation Regulations (FARs) define **night** as "the time between the end of evening civil twilight and the beginning of morning civil twilight, as published in the American Air Almanac, converted to local time." Umm, okay. How does this help me? Really, it doesn't. Thankfully for pilots, the FARs do not base night-flight currency, or aircraft lighting

requirements on the technical definition of **night**. Let's take a minute and review both of these.

Night currency- FAR 61.57 (b) states, "...no person may act as pilot in command of an aircraft carrying passengers during the period beginning 1 hour after sunset and ending 1 hour before sunrise, unless within the preceding 90 days that person has made at least three takeoffs and three landings to a full stop during the period beginning 1 hour after sunset and ending 1 hour before sunrise." So for the purposes of pilot currency, **night flight** is from one hour after sunset to one hour before sunrise. Official sunrise and sunset times can be easily looked up online. I suggest sticking to official government websites. I like the US Naval Observatory website, <http://aa.usno.navy.mil/>.

As a pilot, are you allowed to fly at night without being night current? Yes, you are! The benefit of being night current is that you are allowed to carry passengers during the period starting one hour after sunset and ending one hour before sunrise. Let's suppose I am not night current and am on a flight carrying passengers. Official sunset for my destination is 6:52 p.m. By what time am I legally required to be on the ground? The answer is 7:51 p.m.

If you are not night current, then you must obtain night currency before carrying passengers. A solo night flight that includes three takeoffs and three **full-stop** landings will fulfill this requirement. These landings can be stop-and-gos, but not touch-and-gos. Another note here; currency is specific

to the category, class, and type (if a type rating is required) of aircraft to be flown. Just because you are current in your multi-engine C-310 does not make you current in your C-182. You must fulfill the night takeoff and landing requirements in the class of airplane in which you will be carrying passengers. If you have not flown at night for some time, I recommend contacting your local flight school to arrange for a night-currency flight with a certified flight instructor.

Aircraft lighting- The subject of aircraft lighting is much simpler than currency. FAR 91.209 (a) addresses the requirements for aircraft position lights. Position lights (also called navigation or nav lights) are required to be turned on from sunset to sunrise. That's it! Easy, right? OK, maybe not so easy if you have overcast skies. In that case, use the official sunrise/sunset times for the location in which you are operating. During overcast conditions, leaving position lights on past official sunrise or turning them on before official sunset is good operating practice, as reduced sunlight conditions exist on these days.

According to FAR 91.209 (b), anytime (day and night) an aircraft is operating, the pilot must turn on the anti-collision lights. Aircraft not equipped with anti-collision lights are exempt from this rule. However, if the pilot determines that, because of the operating conditions, it would be in the interest of safety to turn the lights off, he/she may do so. Night taxi operations are a classic example of an operating condition that would justify turning off

Night Flight

Continued on page 8

Tax & Business Assistance
Providing a Mile High Level of Personalized
Service.

Bruce "Sparky" Parker



Parker, Wilkerson, & Nuxoll, CPAs, PLLC
208-321-1323 parkerb@pwncpa.com

HDR

www.hdrinc.com

Driggs-Reed Memorial Airport
Runway and Taxiway Design and
Construction



The Power of More

- Airport Planning
- Airport Engineering
- Architecture
- Environmental Services
- Construction

Boise | 208.387.7000 Coeur d'Alene | 208.676.1130



Obstructive Sleep Apnea

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



We all get tired, and sleep is the only real treatment for this. Yes, there are things you can do to prolong the inevitable, like drinking coffee, but in the end, you have to sleep. For some people, even when they fall asleep, they do not get the rest they need because of obstruction to their breathing. Consider trying to sleep under water and having to wake up to go to the surface to breathe – hard to get real sleep! This is what happens with obstructive sleep apnea. Up to 7 percent of all middle-aged people, 70 percent of clinically obese people, up to 50 percent of people with heart disease and 60 percent of people who have had strokes suffer from sleep apnea.

So, what actually is sleep apnea? The word “apnea” means “being without respiration.” Obstructive sleep apnea means one suffers repetitive upper airway obstruction during sleep as a result of narrow airway passages. In most cases, the cause of this is additional fatty tissue in the neck and around the airways because of obesity. The added fatty tissue blocks the airway enough to literally close the breathing passages. This is especially true when overweight people sleep on their back instead of on their side. Gravity pulls the fatty tissue down into the air passages, and breathing is blocked.

A person with obstructive sleep apnea gets partial obstruction (Hypopnea) or total obstruction (Apnea) hundreds of times each night. The net effect is that the brain does not receive enough oxygen. There are multiple problems that can arise from this condition, including high blood pressure, cardiovascular system strain, increased risk of heart attack and increased risk of stroke.

Sleep apnea is the equivalent of having a blood alcohol of 0.08! In many states, this is the same as being legally drunk! If you add time zone changes and perhaps a glass of alcohol in the evening, you have a very serious combination.

Usually, we get a “wake-up” call from our brain after we have not breathed for 10 seconds, but people with sleep apnea might go 30 seconds before they start gasping for breath.

How do you recognize Obstructive Sleep Apnea? Here are some things to look for:

- Loud and excessive snoring
- Difficulty concentrating, thinking or remembering
- Daytime sleepiness, fatigue or frequent naps
- Headaches
- Irritability (crankiness)
- Short attention span
- Large neck circumference (15 inches or greater)

What can you do?

- If you are overweight, get the pounds off. This is very important as this can correct the problems in the neck. A 10 percent weight loss will decrease Obstructive Sleep Apnea by 25 percent.
- Change sleeping position to the side or the stomach.
- Change the sleeping environment with perhaps a different mattress, temperature, etc.
- A dental appliance that thrusts the lower jaw forward can help those with mild to moderate Obstructive Sleep Apnea. This helps about 75 percent of those affected.
- Consider a Continuous Positive Airway Pressure (CPAP) machine. The machines are very effective non-surgical treatments for any level of Obstructive Sleep Apnea and hold the tissues open by increased air pressure.

If none of these work, and the weight is gone, then consider surgery, but understand the surgical results are not consistent. The best and easiest

alternative for most people is pushing away from the table!

The most important thing is recognizing the symptoms. The treatments can be very effective, and if the treatment is documented, you can maintain your medical certificate.

Sleep well.

Night Flight

Continued from page 7

strobe-type, anti-collision lights. Not doing so may present a blinding hazard or distraction to oneself and others. Just make sure to turn them on when taxiing on to the runway for takeoff. I would also recommend turning all aircraft lights on when crossing any runway, day or night.

Additional night considerations-

Idaho is a vast and sparsely populated state. It is amazing how dark it gets in remote areas. If you are not instrument rated, I recommend avoiding night flight in remote unlit areas. Spatial disorientation has taken the lives of many VFR pilots operating on a clear moonless night. In addition, night flight over mountainous terrain brings added risks. I do not recommend night flight over mountainous terrain in any single-engine aircraft. A mechanical failure in those conditions spells almost certain disaster. Risks run higher for multi-engine aircraft as well. The single-engine service ceiling on many multi-engine airplanes is lower than much of Idaho's terrain. Avoiding that terrain may be impossible in the dark. For these reasons I recommend sticking to night flight over flatter areas, such as the Snake River Plain.

Night flight can be a fun and rewarding experience. The more knowledge you have on the subject, the more empowered you will be in undertaking it. Take some time to review the aeromedical factors associated with night flight, such as anatomy of the eye and visual illusions associated with night flight.



The Common Thread of Perfect Landings

The Fundamentals of Mountain and Canyon Flying - Part 1

By Lori MacNichol – McCall Mountain and Canyon Flying Seminars LLC

Learning to fly, and the thought of mountain flying, may not seem to fit well in the same sentence. But, I urge you to think twice. As the owner and operator of a flight school that teaches both primary flight instruction and mountain and canyon flight instruction, it has been my privilege to teach and interact with more than a thousand pilots and participants. I am here to tell you there is a common thread that weaves mountain and canyon flight training perfectly into your primary flight lessons.

You might be thinking; wait a minute, I thought mountain and canyon flying was an advanced form of flight training. I am too overloaded with just the tasks and requirements of getting my "Private Pilot's License," let alone mountain flying! Yes, you do have your hands full as a student pilot. But, I encourage you to seek just a few hours of flight instruction with a qualified mountain flight instructor.

This does not mean you need to travel to the high country. It would be a benefit for you to experience, firsthand, an eye-opening "density altitude effect." The amazing beauty of God's country and the first time you drop below the

mountain rim, descend into the canyon, and negotiate your first dirt-strip landing along a lazy mountain stream, is probably worth the price of admission. Flight-training enthusiasm and excitement doesn't get much better than this.

A perfect landing is the common thread in all flight training. Never mind that it's never perfect. Never mind that the landing



Lori MacNichol

process is a complicated combination of many small decisions. All this preparation is what you focus on in primary instruction. You will always remember your instructor saying "A good landing is ninety percent pattern and approach."

See Landings

Continued on page 12

Big Creek Cabin



MLS# 519914



Michael Anderson

208-634-2100

www.McCallRealEstate.com

Outstanding backcountry log cabin a short walk from Big Creek Airport. Spectacular views of surrounding forest and Profile Summit from this private 4+ acre partially timbered setting. Unique cabinets carved from solid logs, and many custom interior details. Well and septic system plus water rights, but electric generator required. Wrap around deck with built in BBQ.



The Color of Aviation: *Go Fast, Turn Left*

**Contributions from:
Lamar and Debbie Harris**

Gary Hubler could honestly say aviation was his life.

He logged more than 21,000 hours of flight time, was type-rated in many different aircraft, raced a number of different warbirds, won five consecutive National Formula One Championships, competed in aerobatic competition, jumped out of a perfectly good plane, instructed too many students and pilots to count and helped with countless airplane projects and annual inspections.

Gary always wanted to be a pilot like his father and mother. With instruction from his father and family friend Dick Miller, Gary soloed at age 16 and got his private pilot's license in 1973 at the age of 18. That same year, Gary married

his high school sweetheart, Debra Jean, and started working as an aircraft mechanic, which he did for three years. However, he never stopped talking about flying.

He hung out at the airport and flew with anyone who would take him along. In 1975, he took up skydiving and completed his training for his commercial license. Through hard work, and a little help from his dad, Gary landed a job flying for Clarks Air Service as a crop duster. He sprayed his first field on his 21st birthday and worked on his instrument and instructor ratings. In his off-season he flew a Beech-18, and eventually a DC-3, hauling the mail. He loved flying the DC-3 and took as many friends as possible with him so they could also experience a flight in the airplane.



Gary Hubler

wanted to have a third child, hoping for a girl, Gary made her a deal; if she earned her pilot's license, he would agree to try for a daughter, to add to the two boys they already had. She began instruction the next day. Eighty hours later, she received her private license. Daughter Rebecca arrived soon afterward.



Sharing his love of flying was something Gary did whenever possible, teaching friends, his two brothers, and his two sons. Gary's middle son, Jon, 16, was working toward his license when he was killed in a plane crash with one of Gary's friends. Of the risky flying Gary did, Debra Jean says, "People always asked why I didn't make him stop flying. I just told them that flying is his life, I could never take that away from him; he lives to fly and share flying with others."

When Debra Jean came to him and told him she

To sign off on the work he and his dad were doing installing turbine conversions on spray planes, Gary pursued his mechanic's license in 1987 and later received his airline transport pilot (ATP) and certified flight instructor ratings. In 1989 he received his multi-engine instructor certificate.

Emergency procedures, being on the centerline and cross-wind landings, were a focus while receiving instruction from Gary. If you were his student, he would make sure to stop your prop during a flight. He wanted to be sure your first emergency was a controlled one. If he heard of a safety issue, he would do all he could to help correct the problem. He also was an excellent crop-dusting instructor and even taught several pilots how to fly a float plane. The last certificate he earned was his commercial glider rating.

In the summer of 1984, Gary was offered a chance to fly a race plane in the Reno Air Races. It was the start of his 23-year

See Go Fast

Continued on page 11





George Palmer Putnam Award

By **Sandra Storhok,**
Eastern Idaho 99

As Amelia Earhart's publicist, publisher and widower, George Palmer Putnam proposed an award as a means of honoring anyone who supports an individual member of the group (known as a "49 1/2"), a Chapter or Section, or the organization as a whole. The George Palmer Putnam 49 1/2 Award was established by the 99s in 2006 to recognize exceptional support of the 99s.

The Eastern Idaho 99s nominated Bob Jones for the George Palmer Putnam Award, which was awarded to him on July 13, 2013. Bob personifies the values and contributions of the George Palmer Putnam Award with the high level of support he has given the 99s. Skills, the gift of teaching and wisdom – Bob Jones has them all. Surely, instructing more than 1,000 people to fly must be some kind of record! He taught Onita Hoff, a charter member of the Idaho Chapter, how to fly, as he did her son, daughter and grandson.

Bob has been loved and revered by the 99s as far back as I can remember. He has been the Eastern Idaho 99s' resident instructor for our annual mountain-flying clinic at the Flying B Resort Ranch on the Salmon River in central Idaho. Backcountry students will do just about anything to get the opportunity to learn from this war-trained, mountain aviator because of his reputation for being so calm and steady. His calm nature promotes self-confidence and makes learning fun.

When we offer our Flying Companion Seminars, Bob is always eager to help out. We especially appreciate how articulate he is in his presentation on "How Airplanes Fly" as he de-mystifies the gift of flight. Even the most white-knuckled flying companions are convinced that flying can be both safe and fun.

Although Bob is now in his 80s, he still is the same guy many of us knew when we were younger. Every encounter is enjoyment intertwined with teaching moments. Regardless of how many hours

have passed, inevitably, the time you spend with him seems to end too soon.

It's hard to believe that this natural-born teacher didn't begin his aviation career as an instructor. Bob is from the World War II era, when transitioning from high school to cadet school with the Army Air Corps seemed like the thing to do. Commissioned as an officer in 1944 at the age of 19, Bob learned to fly T-6s at Luke Air Force Base in Arizona. Because the war ended shortly after he enlisted, he never shipped out for overseas combat. After the war, he returned home to southeast Idaho because he anticipated being able to log more flight time as a civilian. His busy flight schedule as a full-time engineer at the National Engineering Laboratory proved this to be the case.

Bob Jones continues to expand his generous contribution to women in aviation. His contagious love of flight is reflected in the countless number of pilots he has influenced. Introducing so many people to the gift of flight is his legacy.

Go Fast

Continued from page 10

racing career. In 1988, he decided to build his own race plane. During a test flight, as he reached higher speeds, he experienced elevator flutter severe enough to break the bell crank linkage to the elevator, making the plane completely uncontrollable. Good thing he had a parachute as he bailed out of the plane and made it safely to the ground. The plane was a total loss. The next plane, #95 Mariah, was built by Gary and his father. Mariah still holds the title of "Fastest Formula One ever built," winning five consecutive National Formula One championships. Gary absolutely loved racing – "GO FAST, TURN LEFT!"

It was a sad day in September 2007 when Gary was tragically killed in an accident at the Reno Air Races. He was one of the best pilots you could ever

know and a very devoted family man and good friend. He always said, "Treat people as if this might be the last time you will ever see them."

~ "Furias" ~
P & W 4360 Powered Hawker Sea Fury



Gary Hubler - Approaching Pylon Two - N.C.A.R. - 2003



Landings

Continued from page 9

I'll never forget my first solo trip into the backcountry. I didn't even have 60 hours of total PIC flight time. But, I figured no big deal. I live here. I learned to fly and received my private pilot's certificate in McCall, Idaho, at a field elevation of 5,020 feet and had just purchased a C-182 and planned to go fishing in the backcountry, which is the reason I learned to fly, and I was sure I knew everything. (It took me 30 years of flying to realize I'm not as smart as I used to be.) I was like a kid waiting for Christmas morning. I was filled with excitement and could hardly sleep a wink in anticipation of the early-morning flight to the Chamberlain Basin Airstrip located in the Frank Church Wilderness. I flew there that crisp early morning, in a direct line of flight at about 10,000 feet MSL. I used dead reckoning as there was no GPS back then. I remember being so pleased that I found the airstrip. I descended to what seemed like a reasonable traffic-pattern altitude and realized after circling multiple times,



I was in way over my head. I was not sure about the landing, the aim-point, or what speeds to use. I questioned whether I could get stopped before the end of the runway. I wondered if I could apply what my instructors called a "go-around" to this landing. And, then I wondered about the departure. Where do I go? The questions in my mind kept coming. I made the best decision considering my experience and flew back home. It didn't take long to find a qualified mountain and canyon flight instructor to give me a few hours of dual instruction.

The first day's flight with a basic mountain-flight instructor was a revelation of things I knew and things I thought I knew. It consisted of getting to know my aircraft intimately, in every phase of flight. I used that first common thread of airspeed and attitude to develop a speed and configuration worksheet. This was to become the basis of a good mountain checkout, which we use every day in my school. It's a form that I developed in the process of learning about my specific airplane. The work goes something like this: We take the aircraft to an altitude that simulates a density altitude we want. We

fly the aircraft at slow flight in different configurations and flap settings at level flight and descending and turning flight. We note power settings, rates of descent and speeds. We expand this to include imminent and actual stalls. Again, we note and record the indicated speeds in these phases of flight. Then we test the stall information while turning, descending and climbing. This gives us enough information to configure the aircraft in a steep stabilized approach of approximately 4.5 degree glide slope. This is a surprisingly big descent rate but it gives excellent energy management control. All those scribbles and notations of speed and flap settings became that common thread you explored when you first learned to fly. Sometimes we clarified words that seemed to work better in the mountains. For example, we called our downwind entry speed canyon speed. We replaced the go-around point on the runway with a more descriptive idea called "abort point." Is this beginning to sound familiar with what you've learned?

See Landings

Continued on page 15



Hungry Ridge Ranch


The BEST of Clearwater Country.
Unforgettable hunting, fishing, hiking, snowmobiling.

400 acres, surrounded by USFS • 10+ Acre parcels start at \$74,950
SELLER FINANCING AVAILABLE


Private 2246 ft. airstrip: **(371D) 4599°N45.47 W115.56 2248x75 TURF CTAF 122.9**
28 miles from Grangeville. Near S. Fork Clearwater River & Gospel Hump Wilderness.



World-Class Recreational Properties
www.BlackSwanDevelopment.com



For information contact:
MIKE CHAPMAN
208 634-9691
www.FlyingBrokers.com





Radio Chatter

Airport News

Reed Ranch airstrip is closed from November 1 to May 31 due to a special use permit for animal habitat. Please **do not** land there during this time.

Smiley Creek Caretaker position is available for next summer. Contact Gary McElheney at 208-334-8893 or gary.mcelheney@itd.idaho.gov.

Ontario, OR

Thanks from ONO
By Tommy Frazier,
Frazier Aviation, LLC

Frazier Aviation at the Ontario, Oregon Airport (KONO) would like to thank everyone for their patronage and announce we now have a very unique crew and courtesy car, a nice Cadillac 6 passenger Limo affectionately called the AIRPORTER. We also have Enterprise Rental Car service available, making it easy to fly in for breakfast, lunch or dinner to enjoy the restaurant of choice or perhaps spend the night. There is even a very nice IFR Certified Cessna 182 for rent to qualified pilots. The next time you are in Ontario, please stop in and introduce yourself!

Boise

Glass Cockpit Aviation earns spot on Flight Training Honor Roll
By Cammie Patch, President
Glass Cockpit Aviation

Glass Cockpit Aviation has been recognized for its high standard of accomplishment in flight training by The Aircraft Owners and Pilots Association (AOPA). The flight school has been awarded a spot on the Flight Training Excellence Awards Honor Roll, a title given to high scoring flight schools from AOPA's flight training poll.

The Flight Training Excellence awards were created to highlight the best the flight training industry has to offer. "We feel it's important to recognize flight training providers, like Glass Cockpit Aviation, who create a quality



customer experience that supports student pilots and their entry into all aspects of the aviation community" said Shannon Yeager, vice president of AOPA's Center to Advance the Pilot Community. Glass Cockpit Aviation was the only Idaho school chosen, and one of only three schools awarded in the Pacific Northwest.

Glass Cockpit Aviation has been training students at the Boise Airport since 2005. www.glasscockpitaviation.com

Gooding

Fresh Mountain Air
By Randy Quigley, GAFA



It's hard to contain one's enthusiasm with an overnight campout on the docket for the Smiley Creek Airport. The chance to exchange the valley's heat for some fresh mountain air was the only draw needed for members of the Gooding Airport Flyers Association (GAFA) to depart Gooding airport with the scenic Sawtooth mountains and Smiley Creek airport in their sights.



The weather was severe clear and the runway was in excellent condition, the smoothest ever. The restrooms were clean and the camp area tidy, kudos to Gordon, the Airport Manager, and the Division of Aeronautics. As we signed the guest book, it became apparent that we weren't the only ones who had traveled to this great mountain getaway. The comments section was full of appreciation for this great location and facility.

As coincidence would have it, we were greeted by some old acquaintances who flew in from California the last time we were there. GAFA has no shortages of chefs, and after a delicious evening meal, there's nothing like hangar flying around the campfire roasting marshmallows and eating s'mores. Smiley Creek has truly become one of GAFA's favorite overnight destinations.

Kamiah

Kamiah Airport 'Hits the spot'

Labor Day Weekend saw the Kamiah Airport (S73) busy with activities. Spot landing and flour bombing competitions ran all day and a delicious country breakfast prepared by Clearwater Valley Aero Club (CVAC) members

Ron Funnemark and his wife Mary Ann. Young Eagle flights were conducted for 37 area youngsters, sponsored by the Experimental Aircraft Association and piloted by veteran pilots Al Betz, George Hunt, Dick Monaghan, Jim Otey, Ed Radke, Scott Rives, Johnny Stewart and Irv Wade.

See Radio Chatter

Continued on page 14



Radio Chatter

Continued from page 13

Kamiah, continued

In all, eighteen planes attended the fly-in including a 1940's-era Aeronca Champ, a vee-tailed Sonex Waixex, a



This beautiful 1999 Maule M-8-235 on tundra tires belongs to Paul Nemeth of Orofino, who together with his daughter Katie won both the spot landing and the flour bombing competition.



This Sonex Waixex owned by Larry Engert of Coeur d'Alene, ID was one of a number of planes to participate in the Clearwater Valley Aero Club's annual Fly-In.

Cubcrafters Super Sports replica and a home-built 260 horsepower Murphy Moose. Clearwater Valley Aero Club President, Jim Freeman thanked all

pilots and volunteers for making the annual fly-in a great event.

See Radio Chatter

Continued on page 16

HANGARS!

44 Years of Manufacturing Excellence

Buy Factory Direct !



Photo by Bruce Selyem

- T-Hangars
- Individual Hangars
- Maintenance Hangars
- Electric Bi-Fold Doors
- Corporate Hangars
- Hangar Homes

Call Today !

R & M STEEL COMPANY



R & M Steel Co.

Phone: 1-208-454-1800

Fax: 1-208-454-1801



www.aviationbuildingsystem.com Email: sales.rmsteel@gmail.com



The Best of Safety Pilot Landmark Accidents (Vol. 1)

Publisher: AOPA

Review by Kelly Householder

Before my last flying trip, I took the time to read "The Best of Safety Pilot Landmark Accidents." This short and simple read definitely made an impact, and I approached my trip with a new mindset.

This book was one of the better case-study books that I've read, addressing pilot errors and highlighting issues that pilots may encounter during many types of flights. It also included some seriously bad aeronautical decision-making moments. The studies on distractions that can lead to a chain of events ending with death were particularly fascinating to me. The story that stands out the most depicts

a wealthy, well-known pilot who took her jet off-roading at an airport through some ditches. Ultimately she ends up with critical fuel situations and convective weather impacts, as well as a fatality.

Another point that was illustrated with exceptional clarity was why it is critical to not treat flying our planes with the same attitude as driving vehicles. Flying requires much more attention, planning and decision-making. Many of the accidents resulted from pilots who failed to prepare or to take many of the proper items into consideration.

Regardless of how much flying you do, this book should be moved to the top of your reading list. I promise, it will make a difference.

Landings

Continued from page 12

The final key to success in the mountains is the ability to control your speed. Aim-point on the runway is also an important part of the landing. You must be the master of airspeed control and aim-point. We're expecting control of attitude within two knots of a targeted airspeed.

After my first day of mountain and canyon flight in 1982 with "Idaho Aviation Hall of Famer" and mountain flight instructor Lyn Clark, I remember thinking, "Why wasn't I taught to fly like this during my primary flight training?" It was apparent how important concepts like the steep stabilized approach were to controlling the outcome of a flight. Picking and holding the aim-point opened a whole new approach to landings anywhere.

See Landings

Continued on page 17

		
<p>1975 Cessna 182P \$121/hr</p>		<p>1974 Cessna 172M \$79/hr</p>
		
<p>1976 Cessna 182Q \$121/hr IFR</p>	<p>Why join? Better to ask yourself, why not join?</p> <ul style="list-style-type: none"> • Aircraft and hangar owned by the club members • Low one time buy-in: \$500 Class I, \$800 Class II. Monthly Dues \$70/mo. • Expertly maintained on field by Aero Services. • Very affordable hourly rates. All club aircraft are fully insured. • No minimum daily rates or overnight fees. Reasonable backcountry policy. • Safety is highest priority: Monthly safety articles, safety meetings, and minimum monthly flight requirement. • 15 seasoned flight instructors offering all levels of training. • New students are always welcome. • Its a fun, friendly club! That means social events like fly-ins, plane washes, BBQs, and more. 	<p>1974 Cessna 172M \$81/hr IFR</p>
		
<p>1965 Cessna 182H \$117/hr</p>		<p>1978 Cessna 152 \$57/hr</p>
<p>Contact information: Call our Membership/Safety Director: Jim Hudson (208) 863-4835 Or Visit our web page: www.t-craft.org</p> <p>Class I Membership: Allows you to fly the Cessna 152 and 172's. Ideal for the student pilot or low time pilot.</p> <p>Class II Membership: Allows you to fly all club aircraft.</p>		



Radio Chatter

Continued from page 14

Sandpoint

Busy Sandpoint Airport

It has been a busy year at Sandpoint Airport (KSZT).

Quest Aircraft Company has weathered the recent economic downturn and is hiring new employees to support increasing sales of its KODIAK single-engine turboprop STOL aircraft. One of the sales contracts includes five KODIAKS sold to a new dealer in China.

Tamarack Aerospace Group (TAG) is ramping up as well and is building a 7,000-square-foot hangar next to the main terminal ramp. TAG designs and manufactures winglets and holds a patent on its active winglet technology. TAG should be in their new facility in January.

Granite Aviation is building a new FBO (fixed base operator) facility at the airport, offering a full line of services,

including automobile and aircraft rental, flight instruction, catering, charter flights and fuel. Granite Aviation's FBO will be open for business in January.

Air Idaho Charters is based at the airport and provides on-demand charter flights to destinations throughout the lower 48 states. It operates pressurized, multi-engine aircraft capable of accommodating up to five passengers in comfort. Air Idaho also can arrange jet and turboprop charters if a larger aircraft suits your needs.

The airport has received some much-needed attention as well. The main terminal ramp was rebuilt this past summer. There is an update to the airport master plan under way, and new snow removal equipment has been purchased just in time for the coming snow season.

The airport's \$30 million annual economic impact is being bolstered by



these investments, and airport staff is quick to thank the FAA, Bonner County, Sandpoint Urban Renewal Agency and private investment for realizing the value the airport offers to the surrounding community and for supporting the airport as a vital economic engine.

If you have questions about the Sandpoint airport or any of the businesses mentioned, please contact airport manager Dave Schuck at SandpointAirport@gmail.com.

See Radio Chatter

Continued on page 19

OUT-PERFORM ALL OF YOUR BUDDIES



Homedale Municipal Airport (S66)

www.kitfoxaircraft.com 208.337.5111

Kitfox Aircraft - all-American made, here since 1984

Build-in-your-garage kits
start at \$19,985

100% factory-built, ready-to-fly
models start @ \$95,995



Landings

Continued from page 15

I now know my power setting for every phase of the flight. I could fly a steep approach to a precise aim-point, which also gave me the ability to land closer to my aim-point and took away the float down the runway. The bottom line is, I know what my aircraft can do for me and, more importantly, I could make my aircraft do what I wanted it to do consistently. I took my C-182 back to that airstrip with my new tools, new speeds and had not only the knowledge, but the confidence, to know the outcome of the landing, takeoff and departure. This training changed my flying forever.

When we fly with a student pilot or a certificated pilot here at McCall Mountain and Canyon Flying Seminars, these are just a few of the tools we give them: a method and a worksheet that will allow them to find the speeds and power settings for their aircraft, a steep stabilized approach,

and the ability to pick an aim-point and land the aircraft where they want to, successfully and consistently every time. That's possible in just the first day's flight lesson with the right instructor. If you can take it further and fly a few more times, you're in for the next flight training treat. We stretch the common thread to drainage navigation, canyon turns and emergency canyon turns. As most pilots know, there is a pure joy and pleasure in designing approaches and departures in the challenging environment of new and confined areas.

I encourage you to get some mountain and canyon flight instruction. It will change the way you fly your aircraft and how you look at an airstrip forever. Next thing you know, you will find yourself

landing in the backcountry to meet fellow pilots for camping, fishing and flying. You will be confident and comfortable that you are equipped to meet the challenges of a very demanding and advanced flight environment.

MONITOR GUARD FREQUENCY 121.5!

**If you hear a distress signal or radio call:
Note your altitude, location and time
and**

PASS IT ON ... IMMEDIATELY!!

- ATC or FSS
- FSS: 800-WXBRIEF (800-992-7433)
- Idaho State Communications (800-632-8000)
- Local FBO
- Local County Sheriff

NOW WITH A TURBO-CHARGED OPTION



*Learn to fly,
continue your backcountry
flight training, or take
a demonstration flight*



Gowen Field -Boise (BOI)
www.stick-rudder.com 208.477.1318





McCall Mountain Canyon Flying Seminars LLC
 Located at the McCall Airport
 104 South 3rd Street
 P.O. Box 1175
 McCall, Idaho 83638
 Phone: (208) 634-1344
 Fax: (501) 634-1348



www. Mountaincanyonflying.com

Jumpstart Your Season!

2-Day Fundamentals OR Refresher Course:

June 5th & 6th, July 22nd & 23rd

or call to create your own course dates!

Receive your "Backcountry Branded" endorsed logbook entry!

2014 Seminar Schedule Spring Canyonlands Safari

May 7 -11

Fall Canyonlands Safari

September 24 -28

2-Day Fundamentals or Refresher

June 5th & 6th

July 22nd & 23rd

4-Day Basic Courses

B1 - June 10th -13th

B2 - June 17th - 20th

B3 - June 30th - July 3rd

B4 - July 8th - 11th

All Inclusive 5-day Courses

Sulphur Creek Advanced

June 23- 27

Middle Fork Lodge Excursion

July 14 - 18

©George A. Kounis/www.pilotgetaways.com



FlyingBrokers.com McCall, Idaho
 Specializing In Resort & Recreational Property

Mike Chapman 208.634.9691
Mike@FlyingBrokers.com



PISTOL CREEK RANCH - FLY-IN BACKCOUNTRY



"VINTAGE RIVER CABIN" 980 SF, furnished 3 BR, 2 BA with huge deck over the Middle Fork Salmon River! .56 acres of river frontage. Opportunity to live the wilderness life style. **\$269,000**

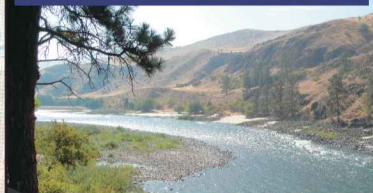


HISTORIC 220 AC PISTOL CREEK RANCH!
 Only 21 owners! Members lodge, 2500 ft. airstrip, private water & hydro power. Horses, barn & outbuildings. Outfitters license, ranch manager & staff. Surrounded by 3.2 million acre Frank Church Wilderness. **\$399,000**



"CUSTOM RIVER CABIN" 1350 SF, 3 BR, 2 BA on .63 acres. Beautifully furnished, river frontage with mountain views! ATV ranch vehicle w/detached garage included. **\$399,000**

SALMON RIVER FRONTAGE



1,500 FT SALMON RIVER FRONTAGE
 Private beach w/water rights. 2 mi. from Slate Creek landing strip. Separate log guest cabin. Multiple outbuildings, eddy for jet boat. Convenient drive-in location between Riggins & Whitebird. **\$695,000**

MCCALL HANGAR



MCCALL CORPORATE HANGAR
 80'x80', 6400 SF w/18'x70' bifold door. Fits large corporate jets. Bifold door modification available to increase clearance to over 20'. Vintage-deco pilot lounge/crew quarters w/3/4 bath. "Nicest Hangar @ MYL" **\$675,000**

MCCALL BUILDING SITE



PAYETTE RIVER SUBDIVISION
 Great location & views from .37 acre building lot. Adjacent to larger acreage, pond & North Valley Rail Trail. County maintained road, CC&R's & private sewer available. South gentle slope w/trees. **\$39,900**



Radio Chatter

Continued from page 16

Idaho Falls

Hearts of Courage Exhibition – Museum of Idaho

The Hearts of Courage exhibition is currently on display at the Museum of Idaho to commemorate the 70th Anniversary of the Gillam plane crash. The Hearts of Courage exhibition is based on a book of the same name written by John Tippetts, son of Idaho native, Joseph Tippetts who was one of the four survivors of the plane crash that happened in Alaska during WWII.

Hearts of Courage is not only Tippetts' account of his father's ordeal and ultimate survival against seemingly insurmountable odds, but is also an inspirational story of courage, determination, and strength of the human spirit.

The Museum of Idaho is dedicated to preserving the natural and cultural history of Idaho and the Intermountain West. The museum is located at 200 N. Eastern Ave. in Idaho Falls. For more information please contact Laura Cooley at 208-522-1400 ext. 3012.



Hearts of Courage exhibition

Why Drive when you can Fly!

Scheduled flight service began October 8 from Pocatello and Idaho Falls to Nampa. Flights depart Tuesday through Friday from Pocatello AvCenter at 6:30 a.m. to Idaho Falls. Then depart Idaho Falls at 7:00 a.m. and land in Nampa at 8:00 a.m. Evening return departs Nampa at 5:30 p.m. landing in Idaho Falls at 6:30 p.m. and back to Pocatello at

7:00 p.m. Price per seat is \$450 one way or \$650 round trip.

Contact AvCenter for additional information: 208-234-2141 or www.avcenter.com

Worried? Aircraft late?

Call Idaho State Communications

208-846-7600 or 800-632-8000

Regal Aviation Insurance



Dedicated to General Aviation

- AG Operators
- Aviation Property (Hangars)
- Corporate & Charter Operators
- Flight Schools
- Fuel Providers
- Maintenance Shops
- Personal Aircraft
- Products Liability



www.RegalAviation.com • 800-275-7345





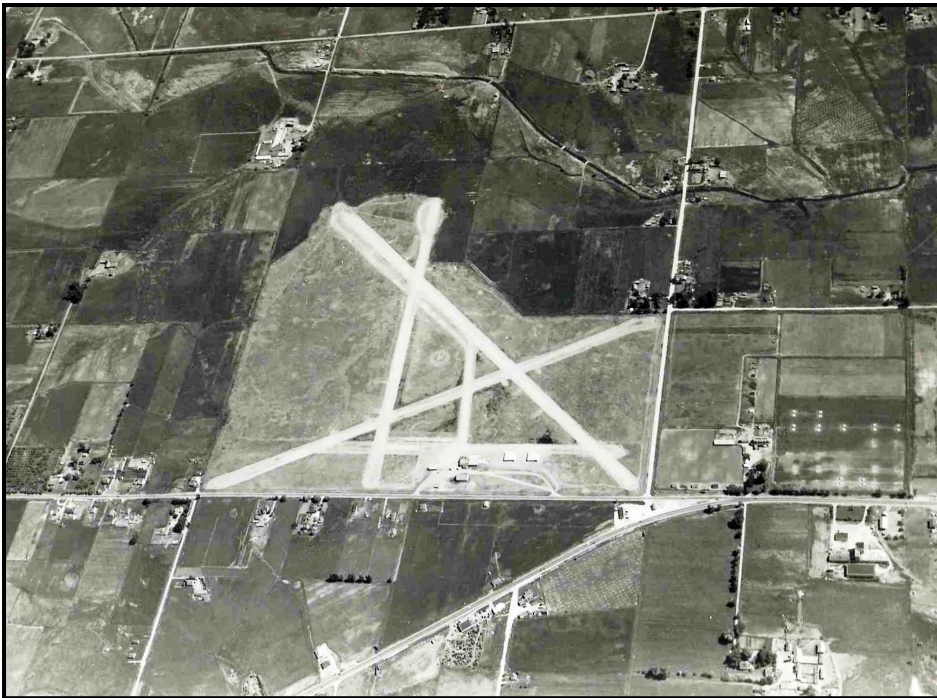
ADDRESS SERVICE REQUESTED

Name This Airfield Contest!

And the winner for the last issue is....Joe Corlett! We obviously need to make this a little easier as we only had two guesses for the last photo, with only one being correct.

The photo was of the first Carey airport, lovingly known as Coats Field by the locals. Coats Field was built in 1948 and dedicated by President Harry S. Truman during his "whistle-stop"

campaign that same year. With true community spirit, this small settlement of 600 inhabitants declared an "airport development day." A beef-barbecue was arranged and everyone including the farmer, baker and candlestick-maker turned out. Although the scheduled date, March 25, 1948 was stormy, no less than 36 donated tractors showed up for the leveling job. The next day brought forth clear skies and equally as many tractors with townspeople galore".



Due to strong frequent crosswinds, a number of accidents, substandard approaches and a narrow runway surface, a new location was proposed in 1951. Once the new Carey airport (U65) was dedicated in May of 1955, Coats Field was officially closed.

Name This Airfield . . . The first correct response to tammy.schoen@itd.idaho.gov will receive a prize, and the first five correct responses will be published with the right answer in the next "Rudder Flutter" issue.

**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

