

Montana and the Sky

Montana Department of Transportation

Aeronautics Division

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Schafer Meadows Work Session



*Fence walk through to campground
Photo Credit: Aeronautics Staff*

Good weather on July 18, 2020, made for a fantastic socially distanced turnout at the Schafer Meadows work session. Nearly 20 airplanes arrived, and a couple dozen volunteer workers completed multiple projects this year. Rotten portions of the eastern approach-end fence end were dismantled and replaced with new wood and painted orange. The restrooms received a thorough cleaning, the airfield was raked free of vole trails, and some exposed rocks were dug



*Volunteers rebuilding and painting the fence
Photo Credit: Aeronautics Staff*

up and removed. Tall brush was whacked down, windsock poles received a fresh coat of paint, and the sock swivel cages were given fresh lubrication. (Did the squeaking wake you up in the morning, too?) The runway cones were realigned to straighten the edges, as winter tends to be hard on them.

A new sign made by Pete Smith was installed at the campground behind the parking area. The original sign was rotting away and was replaced by a durable metal creation on new posts. Rob Buckles, Aeronautics Board member, posed for a photo to inaugurate the new sign.

Finally, new tie down ropes were attached on the existing tie downs and a new walk through was added in the fence to facilitate ease of accessing the campground. No, stock cannot squeeze through the fence walk through like us "skinny" pilots can. MDT Aeronautics staff flew into Schafer for the day with donated materials to help with the projects.



*Pete Smith's beautiful C-180 soaking up some sun
Photo Credit: Aeronautics Staff*

A pork chop and corn on the cob dinner was graciously provided by Loren Smith and flown in by Pete Smith.

Thank you to all who attended and donated supplies. Thank you, MPA member Scott Newpower, for coordinating the work session!



*Rob Buckles poses with new campground sign
Photo Credit: Aeronautics Staff*

New Yellowstone Airport Staff Attend ARFF Training



Aircraft rescue and egress simulator Photo Credit Aeronautics Staff

In June, two Yellowstone Airport employees attended and completed a weeklong Aircraft Rescue and Fire Fighting (ARFF) certification course at the Rocky Mountain Emergency Services Training Center in Helena, Montana. Operations and Maintenance Specialist Luke Borowicz and 2020 Summer Intern Zachary Humphrey attended the rigorous training program and learned about firefighting strategy and participated in live fire training exercises.

The 40-hour training program consists of 20 hours classroom learning about fire safety, firefighting tactics, and rescue tactics and 20 hours are spent on live fire training exercises. These exercises included extinguishing an exterior plane fire, using an Index B ARFF truck, and battling an interior fire in the Specialized Aircraft Fire Trainer (SAFT) using handheld hose lines. While participating in the interior SAFT fire exercise, ARFF personnel wear full firefighting turnout equipment which includes a jacket, pants, gloves, helmet, and a self-contained breathing apparatus (SCBA). The protective equipment allows for individuals to safely withstand the 500-degree temperatures emitted from the interior fire simulator.

To date, all Yellowstone Airport employees are fully trained, and FAA certified to respond to an aircraft emergency or incident.



Aircraft fire simulator Photo Credit Aeronautics Staff



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From San Francisco to Schafer

By Marc McKee

As I wrapped up my last few flights in the very computerized, very electric Airbus 320, I contemplated my transition back to flight in General Aviation (GA). The return to seat of your pants flying was not only exciting, but long overdue. There is so much routine in the airline world, but for good reason. Standard Operating Procedures (SOPs) keep thousands of pilots in sync with each other and the airplane. Practice, mutual respect between seats, and excellent state-of-the-art training centers all keep safety on the forefront of each pilot's mind.

As I dig back to my general aviation roots, I realize many times we are out there on our own. I am recalling my days of flying a Maule in Alaska and teaching new students how to fly in Ohio. No dispatcher to call up with the latest technology at his or her fingertips. No wise, well-seasoned Captain to lean on. The same resources may not be available to us hobby flyers, but there are still a plethora of products and tools at our disposal. My fellow Bureau Chief primed my transition by showing off the new 1800wxbrief.com website and a thorough dive back into Foreflight. My checkout instructor showed me around the local



Pilots Marc McKee and Katie McKee
Photo Credit Aeronautics Staff

VFR checkpoints and ran me through the gamut of maneuvers in the Bonanza. Now, I find myself watching long-term forecasts, scanning satellite imagery, and even glancing at the old lifted K charts (I had to look that one up) instead of relying in onboard radar. We pilots do have

access to great tools after all, we just must know where to find them and stay fresh on the updates.

As for SOPs mentioned earlier, it turns out those tools still work great in GA. Have a routine with flows, and always checking weather before a flight no matter if you just landed or if it has been a month since you flew, are a few examples. Always briefing a passenger on the basics of how the windows and doors work, egress points, and what to do in case of emergency is another example. It is easy to brush off some of these proven procedures as we fly with a similar passenger or approach a greater level of comfort with our airplane. Inevitably, we are still prone to complacency and human error. Yet, these techniques continue to produce safer outcomes time and a time again as long as we follow them every flight.

I invite all of you to share techniques with each other and me in a pilot lounge or at a clinic or around town, just as you have

done for years. One of our greatest resources here in Montana is each other! Sometimes, without thinking about it, I find myself asking how rides were or what pass did you take even when not flying. I bet many of you do the same as a matter of habit. As we flew into Schafer last month for the annual work session, I was reminded why we do all the work, the training, the planning. The group of individuals and the various organizations from the MPA to the RAF to the Forest Service working alongside for the betterment of all users was quite a sight. With the backdrop of the gorgeous Bob Marshall Wilderness area, I was able to start gleaning information about approach methods and weather patterns from the pros. Watching the various approaches to landing and takeoffs on the turf strip with only one way out solidified my continued curiosity of, "How can I be a better pilot?"



Marc McKee in right seat of Airbus 320 Photo Credit Marc McKee

I have realized repeatedly, I can and will learn something new from every person with which I have the pleasure to fly. Whether they are a student pilot with a fresh perspective or a salty old guard pilot who has lived through an era with few of the tools discussed here. That is why I love aviation like the rest of you. Thank you all for welcoming me back to the wonderful world of GA!

Aeronautics Board Loan & Grant Application Reminder

As a reminder to Montana Aeronautics airport loan and grant program applicants, the Loan and Grant online portal (<http://www.mdt.mt.gov/aviation/loans-grants.shtml>) is accepting FY22 applications from July 1, 2020, through November 15, 2020.

If you cannot enter the website, you may have a previous award that needs a closeout form or a status report filed (required at project completion, or annually).

Additionally, projects must be broken down and listed as one project per line item on the application. As an example, asphalt projects should be broken down by runway, apron, and taxiway and not as one project lumped together.

If you have questions or need assistance, please contact Karen Speeg at (406) 444-9569 or kaspeeg@mt.gov.

Montana Pilot Uses Drones for the Greater Good



Kevin flies a drone Photo credit: Kevin Danz

Six years ago, Kevin Danz, a Montana native pilot and aircraft owner, saw an opportunity to use drones to improve advertising for businesses and as an impactful philanthropic tool. That is when Kevin started an FAA-approved drone business called iFLYBIGSKY in Helena.

Some of you may have seen his famous enchanting ice skating video. He used one of his drones to film ice skaters on Canyon Ferry Lake creating a very special video of a beautiful winter day in Big Sky Country. Speed skaters glided across crystal-clear ice, and attracting more than 16 million views. Within three days of the video's creation, it was played on the Today Show, Good Morning America, CBS late night news, and other national media outlets.

Kevin was sworn in with the Lewis & Clark Sherriff Office as a "Special-Deputy" Pilot/Drone pilot. He has participated in six homicide investigations, located a lost child, and has created many promotional videos for local governments using drone technology.

You may have seen some of Kevin's awesome drone footage of the historic Augusta floods from two years ago. A drone equipped with thermal capability assisted in locating a drowned diver. A new addition to the fleet is a specialized water drone, Montana's first. It is an underwater diving drone, capable of depths over 350 feet. It has ambulatory arms capable of grabbing objects and 4k video ability.

Last summer, Kevin flew his 1984 Long-EZ to capture Miss Montana (C-47) which dropped wreaths to remember, honor, and commemorate the 70th Anniversary of the Mann Gulch Fire that claimed the lives of 13 firefighters on August 5, 1949.

Bret Bouda and Kevin donated a picture of the Sperry Chalet in Glacier Park three weeks before it was destroyed by a forest fire several years ago. Kevin plans to work with local government agencies to get approval to fly into Glacier Park to capture the newly built Sperry Chalet.

Kevin volunteers his spare time for worthy projects in need of promotion. He has filmed and created videos to promote Toys for Tots, the VA cemetery, Out of the Darkness Suicide

Awareness Walk, and fallen soldiers. In the last few years, he has taken Veterans for flights over the Mission Mountains to help them deal with PTSD, suicide, and other issues they have encountered from combat.



Left: Miss Montana Right: Kevin's Long-EZ in trail Photo Credits: iFLYBIGSKY

More recently, in April, Kevin flew his Long-EZ to Shelby to honor those who had lost their lives to COVID-19. He flew one lap around the city for each person who had perished followed by a low pass over the community's hospital to boost morale.

A moment of silence was performed in Shelby during the flight. Kevin said seeing the community on the ground below waving flags was very emotional, and something he will never forget.



Kevin's 1984 Long-EZ Photo Credits: iFLYBIGSKY

Where Flying & Fishing Meet



Jim Booth fishing from his 1954 Faust PA-12 Photo Credit: Aeronautics Staff

Jim Booth and his wife splashed in to drop a line on Canyon Ferry Lake one beautiful afternoon in July. Jim met with instant luck, landing a big rainbow trout within minutes of casting.

Many of you saw this special airplane at the 2020 Aviation Conference in Great Falls, a 1954 Faust PA-12 powered by a Warner radial on amphibious floats. Jim used over 20,000 rivets building the floats!

Aviation Quiz

1) You're doing 3 night takeoffs and landings so you can take your friends on a night cross-country flight. When do you need to log your 3 takeoffs and landings?

- A: 1 hour after sunset ending 1 hour before sunrise
- B: 30 minutes after sunset ending 30 min before sunrise
- C: Sunrise to sunset
- D: The beginning of civil twilight to the end of civil twilight

2) Montana's backcountry wilderness airstrips include:

- A: Spotted Bear
- B: Schafer Meadows
- C: Meadow Creek
- D: All of the above

3) Individuals who are fatigued can start to experience hypoxia symptoms as low as ___ during the day and ___ at night.

- A: 5,000' MSL; 3,000' MSL
- B: 10,000' MSL; 5,000' MSL
- C: 12,000' MSL'; 10,000' MSL
- D: 12,500' MSL; 15,000' MSL

4) According to the National Weather Service, on average, one inch of rain is equivalent to how many inches of snow (yea, that stuff is right around the corner!)?

- A: 8 inches
- B: 14 inches
- C: 7 inches
- D: 10 inches

5) What is the difference between a tetrahedron and a windsock?

- A: Tetrahedrons are more accurate in high wind
- B: Wind socks are lit at night, tetrahedrons are not
- C: Tetrahedrons are more accurate in light wind
- D: Tetrahedrons can be manually set to show which runway is in use

6) Montana owns how many airports?

- A: 0
- B: 74
- C: 16
- D: 126

Apply for International Aircraft Dealers Association Business Aviation Scholarships



The International Aircraft Dealers Association (IADA) is accepting applications from college students for its Business Aviation Scholarships through October 1, 2020. The scholarships, funded by the IADA Foundation, will be from \$1,000 to \$5,000. Last year, eight scholarships were awarded.

Typically, the IADA has limited awards to students with GPAs above 3.0. However, this year, students who have been adversely affected by the COVID-19 pandemic are encouraged to apply. The Scholarship Award Selection Committee will evaluate each applicant on a merit and needs basis.

The IADA Business Aviation Scholarship was established to benefit university students seeking a career in business aviation, specifically within corporate aircraft sales, marketing, finance, legal, and insurance disciplines.

Applicants must apply through their university's financial aid office. The universities need to submit a list of applicants meeting IADA scholarship requirements to IADA no later than October 1, 2020.

IADA will accept applications from qualified applicants attending colleges and universities offering course work in corporate aviation management, aerodynamics, aircraft systems, aviation safety, finance, business marketing, economics, and/or studies that relate to aviation business and management.

The awards are available to full-time, undergraduate students taking a minimum of 12 hours per semester, and graduate students. Applicants must have a 3.0 minimum cumulative GPA on a 4.0 grade scale unless the pandemic has adversely impacted them.

Applications, and all supporting material, must be mailed by the university's Financial Aid Office to: International Aircraft Dealers Association, Attn: Scholarship Award Selection Committee, 2752 E Windsong Dr., Boise, Idaho, 83712.

Winners will be notified by November 30, 2020.

When Exiting a Backcountry Strip

By Mike Vivion, Montana Pilots Association President

Occasionally, when visiting a backcountry airstrip, we observe someone else learning a difficult lesson. As the old saying goes, “Learn from the mistakes of others, none of us will live long enough to make them all ourselves.”

In the case I’m discussing here, a pilot landed a tricycle gear airplane on a mountain strip with a good landing and roll out. There was another airplane in the pattern for landing. At this strip, the area to the side of the landing surface was covered by tall vegetation.

The pilot exited the runway a little bit hurriedly to clear the runway for the airplane on downwind. Unfortunately, as he taxied through this tall vegetation, he was not able to see a depression and the spoil pile from that depression just ahead. As luck would have it, his nose wheel found that depression and lowered his propeller enough to just skim that pile of dirt. OUCH!!

As is often the case, there were many bystanders observing this operation, all of whom headed toward the now shutdown airplane. The pilot of the aircraft jumped out of the plane quickly to examine the damages. The plane was now off the runway, and the crowd mobilized to move it further to safety. Someone in the crowd yelled “Are the mags off? The Master is still on!” A bystander quickly checked and turned both the master switch and the magnetos off. The plane was then hurriedly pushed back until another bystander yelled “watch the elevator!” The nose was high, the tail was low, the elevator was drooped. The rush of the bystanders almost bent the elevator pushing it back, also in the interest of clearing the runway quickly. The elevator was then secured by seat-belted the yoke all the way aft, and it was safely pushed further away from the runway surface by the crowd.

There are several lessons we can learn from this unfortunate event:

- Often, there’s no compelling need to rush exiting the runway, particularly when the area outside the runway surface is covered by dense vegetation. A good practice is to shut down on the runway, and walk the area you intend to taxi. If another plane is approaching, try to find a spot that looks good, get just off the runway surface, shut down, and walk the area you want to taxi on and park in. This is true for tricycle gear aircraft, but pilots of tailwheel aircraft should use caution as well. A badger hole can swallow an average size aircraft tire.
- When an incident occurs, people in the area will naturally approach the aircraft to offer assistance, and the pilot is naturally in a hurry to see how much damage was done...all of which is accompanied by a bit of adrenaline. The best thing everyone can do in this scenario is slow down. In this case, the strobe lights were still flashing as the pilot exited the airplane, which should tell everyone that the master switch is still on. It’s a good assumption that if the pilot didn’t turn off the master, he or she probably also failed to secure the ignition switch.
- Observers of an incident are naturally drawn to the scene, both out of curiosity and to offer assistance. But, observers in a rush to assist can do some damage to the aircraft, or worse: they may be injured themselves. Whether you’re the pilot, or an observer, try to slow things down a bit. Wait for the pilot to “direct traffic,” unless of course there is imminent danger to occupants, such as a fire or other serious threat to human life. If the plane just needs to be moved, wait until the pilot/owner decides how best to do so.
- Don’t make the situation worse. A prop strike with the ground is certainly no fun, but it isn’t an emergency. But a bystander grabbing a prop to help push the plane with a hot ignition could quickly turn into a life-threatening event.

Backcountry flying can be very rewarding and enjoyable. Be safe out there folks.



*Schafer Meadows Backcountry Airstrip
Photo Credit: Aeronautics Staff*

Winter Survival Clinic

Do you or someone you know want to attend a winter survival clinic January 2021?

Please contact the Aeronautics Division by calling (406) 444-2506 or email mdtaerosafetied@mt.gov to let us know!

*This clinic is subject to latest COVID-19 restrictions and guidance



Aviation Photo Contest

Do you want to see your photograph on the cover of the 2021 Montana Airport Directory? Submit your photos to the Aeronautics Division by December 1, 2020, to be considered. The winning photo will be selected based on the best representation of aviation in Montana.

Submit your photos to: mdtaerosafetied@mt.gov.

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

**MDT Aeronautics retains all rights to submitted photos and may use them for other promotional purposes.*



What's Next?

Aeronautics closed its office to the public at the end of March due to COVID-19 and reopened at the end of June. If you visit the office, please remember to wear a face mask and social distance.

As we know, some clinics have been canceled, postponed, or modified due to the pandemic. Since the Aviation Organizations of Montana voted to cancel the 2021 Montana Aviation Conference, many are wondering what will happen with the IA renewal seminar and the Flight Instructor Refresher Course. We heard you and your desires to still have these clinics! We are looking into alternate ways to conduct each of these courses safely; they will likely be held virtually via Zoom or dial in. Stay tuned for the latest announcements on these clinics as research and negotiations with the FAA continues.

In more news, we wrapped up the 2020 Fiscal Year mid-summer with just over 4,800 aircraft registrations (up nearly 500 from last year) and about 3,000 registered pilots. Good news for aviation in Montana!

Quiz Answer Key: 1:A 2:B 3:B 4:D 5:D 6:C

Calendar of Events

September 12, 2020 — Columbus Pancake Breakfast. Breakfast served 8:00 a.m. to 12:00 p.m. For more information, contact Hardin Graham (406) 780-0034.

November 15, 2020 — Airport Loan and Grant Application Period Deadline. More information can be found at <https://www.mdt.mt.gov/aviation/loans-grants.shtml> or contact Karen Speeg at (406) 444-9569 or kaspeeg@mt.gov.

October 1, 2020 — 2021 Montana Aviation Scholarship application period opens. More information can be found at <https://www.mdt.mt.gov/aviation/scholarships.shtml> or contact the Aeronautics Division at (406) 444-2506.

***All events are subject to modification or cancellation per the latest COVID-19 guidance**

Color Newsletter?

The Aeronautics Division has printed its monthly newsletter in black and white for many years. Prior to that it was mailed in color.

While many of you receive the newsletter by email in color, many still receive a black and white printed copy by mail. We are exploring the possibility of again printing in color!

We would like you to decide how you want this newsletter delivered. The black and white version costs .46 cents per copy, and the new color copies cost 1.06 each. Do you like the color photos that bring life to the stories they accompany and think it is worth it?

Please let us know soon if you love it, or if you want it to stay black and white. Email us your thoughts at mdtaerosafetied@mt.gov or call us at (406) 444-2506.



VISION ZERO

zero deaths · zero serious injuries

MONTANA DEPARTMENT
OF TRANSPORTATION

September 2020

5403

Aeronautics Division

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Vision Zero: A Goal for Everyone

In 2019, there were 184 fatalities on Montana roads.

What does that mean? 184 parents, children, grandparents, friends, siblings, spouses, and other loved ones had lives that were cut short. It also means countless tears and shattered lives for 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 2019 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.

VISION ZERO
zero deaths · zero serious injuries

**MONTANA DEPARTMENT
OF TRANSPORTATION**

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