



Montana Department of Transportation

Aeronautics Division

Vol. 64, No. 10

October 2013

Search Clinic Held in Columbus

By David J. Hoerner, Safety & Education

Montana's annual Pilot Search Clinic was held in Columbus on September 6-8. A mock search was initiated with a pilot whose flight plan indicated he was flying from Red Lodge to Bozeman Yellowstone International Airport in Belgrade.

The aircraft never arrived at its destination; Aeronautics was informed of the missing pilot. A route search was flown and flights to surrounding private airstrips reveal nothing.

Grids were created along the airplanes expected route and twenty-four Montana pilots were instructed in mountain flying and procedures for safely flying grids in the mountainous terrain.

Each participant received three days of mountain flying techniques, survival training and instruction on how to operate ground based ELT direction finding equipment.

Instruction for the emergency medical and survival training was conducted by Rod Alne of Peak Inc. His company provides emergency training for outdoor adventures and was a great addition to the program. Ken Wilhelm of MDT Aeronautics offered his expertise in ELT instruction.

This program wouldn't be possible without the help of our experienced flight instructors: Tom Glanville, Art Dykstra, Bill Mayo, Mike Campbell, Tim Dwyer and Harold Dramstad.

Special thanks to the Columbus fire department for the use of their facility for the evening programs and Wanda Rickman and Dottie Dwyer for helping with the organization of the programs. I would also like to thank Mayor Gary Woltermann and the town of Columbus for providing a great location for the clinic.

Montana's search and rescue program for missing aircraft and activated ELTs is highly effective because of the volunteers that are available with their time and equipment. During an actual search, the problem is not finding pilots to fly; it is usually picking four or five pilots and telling the rest to standby.

Montana Pilots can be commended for their efforts to help their fellow pilot when in need. This attitude amongst the pilots in our state makes Montana such a great flying community.

Plans for next year search clinic are in the works with a new location in the central or eastern part of the state. If anyone has any recommendations give me a call at (406) 444-9569 or email dhoerner@mt.gov with your ideas.



Pilots take time for a quick photo before heading out for their flight.



Ken Wilhelm, instructs a participant on how to use the direction finding equipment.

Administrator's Column

Montana Economic Development Summit: Several high-profile corporate executives shared their theories to success with close to 3,500 participants attending the summit last month in Butte. The two-day summit also included over 40 separate panels plus 75 exhibits. The sixth summit, organized by Senator Max Baucus has three rules: Nothing is off the table; no talking politics; and solutions should be driven by the private sector. Ambassadors from Canada, China, German, Japan and Peru led a discussion on ways their countries can work better with Montana businesses. Aviation highlights from the summit: Delta Airlines CEO Richard Anderson spoke of bringing larger regional planes to Montana, transitioning to 100-passenger regional jets from the current 50-passenger aircraft. Eric Phillips, Delta's vice-president of pricing and revenue management spoke of recent or expanded Montana routes including nonstop service between Atlanta and Bozeman; Atlanta and Missoula and a nonstop flight between Billings and Atlanta next summer. Delta is also considering a nonstop flight between JFK in New York and Bozeman. Montana airport representatives were provided the opportunity to meet separately with Mr. Anderson and Phillips. Boeing CEO Jim McNERNEY announced a \$35 million expansion of its Helena manufacturing site and the hiring of 20-25 additional employees. The announcement was made from the main stage where Mr. McNERNEY was joined by Senator Max Baucus and Governor Steve Bullock. Construction will begin this fall. The \$35 million project is expected to be complete by the end of next year. It will increase the manufacturing plant's size from 55,000 square feet to 167,099 square feet. The facility currently employs 144 people. It makes parts for commercial airplanes and is beginning new work for the Boeing 787-10 Dreamliner. Eric Smith, Director and site leader for Boeing Helena made a similar announcement at its facility in Helena to employees and members of the community prior to CEO McNERNEY's announcement in Butte. This is great news for Helena and Montana jobs. Thank you to Senator Baucus and to the many sponsors, staff, volunteers and Montana Tech who worked diligently to make the 2013 Montana Economic Development Summit a reality.

"Giving Back" Grants Awarded: The Recreational Aviation Foundation (RAF) was selected to receive one of AOPA Foundation's \$10,000 awards from its "Giving Back" program. The RAF was one of ten charities who do good work through general aviation, keeping pilots safe and safeguarding the future of GA. The RAF has committed to match the grant with an additional \$10,000 and will seek contributions from associated organizations. The funds will pay for a scientific study of the impact of aircraft noise on wildlife, and form a credible basis for productive discussion regarding aviation access to some of our nation's special places.

Free Offering: Interested in airplanes? Wish you knew more about aerodynamics -- air traffic control, space policy, satellite engineering or airline management? You are in luck and can study all of these topics + more, for free, at the Massachusetts Institute of Technology, via their OpenCourseware website at <http://ocw.mit.edu/index.htm>. Each course features a syllabus, readings, video lectures, and projects that you can complete. They do not include instructor support, classroom interaction or certification. Sign-up and enjoy.

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Montana and the Sky

Department of Transportation

Steve Bullock, Governor

Mike Tooley, Director

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Telephone - (406) 444-2506

Fax - (406) 444-2519

P.O. Box 200507

Helena, MT 59620-0507

www.mdt.mt.gov/aviation/

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Calendar of Events

January 10-12, 2014 – Winter Survival Clinic. Homestake Lodge, Butte. For further information contact Dave Hoerner at (406) 444-9568 or dhoerner@mt.gov.

February 27 – March 1, 2014 – Montana Aviation Conference. Holiday Inn Grand, Billings. For further information contact Patty Kautz pkautz@mt.gov or (406) 444-9580.

Courtesy Car Available to Any Airport Free of Charge



Mark and Kim Scharf owners of 3 Rivers Aircraft in Choteau Montana have decided to close up their FBO. They have a courtesy car that was donated to them for the airport that they would like to pass on to an airport in Montana that is in need of a car. The vehicle is a 1982 GMC Jimmy 4X4, color gray & black with 103,803 miles on it. Any airport interested in a free courtesy car should contact Mark at mark@3riversaircraft.com.

Charlie Taylor/Rosie the Riveter Scholarship

EAA Chapter 344 in Helena is offering a \$500 scholarship to a Helena College full-time 2nd year student in the Aviation Technology Program. An application with criteria and scholarship process is available on the Helena College website <http://umhelena.edu/>. Deadline for this scholarship is November 29.



Airport of the Year Nominations Requested

The MDT Aeronautics Division is soliciting nominations for our annual “Airport of the Year” award. To nominate an airport, send some brief background information of why you think your favorite airport is deserving of the airport of the year. Nominations will be accepted by any individual or entity and will be accepted through the end of the year. MDT Aeronautics will collect the nominations and the winner will be selected and notified in January. Public recognition along with the formal award will be presented to representatives of the winning airport during the Montana Aviation Conference awards luncheon in Billings on March 1. Nominations can be sent to any of the following: MAIL: MDT Aeronautics Division, Attn: Tim Conway, PO Box 200507, Helena, MT 59620-0507; EMAIL: tconway@mt.gov; FAX: (406) 444-2519.

Scholarship Opportunities

Montana is very fortunate to have many generous individuals and organizations that believe in promoting aviation by offering monetary assistance to qualified persons. The Aeronautics Division assists in administering some of these scholarships and encourages participation. The scholarships are offered to Montanans to help defray costs of education (i.e., flight instruction, A&P, etc.) and will be presented during the 2014 Montana Aviation Conference in Billings. Awarding of the scholarships will be based on a letter explaining the reasons for applying, future career goals, past aviation experience, if any, and any outstanding achievements. The same letter can be submitted but applicant must submit one copy addressed to each individual scholarship they are applying for. Letters of application must include a mailing address and daytime phone number. If you are selected to receive one of the scholarships your photo will appear in the 2014 Montana Aviation Conference Program, please include a photo with your applications for this purpose (only one photo necessary). Letters should be mailed to: Montana Aeronautics Division, PO Box 200507, Helena, MT 59620-0507 or call (406) 444-2506 for further information. **Letters must be postmarked on or before January 6, 2014.**

A Love of Aviation (ALOA) Scholarship – An anonymous donor established this scholarship of \$250 in 1997 and in 2010 two more anonymous donors contributed an additional \$250 each creating a \$750 scholarship.

AOM Flight Training Scholarship – AOM has established this \$500 scholarship to financially assist a student pilot in obtaining their private pilot certificate.

Blue Goose First Generation Flight Scholarship – This \$500 scholarship is awarded to a first generation pilot to assist with flight training. This scholarship is designed to assist a person who has a love of aviation, yet had limited exposure to aviation, someone from a non-aviation background/family.

EAA Missoula Chapter 517 Scholarship - EAA Chapter 517 in Missoula has established a \$1,000 scholarship. This \$1,000 Aviation Career Scholarship will be available to a Montana resident to pursue one of the following: Post-solo flight training; a second year of A&P training; other aviation career training.

Edwards Jet Center Scholarship – Edwards Jet Center a full-service fixed based operator and Part 135 charter operator based at Logan International Airport in Billings is offering a \$500 scholarship to help defray the costs of flight instruction.

Montana Antique Aircraft Association (MAAA) Scholarships – MAAA is offering a \$1,000 scholarship to help defray the costs of flight instruction.

Montana Pilots Association Air Safety and Education Foundation (MPA ASEF) Flight Training Scholarship – This \$1000 scholarship is open to an active pilot who has considerable interest in aviation and is seeking advanced flight training or a pursuing a profession in aviation. Applicant must be a Montana resident.

Montana Pilots Association (MPA) Junior Pilot Scholarship – The recipient of this \$1000 scholarship is chosen for outstanding interest in aviation, citizenship in their community and demonstrated academic achievement. The recipient must be a Montana resident and previously soloed. Preference is given to younger applicants who are new pilots or pursuing a profession in aviation.

Parrott Family Scholarship – The Parrott Family offers this \$1,000 scholarship to be used over a one-year period for pilot training programs for students enrolled in the Rocky Mountain College (RMC) aviation program. The funds may be used for tuition in the RMC aviation program, and/or flight training expenses leading to a Private, Commercial, or Flight Instructor Certificate, and may include Instrument and Multiengine simulator training, and the purchase of aviation related materials and related supplies.

Theresa (Nistler) Colley Scholarship – Mountain AirDance Flight Training (Jeanne MacPherson and Bill Gallea) and Vetter Aviation (Brent and Rosie Vetter) offer this \$1000 scholarship in memory of Theresa (Nistler) Colley who passed away from Leukemia (AML) in February, 2012. Theresa loved flying and was working toward her private pilot certificate. This scholarship will be awarded to a student pilot who is working on getting their private pilot rating.

Snow in the Mountains

By David J. Hoerner, Safety & Education

The old saying, “be careful what you wish for,” has come true again. Day after day of the summers’ heat made me wish for the cool fall weather. The fresh snow near the top of the mountains brought reality to the approaching months of snow, blizzards and below zero temperatures.

As pilots the approaching winter should spark an urge to prepare for cold weather flying. If your airplane is tied down outside, now might be the time to change the oil to a lighter grade to help make for easier starts.

The old rule to try a cold weather start is if the oil will drop off the dip stick, but it is wise to use your own limits as when to attempt a cold start.

Usually if the oil won’t run off the dip stick using a pre-heat or finding a warm hanger is recommended. The warm hanger will also melt any ice adhered to the wings or propeller. If you’re the pilot that hand props an engine now would be the time to practice the procedure with a well prepared pilot behind the controls.

Over priming while hand propping an aircraft can turn a good day into a disaster. An over prime and back fire can start a fire which ignites the fuel that has dripped onto the filter. The reaction for the unprepared is to run, but pulling the mixture control to idle cutoff and cranking the engine should suck the fire back into the engine.

But don’t bet your life on this technique. A low charged battery or excessive fuel could spread the fire outside the filter box and ignite electrical wires. In this case a fire extinguisher is the only chance of getting the fire under control and if you do succeed your airplane must go in for an inspection before the next flight.

Drag your survival gear out and lay it out on the floor. You should have a good medical kit, a way to start fires and if possible a fire starter. A survival tube or tent to keep the cold out is a must and a packet of hand warmers could save the day.

Remember that if you can’t keep your hands warm and functional it will be hard to survive in subzero temperatures. Have extra clothing, rain gear and sleeping equipment for all passengers.

Pilots must find a means for rescuers to help find him and his passengers in the unlikely event of an emergency. A detailed flight plan is a mandatory and some sort of new generation tracking device should be along on every flight.

If you are the one of many aircraft owners who still has a 121.5 Emergency Locator installed in your airplane, don’t bet your life that it will bring rescuers. **The government isn’t listening to the old 121.5 Emergency Locator Transmitter frequency with the satellites.**

The newly designed and improved 406 ELT is what the satellites are tuned to, with this new transmitter on board the aircraft, rescue time improves greatly. Having a personal beacon such as a 406 Personal Locator Beacon, a Spot Tracker or Spider Tracks will help guarantee a quicker response to your location. The price of these locator beacons are low and when you’re on the ground the money you spent will be well worth the cost.

On January 10, 11 and 12, 2014 the MDT Aeronautics Winter Survival Clinic will be held at Homestake Lodge, which is a great facility for the indoor and outdoor training. This location will make traveling for eastern pilots easier and more affordable. Rod Alne of Peak Inc. will be providing the survival training for the clinic. He is the owner and creator of the company, which is located in Butte. The company provides training for our military special forces and we are glad to have Rod and Peak Inc. on board for our winter survival training. This location should provide plenty of snow and cold temperatures.

A registration form for the winter survival clinic is included with this month’s newsletter. We can only accept a limit of twenty four pilots. Call me at (406) 444-9568 or email dhoerner@mt.gov for more information.



Participants in the 2013 Winter Survival Course practice their fire starting skills.



A cozy shelter from the 2013 clinic!

Welcome Stefani!



MDT Aeronautics Division welcomes Stefani DeMars to the Safety and Education Bureau. Stefani is former employee of the MDT Administration Division. Stefani attended Helena High School before moving to Missoula to pursue a degree in Art Education. Her duties at Aeronautics will include adopting and promoting safety and education in the aviation field. As an Administrative Assistant she will also help in coordinating the departments many safety and educational clinics, process pilot registration and work with accounts receivable and payable. Stefani can be contacted at sdemars@mt.gov or (406) 444-2506. Welcome aboard Stefani!

Stearman 87TL Inaugural Flight

Stearman N87TL flew for the first time in sixty years plus on October 6, 2013. Tim Linn's dream began back on September 26, 1977 when he purchased the project. It was a dream he never gave up on.

Tim took off at the Bozeman Yellowstone International Airport originally hoping to take off on the grass runway but recent snow and rain caused that runway to close. With a high speed taxi on the main runway to mid-field, then a full power check N87TL flew off Runway 12 and made a successful wheel landing on the pavement.

Tim has been asked "how did it fly" many times. With a smile he has expressed "beautifully - once at altitude, trimmed out with the turn coordinator ball centered, at a high power setting, the Stearman flew superbly with hands off the control stick! The many hours spent learning how to rig a bi-plane and adjusting the controls to spec and double checking them paid off -- it flies beautiful."



Garmin Unveils GPS Smart Watch for Pilots

Garmin International Inc., a unit of Garmin Ltd. (NASDAQ: GRMN), the global leader in satellite navigation, announced another aviation first, a premium GPS watch designed specifically for aviators. D2's features include Garmin's signature direct-to and nearest navigation functions, as well as a built-in altimeter with adjustable baro setting, altitude alerting capabilities, display of both local and Zulu/UTC time, and the ability to seamlessly integrate with the Garmin Pilot™ app, VIRB™ action camera, and more.

"In addition to the ability to provide global navigation solutions right on your wrist, D2's seamless integration with other Garmin products makes it an essential piece of equipment for every cockpit," said Carl Wolf, Garmin's vice president of aviation sales and marketing. "D2 is as rich in style as it is in features and with the wealth of information it provides, every pilot will want one."

D2 meets the needs of global aviators by offering a worldwide aviation database. Pilots can easily press and hold dedicated buttons for quick access to perform direct-to, nearest functions, as well as create fly-over waypoints of their current locations. Additionally, pilots can load flight plans and create waypoints, similar to the capability found in our popular portable GPS products. Other features include the option to assign customized data fields to display GPS ground speed, GPS track, distance, estimated time enroute, bearing, glide ratio and much more. D2 features altitude alerting which notifies pilots when they reach or leave a preselected altitude, helping to ensure the desired altitude is maintained in-flight.

Pilots can navigate precisely and accurately with D2, which offers a built-in WAAS GPS, highly accurate altimeter with an adjustable barometric setting, compass with an HSI, and moving map page. With the option to set up vibrating alerts within D2, pilots are easily reminded of critical operations such as when to switch fuel tanks in-flight or any other time sensitive operation.

D2 enriches every flying experience when integrated with select Garmin products. Pilots may conveniently build flight plans and create waypoints within the Garmin Pilot app on compatible Bluetooth® (BLE) devices and easily upload them to D2. Additionally, D2 will remotely control Garmin's HD action camera, VIRB. When connected to VIRB, D2 has the ability to remotely start and stop video, view elapsed time for active video recording, as well as capture high quality still photos – even when video recording is active.

Availability for D2 is anticipated in November at a price of \$449.00.



Homebuilt Accident Rate Drops 30%

Heightened safety efforts by the aviation community and the Experimental Aircraft Association (EAA) are showing positive results, as fiscal year 2013 figures from the FAA indicate that fatal accidents in amateur-built aircraft in the U.S. declined by 30% when compared to fiscal year 2012.

The totals, which include accidents during the 2013 federal fiscal year from Oct. 1, 2012, through Sept. 30, 2013, showed that fatal accidents in amateur-built aircraft declined from 50 in FY2012 to 35 over the past 12 months.

In addition, fatal accidents in all experimental category aircraft — which includes those in experimental/exhibition and light-sport aircraft subcategories — dropped from 73 to 55, a 25% decline.

These figures meet the FAA's "not-to-exceed" annual accident totals that are part of the agency's 10-year accident reduction initiative, EAA officials note.

"This is very good news and leaves us cautiously optimistic that many of EAA's safety initiatives are beginning to take hold," said Sean Elliott, EAA's vice president of advocacy and safety. "The goal is to promote the best training possible that will help pilots be better prepared and educated, and avoid some of the most common accident causes."

Building on EAA's Technical Counselor and Flight Advisor programs, EAA's initiatives over the past year included a focus on transition and recurrent training in amateur-built aircraft, as well as additional published information from EAA contributors who have strong flight-testing backgrounds.

Particular emphasis was on initial flight testing of amateur-built aircraft and transition training. While the accident totals are available at this time, the FAA will take up to two years to compile and analyze data that will determine the accident rate — the comparison of total accidents to the number of hours flown, EAA officials noted. However, the 2013 accident totals for the entire general aviation community remained approximately the same as in 2012, which gives an indication that total hours flown over the past 12 months have not changed greatly.

"Everyone must realize that we are already dealing with very small numbers here, so even a handful of accidents can cause significant percentage fluctuations in the annual total," Elliott said. "The actual number of fatal amateur-built aircraft accidents, for example, is already below the yearly U.S. fatal incident total for those who are scuba diving, horseback riding, or even struck by lightning. Regardless, we will continue to find and promote more ways to enhance aviation safety."

Aeronautics Division
 Montana Department of Transportation
 2630 Airport Road
 PO Box 200507
 Helena, Montana 59620-0507



October, 2013

Johnson Named Master Pilot

Pat Johnson of Helena is the 42nd person in Montana, and the first woman, to earn the prestigious Wright Brothers "Master Pilot Award" by the Federal Aviation Administration.

The Master Pilot designation recognizes at least 50 consecutive years of aviation expertise and safe flying practices.

Pat taught physics and earth science in Helena for 27 years and now works for the Office of Public Instruction.

She has taught aerospace education workshops at Carroll College for teachers and has received several national awards, including the Scott Crossfield National Aerospace Education Teacher of the Year.

In 1984 she was selected as the Montana candidate for the NASA Teacher in Space program, for which more than 11,000 teachers applied nationwide.

We congratulate Pat for her achievements and appreciate all she does to keep aviation alive in Montana.



Pat Johnson flies a 1966 Cessna 172 she calls "Romeo". Photo by Eliza Wiley, Helena Independent Record.

2014 MT Aeronautics Winter Survival Clinic



MDT Aeronautics Division invites you to attend the 2014 MDT Montana Aeronautics Winter Survival Clinic. This year the clinic will be at the Homestake Pass Lodge near Butte Montana.

January 10 - 12, 2014.

You will sleep inside Homestake lodge the first night with instructional talks on emergency landings and emergency medical procedures. Spend Saturday learning techniques on winter survival, and then put the training to work and spend the second night in your survival shelter.

The clinic is geared toward all aviation pilots in the event that an emergency landing takes place and you need to survive until help arrives; however, these skills can be used by anyone that finds themselves in a survival situation. Also included is emergency medical training.

Rod Alne of Peak Inc. will be providing the survival training for the clinic. He is the owner and creator of the company, which is located in Butte. The company provides training for our Military Special Forces and we are glad to have Rod and Peak on board for our winter survival training. Sign up early for the clinic; we have a limit of twenty four pilots. We are excited for the clinic this year and we hope to see you there.

Come join us on the continental divide to build and gain confidence in survival techniques!

2014 Winter Survival Clinic

Hosted by the MDT Aeronautics Division

Return Completed Registration to:

Clinic Name: 2014 Winter Survival Clinic

Clinic Dates: January 10 - 12, 2014

Clinic Location: Homestake Pass Lodge
(15 Miles East of Butte)

MDT Aeronautics
2630 Airport Road
PO BOX 200507
Helena, MT
59620-0507
Fax: 406-444-2519
Email: dhoerner@mt.gov
Phone: 406-444-2506 or 406-444-9568

Attendee Information

Name:	
Name (2):	
Name (3):	
Name (4):	
Company:	
Address:	
City:	
State/Province:	
Zip/Postal Code:	

Main Contact:	
Email:	
Phone:	

Special Needs:

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Registration Fees

Clinic Fee:	\$120.00
x Number of Attendees:	
Subtotal:	\$0.00
Total Due:	\$0.00

Payments must be received by: December 20, 2013

Payment

- Check payable to: Montana Aeronautics
 Cash

