

Montana and the Sky



Montana Department of Transportation

Aeronautics Division

Vol. 68, No. 5

May 2017

MDT- Aeronautics Division Sponsors Aviation Awareness Art Contest



Alex Cooley (left), Alana Brown, and Victoria Schneider proudly display their art work, certificates, and trophies at the Aviation Awareness Art Contest awards ceremony.

The Aviation Awareness Art Contest awards ceremony was held in Helena on May 5, 2017. This annual contest was first established in 1986 as an essay writing contest to encourage and educate students in the many career opportunities in aviation and aerospace. Over the years, it has grown into a state wide event that has become a recurring project for several schools. By broadening their knowledge of this field, it is our hope that students will gain a new found interest in aviation/aerospace and its increasingly evolving career opportunities.

MDT Director Mike Tooley and the Aeronautics Division Administrator welcomed this year's Art Contest winners to Helena with a reception in the Capitol Rotunda. Guest speaker, Adam Weitz of Exec Air Montana, told of his success in the field of Aviation after he won first place in the same art contest in 1998. Winners; Alex Cooley (Kalispell), Alana Brown (Bozeman), and Victoria Schneider (Fromberg) traveled to Helena by airplane with their families to receive their awards. The winners and their families were treated to a guided tour of the capitol building, followed by lunch downtown at Bert &

Ernie's restaurant before being flown back home. Congratulations to all the winners and thank you to all the students that participated in this year's contest!



Front row left to right; Alex Cooley, Alana Brown, Victoria Schneider. Middle row; sister Addy Cooley, mother Amy Brown, mother Mary Schneider. Back row; father Zane Cooley, father Dan Brown, father Greg Schneider.

Former Chief Pilot Teaches Ground School

Fifth-grade students in Ms. Erin Maxwell's PEAK program at Ray Bjork School in Helena recently took ground school lessons in air navigation and cross country flight planning from Bozeman native and former Allegiant Airlines east coast Chief Pilot, Chris Gillette. Chris volunteers with the education programs at the Aeronautics Division when he is not flying as a co-pilot on the State of Montana King Air or working as a grounds keeper at the Montana Learning Center at Canyon Ferry Lake.



Chris Gillette, above, pilot and volunteer educator.

Administrator's Column

Airway Beacon Update: Now that the legislature has adjourned, I wanted to update you on the airway beacons. HB2 did pass with the beacon language stricken as amended on a motion by Senator Lang. In a meeting following that with Lt. Governor Cooney, Representatives Ellis and Curdy, Governor Bullock's chief counsel Ali Bovingdon, Director Tooley and myself, the Lt. Governor requested that Director Tooley create a beacon "working group." The group will consist of industry representatives who will develop recommendations for the future of the airway beacons to be shared with the general public via one or more public meetings. The recommendations will then be presented to Director Tooley for consideration prior to him making a decision regarding the future of the airway beacons in Montana.

UAS Training at UM: The University of Montana Autonomous Aerial Systems Office and Sands Unmanned Aviation Training (SUAT) of Kalispell will team up to offer a Basic Unmanned Aviation Systems Training Course next month. The training will be held on the UM campus May 22-26 and will provide ground instruction, hands-on flight instruction with small quadcopters, preparation for FAA licensing, and an overview of GIS and sensor applications. The course will be taught by Justin Sands and Hovig Yaralian of SUAT and Kevin McManigal of UM's Department of Geography. The training aims to convert people with little to no Small Unmanned Aerial Systems (sUAS) experience into beginner pilots who understand and operate in a safe and productive manner. Sands, from Columbia Falls, is a private pilot with more than 350 manned flight hours and 1,500 hours of sUAS flight time. He has extensive experience in the design, building and flight testing of UAS's, including the Sandstorm UAV that he uses in training MQ-9 Predator pilots for the U.S. Department of Defense. Registration for the Basic UAS Training Course is open to the public, and participants can earn two college credits. The course is being offered through UM's Department of Physics and Astronomy and the School of Extended and Lifelong Learning. For more information or to register, call Jaylene Naylor at 406-529-9174 or email jaylene.naylor@umontana.edu.

Neptune Aviation News: Neptune has joined efforts to fight devastating wildfires in Chile that have killed at least a dozen people, destroyed over 2,000 homes and left 8,000 homeless. All of the local resources were committed and Chile put out an international plea for assistance calling Neptune to see if aircraft were available according to Missoula-based Neptune Aviation CEO, Ron Hooper. Hooper sent one of Neptune's next generation four-engine-jet-tankers carrying four Neptune employees. Once there, it's just another day once you overcome the language challenges. About 99 percent of the ground forces do not speak English. Fortunately, one of Neptune's employees on this mission has taken on a bigger role than normal as he is fluent in Spanish. He's been riding along in the cockpit and having communication with ground personnel in Spanish, per Hooper. The 2017 fire season will certainly be noteworthy as this is the final service year for Neptune's fleet of iconic propeller-driven P2V air tankers. The aircraft will be retired this fall with a couple of the old planes kept around in airworthy condition for air shows, others going to museums, and one at the airport gate in Missoula.

Aircraft Owner and Pilot Association (AOPA) Scholarship Deadlines

Approaching: Funded by generous donations to the AOPA Foundation, the AOPA High School Flight Training Scholarships and the AOPA Flight Training Scholarships are opening pathways to a life in aviation for individuals while helping to secure general aviation's future. Article continued on page four...



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Official monthly publication of the
Aeronautics Division
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Aviation Fuel Now Available at Big Horn County Airport in Hardin

Pilots flying into the Big Horn County Airport at Hardin, (00U) will now be able to purchase 100LL aviation gasoline following the recent installation of a self-service fueling facility at the two-year-old airport, according to Ed Auker, Airport Manager. The new Hardin airport, located three miles northwest of the old airport next to the fairgrounds, opened for use in December 2014. The \$6 million project was funded in part by \$175,000 in grants over eight years authorized by the Montana Aeronautics Board derived from aviation fuel tax revenue.

Big Horn county constructed nine hangars on the field prior to opening, and all but one are currently rented. Space is available for lease on the airport for construction of more hangars. The new 4,490-foot asphalt runway is more pilot and business jet friendly than the old strip located on the lee side of the grain elevators on the edge of town. Auker has seen increased traffic since the new airport opened, including business jets bringing clients to stay at fishing lodges on the Big Horn River, state and federal agencies conducting wildlife surveys, wildland firefighting, and pest control.



Big Horn County Airport, Hardin, MT

The FAA process for publishing an RNAV GPS instrument approach procedure into the airport has begun, which will greatly benefit air ambulance services for Hardin and the surrounding communities.

A fly-in on June 25th is planned to coincide with the 141st anniversary of the Battle of the Little Big Horn, which took place just 15 miles south of Hardin. Pilots attending the fly-in can make the 40-mile flight to the south-southwest for stunning views of the Big Horn Canyon National Recreation Area. For more information, contact Ed Auker at 406.665.1731 or eauger@bighorncountymt.gov.



Photo Credit: <http://afthunderbirds.com/site/2017/03/21/trip-4-waco-texas/>

Thunderbirds to Perform in Great Falls

The U.S. Air Force Air Demonstration Squadron, The Thunderbirds, will perform in the Flight Over the Falls airshow in Great Falls on July 22-23. The mission of the squadron is to perform precision aerial maneuvers to demonstrate the capabilities of the F-16 Fighting Falcon aircraft. Their objective is to support Air Force recruiting and retention and to strengthen esprit de corps and morale within the Air Force. The squadron, currently based at Nellis Air Force Base, Nevada, has been performing air shows since 1953 and will fly at 37 events this year.

MDT Aeronautics Division Maintains Meteorological Evaluation Tower Site Database

Montana is home to a vast source of renewable wind energy, and land owners are seeking to take advantage of the resource by evaluating their properties for the siting of windmills. The evaluation is typically done by the installation of a 200-foot tall meteorological evaluation tower (MET) that can record wind speeds and direction for a period of two years. Montana law has specific marking requirements for these towers, and the MDT Aeronautics Division maintains a database of known MET tower sites in the state.

A map showing the location of these towers is maintained at <http://www.mdt.mt.gov/aviation/obstruction-info.shtml>. The database is updated whenever MET towers are constructed or removed. If you notice a MET tower that you believe has not been included on our map, please contact the Safety and Education Bureau at 406.444.9568, or hdramstad@mt.gov.

Unmanned Aerial System (UAS) Tested by MDT for Field Use

Staff from the MDT Construction and Engineering Bureau recently performed a successful mapping exercise at the Lincoln Road section yard near Helena using a UAS. The newly acquired system, a DJI Phantom four motor electric quad copter, operates with a gimbal stabilized 12-megapixel digital camera and software that permits a fully automatic flight. Top speed of the device is 45 mph, with a battery endurance of 28 minutes. Maximum range of signal transmission from the ground control unit is 3.1 miles, and position accuracy, of the aerial unit is +/- 4 inches vertically, and +/- 12 inches horizontally when flying below about 35 feet. In the event of loss of signal, the UAV will return to its point of power up at an altitude of 300 feet.

Operation of the system is limited to wind conditions of less than 15 mph. The 28-acre Lincoln Road site was mapped in about 10 minutes from an altitude of 200 feet, collecting data to produce maps and volume estimates of stockpiles of material. The UAS technology operated under FAA Part 107 holds great promise for fast, accurate, safe, and efficient use in engineering applications.



Staff from the MDT Construction and Engineering Services Bureau flew their new UAS recently on a scouting mission over the Bear-tooth Highway to assist MDT maintenance crews in planning their road clearing work.

Courtesy car available at Riddick Field, Philipsburg, Montana

For information, contact Vince Reece at 406.560.4437.

Continued from Administrator's column page two:

For application deadlines and details about eligibility requirements for both scholarships, click on the appropriate link. [2017 High School Flight Training Scholarship Program](#) will award 20 flight training scholarships of \$5,000 each to eligible high school students. Eligible students must be 15 to 18 years old, U.S. citizens or permanent residents, carry at least a 2.75 cumulative GPA and not yet have taken a check ride for a pilot certificate. Scholarship applications will be accepted until May 19, with the winners to be announced on June 23. [2017 AOPA Foundation Flight Training Scholarship Program](#) will award scholarships ranging from \$2,500 to \$5,000. The deadline for submitting applications is May 31, with the winners to be announced in late June or early July. The **AOPA Foundation Flight Training Scholarship Program** encourages student pilots to achieve their goals by facilitating a positive flight training experience. Applicants must be a U.S. citizen or permanent resident; at least 16 years of age by May 31, 2017; hold an FAA student pilot certificate and be a current AOPA member. For more information regarding eligibility requirements, go to the [FAQ page](#).

Flying and Fly Fishing at Rock Creek Airport



Would you like to combine some flying and fly fishing...? The Rock Creek Airport (RC0) southeast of Missoula is a good destination. RC0 is located approximately 25 NM from the Missoula VOR/DME on a 105 degree heading, or approximately 58 NM from the Coopertown VOR on a 302 degree heading. Originally constructed in 1958, the current turf runway 07/25 is 4,110' X 75'. About one mile south from the departure end of Runway 25 at 90 Rock Creek Road is "A Cabin at Rock Creek Montana." The cabin is available for reservation via their website: www.vrbo.com/723618. Blue ribbon fishing is available a few steps away. The popular Rock Creek Mercantile www.rcmerc.com/ and Ekstrom's Stage Station Restaurant www.ekstromstagestation.com/ and are right across the street.

Aviation Maintenance Technician Day is May 24, 2017

In May of 2005, Montana Governor Schweitzer signed and issued a Governor's Citation designating every May 24th as Aviation Maintenance Technician (AMT) Day. AMT Day celebrates the birth date of Charles E. Taylor, the world's first Aviation Mechanic of powered flight and machinist for the Wright Brothers.

Charles was born on May 24, 1868, on a farm in Cerro Gordo, Illinois. After moving to Dayton, Ohio and working at several jobs, he went to work for the Wright's on June 15, 1901, for \$18 a week. He started doing routine repairs on bicycles, which freed up the brothers to pursue their experiments with gliders.

He built the Wright's first wind tunnel and machined a lot of the parts used on their glider. During the winter of 1902, using crudely sketched drawings, he began building an engine, which by the Wright's calculations needed to produce 8 to 9 brake horsepower and weigh no more than 180 lbs. He finished the 4-cylinder engine in six weeks. In February 1903, the engine was placed on a test stand. It produced 12 hp at full throttle. The Aviation Maintenance business began and Charles Taylor became the first aircraft mechanic.

Charles was one of those many people who worked quietly in the background, but made an enormous impact on aviation. His craftsmanship, enthusiasm, and quiet genius earned him a place in aviation history when the Wright brothers successfully flew their airplane at Kitty Hawk, on December 17, 1903. Without Charles Taylor, the Wright brothers would not have made that historic flight 113 years ago.

The Wright brothers depended on the talents of Charles Taylor. Montana aviators depend on the talents of the states hard working, conscience aircraft maintenance technicians. Montana currently has 922 active aviation mechanics with Airframe and Powerplant ratings, of those, 241 hold Inspection Authorizations. There are also 62 holders of Repairman Certificates working in Montana Repair Stations.

Take the time to recognize each and every one of the dedicated Montana Aviation Maintenance Technicians that help make the US Aviation system the safest in the world.



Helena College students Eric Harwood, left, Bree Sutherland and Chris Duncan.

Additional information on Charles Taylor can be found at http://www.faa.gov/about/history/pioneers/media/Charles_E_Taylor.pdf.



Nolan Teel, left, of Great Falls, commander of the Montana Wing of the Civil Air Patrol since 2013, relinquished command of the Montana Wing to Mitch Edwards of Bozeman, center, in a change of command ceremony during the Wing conference in Helena on April 22nd at the Colonial Radisson Hotel, as Vice-Wing Commander AI Nash looks on.

Non-Directional Beacons Decommissioned

ATENTION PILOTS: The following NDB's have been decommissioned in the past 12 months and are no longer available for navigation purposes. The only exception is the Shelby NDB which will be available for the time being, but only for VFR navigation. For questions contact Jan Smith at 406-444-9592 or jansmith@mt.gov.

- Chester (LTY) VFR decommissioned
- Choteau (CII) IFR decommissioned
- Circle (CRR) VFR decommissioned
- Conrad (CRD) IFR decommissioned
- Ennis (EKS) VFR decommissioned
- Eureka (88M) VFR decommissioned
- Glasgow (GGW) IFR decommissioned
- Harlowton (HWQ) VFR decommissioned
- Jordan (JDN) VFR decommissioned
- Malta (MLK) VFR decommissioned
- Plentywood (PWD) VFR decommissioned
- Scobey (SCO) VFR decommissioned
- West Yellowstone (ESY) VFR decommissioned
- Wolf Point (OLF) IFR decommissioned

Calendar of Events

May 20, 2017 - Fly-In Breakfast Havre City County Airport (KHVR), hosted by North Central Hangar MPA. We offer the second best breakfast you can get at any airport. Serving from 7:00 a.m. to 11:00 a.m. Pilot in command eats free. Others, all you can eat for \$7.00. For information contact Willie Hurd at 406-945-3646.

May 27, 2017 – Spotted Bear work session will begin at 9:00 a.m. For further information, contact Wade Cebulski at 406.444.9581 or email wcebulski@mt.gov.

June 3, 2017 - Annual Burger Burn Social - From 11:00 a.m. to 1:00 p.m. at Morrison Park, Helena, hosted by EAA Chapter 344. Inviting any and all aviation enthusiast and their guests to join us for a burger, fixings, and beverages. Included, of course, will be the airplane banter from the local home-builders and aircraft owners/operators/controllers.

June 10, 2017 - Lewistown Airport Fly-In Breakfast 13th annual pancake breakfast served from 7 a.m. to noon for \$6. There will be Young Eagle rides courtesy of EAA Chapter 344 from Helena. A large turn out of Cubs from back east is expected. Vintage tractors and a working black smith shop will be in operation at the airport.

June 17, 2017 – Meadow Creek work session will begin at 9:00 a.m. For further information, contact Wade Cebulski at 406.444.9581 or email wcebulski@mt.gov.

June 17, 2017 - Plains Airport (Penn Stohr) Field (S34) Fly-In Breakfast - from 8:00 am to 11:00 am. Sponsored by the Montana Pilot's Association, Sanders County Hangar. For information, contact Randy Garrison at 406.370.6179.

June 19-20, 2017 - Aviation Career Exploration (ACE) Academy - Program geared toward high school students interested in aviation. For more information, contact Harold Dramstad at 406.444.9568 or hdramstad@mt.gov.

June 24, 2017 - Wings and Wheels Airshow, Hamilton Airport - Join us for a pancake breakfast, car show, static display aircraft, and airshow. This year's airshow will feature Legacy Air Museum and Power Addiction Air Show. For more details, call Choice Aviation at 406.363.6471 or visit www.wingsandwheelsairshow.com.

June 24, 2017 – Rocky Mountain College Flight Team Fly-In – Laurel Airport, Northern Skies Ramp. Breakfast at 8:00 a.m. Pilot competitions start at 9:00 a.m. For more information, call Sam at 406.861.1170 or email sam@mtchemnet.com.

June 24, 2017 - Fly-In Breakfast at Round Up Airport (RPX) - from 8:00 a.m. to 12:00 p.m. For more information contact Doug Parrott at 406-323-1662.

June 25th, 2017 - Big Horn County Airport Fly-In - Hardin to coincide with the anniversary of the Battle of the Little Big Horn. For information, contact Ed Auker at 406.665.1731.

July 4, 2017 - Townsend Festival of Flight - "We don't fool you, we feed you!" An annual, deluxe fly-in breakfast and Young Eagles Rally for all GA, Experimental, Classic, Vintage and Light Sport aircraft sponsored by EAA Chapter 344 at Townsend Airport. Breakfast served 8:00 a.m. to 10:00 a.m. Young Eagles flights 09:00 a.m. to 11:00 a.m. For more information, contact Neil Salmi at 406 980-0544, and for Young Eagles flight information, contact Lance Seaman at 406.442.8459. Proceeds support EAA programs.

July 15, 2017 – Schafer Meadows work session will begin at 9:00 a.m. For further information, contact Wade Cebulski at 406.444.9581 or email wcebulski@mt.gov.

July 15, 2017 – Jim Bridger Fly-In & Celebration Days- Breakfast will be 7:00 a.m. to 9:00 a.m. and the fly-in is held in conjunction with Jim Bridger days that will be going on in the town of Bridger. For information contact Merrill Pfeifer at 406- 425-4218.

July 21-22, 2017 - Can-Am Aerobatic Competition, Cut Bank Airport. This is the only sanctioned competition in Montana, drawing pilots and airplanes from Montana and northwestern U.S. and Canada. Everyone is welcome with transportation to town available during the event. Call Dave Ries for more information at 406.229.0376.

July 22, 2017 – Jerry Cain's annual BBQ and community open house at the Lincoln, MT airport (S69). The BBQ from 11:00 a.m. to 2:00 p.m. There will be hamburgers, hot dogs, cake, ice cream and more! You may bring food to share or cook on the BBQ. Tie down area and campgrounds available! Contact Jerry at jcain@theraf.org for more information.

July 23, 2017 - Annual St. Ignatius (52S) Huckleberry Pancake Fly-In Breakfast - From 8 a.m. until noon. This free event is sponsored the EAA Chapter 1122. For more information, contact Michael Kuefler at 406-544-2274.

July 22-23, 2017 - Flight Over the Falls - U.S. Air Force Air Demonstration Squadron, Thunderbirds in Great Falls, MT. For more information, contact Montana Air National Guard at 406-791-0159.

August 13, 2017- Hysham (6U7) Fly-In - The Hysham airport fly-in and drive-in will be on Sunday, August 13th from 7 a.m. to noon. The breakfast is a fundraiser for the Hysham Lions Club. Cost is \$8 and will include pancakes, ham, eggs, coffee, and juice. Contact airport manager, Bob Miller, with questions at 406-342-5252.

August 18-20, 2017 - The 15th Annual Montana Fun Weekend Fly-In and Car Show will be held at the Cut Bank Airport. Breakfast available Saturday and Sunday. Burn-out contest and movie Friday night. Car, motorcycle, and airplane show and shine Saturday. Concessions onsite Saturday. Call Roy at 406.450.1078 for more information.

September 8-10, 2017-Search Pilot Clinic, the 2017 MDT Aeronautics Search Pilot Clinic will be conducted at the Fort Peck airport, 37S. For more information contact Harold Dramstad at 406-444-9568

September 9, 2017 - Polson Fly-In Breakfast - From 8:00 a.m. to 11:30 a.m. Courtesy of EAA Chapter 1122. For more information, contact Joe Kuberka at 719-393-5550.

Lincoln County Search and Rescue Unit Trains with Aeronautics



The Can-Am Search and Rescue Unit, under the direction of Lincoln County Sheriff, Roby Bowe, met recently at their facility on the old Eureka airport to train with the MDT Aeronautics Division in using directional finding equipment to locate missing aircraft. Thirty members of the unit turned out for their monthly training with president, Greg Miller, and training officer, Jason Van Tatenhove. The homing equipment and car top antennas provided by Aeronautics are used to locate emergency locator transmitters activated in aircraft accidents.

Join us!

Aviation Career Exploration (ACE) Academy
June 19-20, 2017

MONTANA MDT ★
DEPARTMENT OF TRANSPORTATION

www.mdt.mt.gov/aviation



zero deaths

zero serious injuries

Vision Zero: A Goal for Everyone

In 2016, there were 190 fatalities on Montana roads.

What does that mean? 190 parents, children, grandparents, friends, siblings, spouses, and other loved ones had lives that were cut short. It also means countless tears and shattered lives of those left with the aftermath of unsafe driving behaviors. Which loved one are you prepared to lose? If your answer is none, then

Vision Zero is also YOUR goal.

It will take every one of us to work towards the day that Vision Zero is met, and the fatality total reads "ZERO." Two of the highest contributing factors to traffic fatalities in 2016 were alcohol and no seat belt.

These are behaviors that can be changed! Start by always wearing your seatbelt and planning for sober transportation. Remind your loved ones and those around you to do the same.

-Director Mike Tooley, MDT

Visit www.mdt.mt.gov/visionzero for more information.