Montana Department of Transportation

Aeronautics Division

Vol. 65, No. 9

September 2014

Airway Beacons may be featured in Wall Street Journal

Mike Rogan from our office was contacted a couple of months ago by Susan Carey who is the aviation reporter for the Wall Street Journal, concerning the last remaining Airway Beacon system in the world which happens to be owned and operated by the MDT Aeronautics Division. Susan was fascinated by the system and was able to convince her editor to allow her to travel from Chicago to Montana to conduct interviews about the system. Mike made arrangements to take Susan on a routine beacon maintenance trip to the MacDonald Pass beacon. John Boughton who is the National Register Coordinator and Kate Hampton, Community Preservation Coordinator at the State Historic Preservation Office of the Montana Historical Society, joined them to document what maintenance is done to keep the beacons on for the flying public.



Pictured (l-r) John Axline, Kate Hampton and Susan Carey.

The next morning Susan, Kate and Jon Axline, who is the MDT historian, accompanied Mike Rogan on a gorgeous early morning flight to document how the lighted airway system actually works. They departed Helena Regional airport just before sunrise and flew to the west. The first airway beacon to the west is MacDonald Pass airway beacon; they then flew on to the Avon airway beacon then flew to the Garrison area. They followed the beacons back to Helena flying east from Helena to the Spokane airway beacon. By the time they got to Spokane beacon the sun was up enough to activate the photo cell turning the beacon off. It was a great flight and a beautiful morning to be flying. Seeing how the system worked really helped Susan with some of the more technical aspects of the beacons. The article may be published in an upcoming edition of the Wall Street Journal.



An aerial view of the Spokane Beacon.

Mike Rogan performing maintenance on the MacDonald Pass Beacon.

Administrator's Column

Plan to Visit Seeley Lake: The Seeley Lake Airport will celebrate its 40th Anniversary and the Montana Pilots Association is celebrating its 75th Anniversary on Saturday, September 13. Make plans to join us and let the airport, MPA and the Seeley Lake Aviation Foundation treat you to lunch. The event will take place from 12:00 pm – 3:00 pm with a short program taking place at 1:00 pm. Lunch will be prepared by the Seeley Lake Senior Citizen Center. Fly-in or drive-in -- come help us celebrate not only the anniversaries but the special partnerships we share with these groups.

Economic impact study: As you may recall in 2007/2008 the MDT Aeronautics Division and the Federal Aviation Administration hired an independent consulting firm to conduct research and develop an economic impact study for all public use airports state wide. Information containing Direct and Indirect Economic Impact of the seven large commercial airports, 8 Essential Air Service airports and all General Aviation public use airports State-wide was collected and prepared. The information was presented to show impacts separately for each airport together with an executive summary. Each year we receive many inquiries about this study wondering if it has been updated. Fortunately, the MDT Research Review Committee has approved scoping this project to include reviewing the 2007/2008 date and develop a strategy to update the Economic Impact Study to produce more accurate and current information for use by all. An initial meeting is taking place later this month to kick-off the project.

Thanks to Summit Aviation: Summit Aviation in Bozeman recently hosted a week-long camp for young adult cancer survivors. Owner, Ben Walton finally made his dream come true after years of thinking about it. Four young adults that were all diagnosed with various forms of cancer early in life, and now in remission, are pondering the question, "What do I want to do?" The survivors all with no flight experience were able to perform an unassisted take-off and landing. Camp goers were teamed with a volunteer flight instructor from Summit Aviation and given ten hours of flight time, paid for by generous donors. After ground school, a thorough preflight inspection and a 2 hour flight, all were treated to a themed lunch (complete with costumes) to include Did You Ever Know That You're My Gyro! The camp included tours of the Bozeman Yellowstone International Airport, the Air Traffic Control Tower and private aircraft owners opened up their hangars. Ben is already planning for next year's camp. "If anyone deserves an experience like this, they do. I know they treasure each day more than we do, but they also fear each day the cancer might return. My hope is that this experience will give them new confidence; that it will help them overcome their fears, and that they all can become pilots someday soon." To Ben, his wonderful staff and kind contributors that made this happen – thank you for sharing your love of aviation.

Yellow Marvel: If you haven't checked out the July issue of *AOPA Pilot*, click on the link below and read a fantastic article on the work of Roger and Darin Meggers to restore N5410H, the very first Super Cub manufactured in 1950. Perhaps you've seen the airplane in a previous issue of *Montana and the Sky* or listened to the duo speak at this years' Montana Aviation Conference in Billings. Enjoy the story and photos of this extremely talented and artistic father/son team. http://www.aopa.org/News-and-Video/All-News/2014/July/Pilot/f_cub



*Montana and the Sky*Department of Transportation

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Official monthly publication of the Aeronautics Division
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Montana and the Sky is published monthly in the interest of aviation in the State of Montana. First Class postage paid at Helena, Montana 59604

Editor: Patty Kautz

Calendar of Events

September 6 – Columbus (Wolterman Memorial) Airport fly-in with breakfast service starting at 8 a.m. For further information contact Hardin Graham: (406) 780-0034; Alan Drain: (406) 780-0171; or Mark O'Bryant: (406) 696-6923.

September 6 – Havre (KHVR) Air Fair fly-in breakfast, airplane rides for youth, sky bowling. For further information contact Willie Hurd (406) 265-2977 or pronghorn@mcn.net.

September 6 – Annual Polson Airport fly-in, pancake breakfast at 8:00 a.m. View some fantastic aircraft from homebuilt, vintage, warbirds, floatplanes to general aviation aircraft, Model RC aircraft and Skydivers. Static demonstration aircraft of Lifeflight. Day activities conclude with the Soroptomists Wine Festival and Art Auction. For further information call (406) 883-4036 or urbmt@yahoo.com.

September 11-12 - Montana Community Airport Association Conference, Hilton Garden Inn, Great Falls. More info contact Fred Leistiko (406) 270-4242 or www.mtcaa.org.

September 13 – MPA 75th Anniversary & Seeley Lake 50th Anniversary Fly-in, Seeley Lake Airport. Montana Pilots Association, Montana Department of Transportation and the Seeley Lake Aviation Foundation will be providing food and beverages from noon to 3:00 p.m. (or until food runs out). For further information call (406) 444-2506.

September 20 – Missoula GA barbeque, noon to 4 p.m. Share a day of celebrating general aviation at the "MSO GA BBQ!" Chefs extraordinaire Cris Jensen and Brian Ellestad in their highly anticipated annual appearance. Fantastic restored cars and hotrods by the Garden City Rods and Customs car club, displays of MSO aircraft of special interest including those of the Museum of Mountain Flying. Pilots from around the State are invited to attend, park at Northstar Jet. Mark your calendar! Don't miss this one! For further information contact Gary Matson at (406) 370-6584.

September 20 – Wokal Field (Glasgow) Open House/Fly-In. 10:00 a.m. to 2:00 p.m. Lunch, car displays. For further information contact Lucas Locke at airport@valleycountymt.gov or (406) 263-7010 or (406) 228-2719.

October 6-7 – Operation SAFE Clinic Lewistown. For further information contact Colleen Campbell at eccampbell@yahoo.com. For lodging arrangements call Super 8 at (800) 536-9326.

February 26-28, 2015 – Montana Aviation Conference, Holiday Inn, Missoula. For further information contact Patty Kautz at (406) 444-9580 or pkautz@mt.gov.

Proposed Amendments to Rules

On September 20 the department proposes to amend the rules pertaining to the board of Aeronautics grant and loan program. Concerned persons may submit their data, views, or arguments concerning the proposed actions in writing to: Tim Conway, Department of Transportation, Aeronautics Division, P.O. Box 200507, Helena, Montana, 59620-0507; telephone (406) 444-9547; fax (406) 444-2519; or e-mail tconway@mt.gov, and must be received no later than 5:00 p.m., September 18, 2014. To receive a copy of the proposed rule changes please contact the MDT Aeronautics Division at (406) 444-2506.

MDT attempts to provide accommodations for any known disability that may interfere with a person participating in any service, program or activity of the Department. Alternative accessible formats of this information will be provided upon request. For further information call (406) 444-6331 or TTY (406) 444-7696. MDT produces 1,800 copies of this public document at an estimated cost of 39 cents each, for a total cost of \$702. This includes \$483 for postage.



Aviation Maintenance a Lucrative Career Choice

The first program at Helena College University of Montana was Aviation and it began in 1939. At that time, the school trained pilots for military service. The program has evolved some 75 years later to an Associate of Applied Science degree in Aviation Maintenance Technology.

The mission of the Aviation Maintenance Technology program at Helena College is to provide entry-level technicians who are trained in the fundamentals of aircraft maintenance with respect to general aviation and the light utility helicopter industry. With this training, a technician will be prepared for employment in many different occupations in the aviation industry including: Fixed Base Operations, Repair Stations,



Commuter Airlines, Air Cargo, Aircraft Restoration, Flight Schools and Aerial Fire Fighting, to name a few.

Students are trained above and beyond the standards outlined in 14 CFR 147 (FAR Part 147) and the guidelines set forth in the program approved curriculum. Upon completion of 1900 hours of course work, students will be prepared to sit with a Designated Maintenance Examiner qualified by the Federal Aviation Administration and be administered three Oral and Practical Exams.

The only program of its kind in Montana, the Aviation Maintenance Technology program provides students with the basic skills common to all mechanics as well as the specialized requirements unique to aircraft maintenance. Satisfactory completion of the program prepares and qualifies students for the FAA's tests to obtain an Airframe and Powerplant Mechanic license. Completion of the program will also give the student the necessary job skills to gain employment in the aircraft industry. The program requires four semesters of study. The FAA requires that the program be broken into 3 specific areas of instruction beginning with general knowledge of the aviation industry, airframe and powerplants.

There is a fantastic array of small aircraft for hands on training. A Cessna 172, Cessna 150, Cessna 310, Piper Aero, Beechcraft Baron, Sabreliner, even a Huey and a Bell 47. During the first semester students cover basic terminology and basic aircraft maintenance skills, the second semester starts with airframes where more specific maintenance skills are covered. The second year, students complete airframes and begin powerplant maintenance training on both reciprocating and turbine engines.

Instructors are proud of the 100% employment placement rate for students obtaining their licenses. Graduates of the program go to work all over the country, although many stay in Montana. Tod Dumas is an aviation maintenance instructor who began teaching at Helena College in 2008. Since then he's also seen students use their aviation maintenance degree as a foundation toward pursuing a degree in mechanical or aerospace engineering and commercial pilot certifications. "There are all kinds of opportunities for our graduates and the future is bright for mechanics as the baby boomers retire."

The program accepts twenty students per academic year to allow for specialized, hands on training. For more information, contact Helena College at (406) 447-6904.

Nominations now being accepted for 2015 General Aviation Awards

Nominations for the 2015 General Aviation Awards are being accepted through Sept. 30, 2014.

The mission of the General Aviation Awards program is to recognize individual aviation professionals on the local, regional, and national levels for their contributions to aviation, education, and flight safety. The program is a cooperative effort between more than a dozen general aviation industry sponsors and the Federal Aviation Administration (FAA).

Nominations can be made for Flight Instructor, FAASTeam Representative, Aviation Maintenance Technician, and Avionics Technician of the Year.

If you know an exceptional aviation professional or if you'd like to apply yourself, visit GeneralAviationAwards.org or email info@generalaviationawards.org for more information.

First aviation mechanic display added to Air Force Museum



The National Museum of the U.S. Air Force honored the first aviation mechanic, Charles E. Taylor, by unveiling a bronze bust of his likeness for permanent display during a ceremony in the museum's Early Years Gallery July 21.

A brilliant, self-taught man, Taylor began working in the Wrights' bicycle business in 1896, and played an important role in their flying experiments for several years. Unable to find a manufacturer who could build an engine to their specifications — weighing no more than 180 lbs. and delivering 8-9 horse-power — the Wright brothers turned to Taylor. In just six weeks Taylor designed and built the engine that made their pioneering powered flights possible.

According to Museum Director Lt. Gen. (Ret.) Jack Hudson, the Taylor bust is a fitting addition to the museum since the story of the Wright brothers cannot be fully told without him.

"The importance of Charles Taylor's role in helping the Wright brothers achieve their dream of heavier-than-air powered flight should not be understated," Hudson said. "His development of a lightweight engine for propulsion was critical, and Taylor's story of innovation serves as an inspiration — especially for those pursuing careers in science, technology, engineering and math (STEM)."

Aircraft Maintenance Technicians Association (AMTA), a non-profit organization created in 2002 to promote Taylor for his contributions to aviation, the United States and those who have followed in his footsteps, commissioned Dayton artist Virginia Hess to create the bust for the museum.

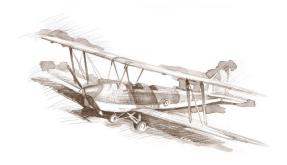
According AMTA Director Ken MacTiernan, having a bust of Taylor on display at the National Museum of the U. S. Air Force will ensure that his contributions to aviation history are well remembered.

"The National Museum of the U. S. Air Force was chosen because of the respect given to the museum by its visitors worldwide," said MacTiernan. "The quality of exhibits and displays is second to none, and having the museum as a place that Taylor can call 'home' just seems highly appropriate."

In addition to the bust at the National Museum of the U.S. Air Force, AMTA has commissioned other Charles E. Taylor busts at the following locations: San Diego Air & Space Museum; Smithsonian's Steven F. Udvar-Hazy Center; American Airlines maintenance facilities in Kansas City, Mo.; Tulsa, Okla.; Alliance, Texas and Dallas-Fort Worth Airport; Le Mans Sarthe France; and the United States Air Force Academy.

Among those in attendance at the ceremony today included Taylor's grandson, Reuben Taylor, and great-grandson, Charles Taylor II.

The National Museum of the United States Air Force, located at Wright-Patterson Air Force Base near Dayton, Ohio, is the service's national institution for preserving and presenting the Air Force story from the beginning of military flight to today's war on terrorism. It is free to the public and features more than 360 aerospace vehicles and missiles and thousands of artifacts amid more than 17 acres of indoor exhibit space. Each year about 1 million visitors from around the world come to the museum.



"The air up there in the clouds is very pure and fine, bracing and delicious. Any why shouldn't it be... its the same the angels breathe."

--Mark Twain

Backcountry Flying Etiquette

By Jeanne MacPherson

Flying media is full of mountain flying tips. Instead of recapping those here, I'd like to share the Recreational Aviation Foundation (RAF) philosophy that we hope will lead to assured aviation access to some of our nation's special places.

It's important to remember that we share the wild country with a variety of users, many of whom are out there for quiet and solitude. There are ways to fly quietly.

Maintain a good height, 2,000 feet AGL is recommended over wilderness areas. Power back, slow down, and enjoy the scenery. Respect wildlife.

Avoid touch and goes in the backcountry. Do most of your practice close to home. Review your performance charts. Higher temperatures, elevations, and aircraft weights will decrease performance...a lot!



You can, and should, perfect your short field/soft field technique before you head to the mountains. Just like good instrument pilots learn to "fly by the numbers," nail down what power settings and configurations you will use for each phase of flight. And try adding whatever load you'll be packing in so you are practicing at the weights you expect to carry into the backcountry.

Mountain flying instructors agree that flying a stabilized approach at the exact target airspeed to a predetermined spot is the way to a successful landing. This should reduce the likelihood for a go-around.

Repeated approaches and high speed fly-overs are a pet peeve of non-flying backcountry users.

Avoid formation flight, and minimize radio chatter. If flying together, keep some separation and pre-arrange a frequency that will not interfere with traffic at the fields in your proximity.

Taxiing and parking require courtesy as well. Avoid taxiing in a way that your proposal will throw debris on your neighbor's aircraft or campsite. If there is no way to turn into your parking spot without blowing dirt on a neighbor, stop short, turn your plane by hand and push it back into place. If there are other aircraft present, there is usually plenty of help available. The same goes for run-ups — be aware of what's behind you.

Practice "leave no trace" outdoor ethics. Use designated campsites and fire grates. In fact, carry garbage bags and leave the place nicer than you found it.

Etiquette is basically following the Golden Rule. Once you shut down your engine and hike out to your secret fishing hole, what do you want to listen to while you await that subtle tug on your line?

The RAF mission is to protect and preserve the nation's backcountry airstrips for the future. It encourages pilots to take part in airfield maintenance. Volunteer when your state's pilot association organizes work sessions. Add purpose to your enjoyment of the backcountry and plan your outings to help at maintenance sessions. I invite you to consider being a part of this exciting mission to preserve backcountry access for the long term.

Controller: I've got you on radar, state your intentions.

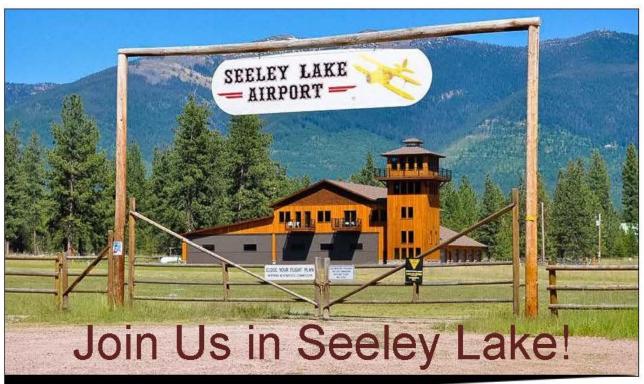
Pilot: Can I fly around in circles Sir?

Controller: Negative, you are in a busy airspace right

now.

Pilot: Ok then, I'll fly around in straight lines.





SEPTEMBER 13, 2014

The Montana Pilots Association 75th Anniversary & The Seeley Lake Airport 50th Anniversary!



Join us September 13th, 2014 to celebrate two outstanding aviation organizations and the many years of service they have contributed to Montana Pilots! The Montana Pilots Association (MPA) is a non-profit organization that was founded in 1939 to serve the interests and needs of general aviation in Montana. The Seeley Lake Airport was established in 1964 and is frequented by recreational flyers and utilized by a number of aviation activities such as firefighting, emergency medical evacuation and

search and rescue operations. The MPA, MDT and the Seeley Lake Aviation Foundation will be providing food and beverages from noon to 3pm or until the food runs out. Guest speakers will begin at 1pm and the Seeley Lake Senior Citizen Center will be offering their assistance for food preparation and service. Donations can be made to support the Seeley Lake

Senior Citizen Center for their provided services at any time during the celebration. We encourage all to attend and look forward to seeing you in Seeley Lake!

THE SEELEY LAKE AVIATION FOUNDATION
P.O. BOX 1168 - SEELEY LAKE, MT 59868

For more information, call (406) 444-2506.

THE SEELEY LAKE SENIOR CITIZEN CENTER



SEELEY LAKE, MT



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September, 2014



FAA offers new weather reporting tool for pilots

The FAA is encouraging the use of a new tool for electronic submission of pilot weather reports (PIREPs).

The tool is located on the National Weather Service's (NWS's) Aviation Weather Center (AWC) Aviation Digital Data Service (ADDS) website, and lets pilot enter real time turbulence and icing PIREPs electronically, along with other weather observations, which will then be displayed graphically and distributed nationwide.

"There are a number of benefits to this new system," noted National Business Aviation Association Air Traffic Management Specialist John Kosak. "The information can be immediately distributed to others throughout the aviation community, as well as to dispatchers and schedulers who can use it for flight planning. Also, air traffic managers will hear of the areas where weather is constraining the system, and pilots can plan their routes to travel as safely and efficiently as possible."

Also, the information can be fed into the NWS models to improve the accuracy of the forecasts, said Kosak, who serves as staff liaison to the new NBAA Weather Subcommittee.

"The more data that is input from across the National Airspace System (NAS), the better the forecasts the aviation community receives through the AWC on the ADDS website," he added.

This includes human generated products like AIRMETs and SIGMETs, as well as automated products like the graphical turbulence guidance, the current icing product and the forecast icing product.

One report the NWS would actually like to see more of is the "null report," Kosak said. For example, a report of no turbulence in an area where the pilot actually experiences a smooth ride, he explained. These reports allow NWS them to tweak its forecasting process.

Operators interested in participating in this effort should direct email inquiries to ncep.awcweb@noaa.gov. The following information is required for enrollment: location name, name and email of the primary point of contact and a phone number.