

# Montana and the Sky

Montana Department of Transportation

Aeronautics Division

Vol. 71, No. 01

January 2020

## 2020 Montana Aviation Conference Keynote Speaker Colonel (Retired) Stephen “Lux” Luxion



*Stephen Luxion Photo Credit: Stephen Luxion*

The Montana Aviation Conference committee is pleased to welcome Colonel (retired) Stephen P. Luxion as keynote speaker Friday evening February 28, 2020 at the Montana Aviation Conference. Colonel (Retired) Stephen P. Luxion is the Executive Director of ASSURE (Alliance for System Safety of UAS through Research Excellence) and Principal for Assure Research & Development Corporation (ARDC), working from Mississippi State University. Steve is responsible for leading the alliance of 23 of the world's leading research universities and its industry partners. ASSURE is the Federal Aviation Administration's (FAA) Center of Excellence for Unmanned Aircraft Systems (UAS). ASSURE provides the FAA a wide-ranging UAS research portfolio and conducts specific research funded by the FAA to help inform and address the key challenges to safely and efficiently integrate UAS into the National Airspace System. ARDC serves as the non-profit arm of the Alliance that leverages the ASSURE team, its expertise, experience, and knowledge to serve others outside the FAA.

Lux is a 34 year US Air Force veteran with over 2,500 hours flying time in the F-111 Aardvark, MQ-1B Predator UAV, and the F-14A Tomcat and EA-6B Prowler while on exchange with the US Navy; he has 700 combat hours in operations over Iraq, Bosnia, and Afghanistan. For his combat efforts, Colonel Luxion was awarded the Distinguished Flying Cross for Valor, four Air Medals, and seven Aerial Achievement Medals.

Steve received his Bachelor of Science degree in Computer Science and commission from the U.S. Air Force Academy in 1984. He commanded at the squadron, group and center levels and helped lead the establishment of NATO's first Aerospace Center of Excellence. Steve retired from the US Air Force in 2014 from his last assignment at Embry-Riddle Aeronautical University-Daytona Beach where he commanded the Reserve Officers Training Program.

Colonel Luxion is a distinguished graduate of both the USAF Fighter Weapons School and Air Command and Staff College. He is also a graduate of four master's degree programs from Embry-Riddle, the School of Advanced Airpower Studies, and the National War College.

**REGISTER NOW**

## **Aircraft Registration Deadline March 1, 2020**

Montana does not have any taxes for aircraft but does assess an annual registration fee in lieu of tax for annual aircraft registration. The fees are set by the Legislature and are determined according to the type and age of the aircraft. Aircraft customarily kept in Montana must be registered with the Montana Aeronautics Division on or before March 1<sup>st</sup> every year and within 30 days of purchase. Aircraft renewal invoices are sent the first week of December. A penalty for late registrations must be assessed in the amount of five times the registration fee if payment isn't received on time.

Montana is also required to register all pilots in the state; the fee is \$10. Included is an annual Montana Airport Directory, subscription to *Montana and the Sky* newsletter and pilot registration card. Registered pilot information is collected only to aid in search and rescue cases as it can help us locate and contact you sooner during an emergency. Your information is not shared or distributed outside of our office for any purpose other than a Search and Rescue emergency.

Online aircraft and pilot registration services are available at:  
<https://app.mt.gov/aeronautics>. Vendor fees apply.

**PLEASE POSTMARK OR TIMESTAMP YOUR REGISTRATION PAYMENTS ON OR BEFORE MARCH 1<sup>ST</sup> FOR A RENEWAL, OR BEFORE 30 DAYS AFTER A NEW AIRCRAFT PURCHASE, TO AVOID THE PENALTY.**

For other questions, please contact the Aeronautics Division at (406) 444-2506.

## **Yellowstone Airport 2020 Internship Recruitment**

The Yellowstone Airport is already recruiting for an internship position for the 2020 summer season!

The position will be exposed to all aspects of Airport Management and Operations. Duties: 50% Airport Operations and Maintenance, 50% Airport Administration

Intern will be exposed to:

- Airport Management
- Airport Operations
- Airfield Maintenance
- Business and Properties
- Wildlife Hazard Mitigation
- Aircraft Rescue and Fire Fighting
- Assist the Airport Manager with various Administrative Tasks
- Tenant Relations
- 14 CFR Part 139 Requirements – Certification of Airports
- 49 CFR Part 1542 – Airport Security
- Ground Vehicle Pedestrian Training
- Self-inspections
- NOTAM Reporting
- Airfield and Facilities Maintenance

Click on the below link to watch a video from the 2019 Aeronautics Intern sharing his internship experience at Yellowstone Airport:

[https://www.youtube.com/watch?v=eLduqBdurWE&list=PLxseor6l1x1HyaYu4wEn\\_hcjuIuDoDG1-E&index=3](https://www.youtube.com/watch?v=eLduqBdurWE&list=PLxseor6l1x1HyaYu4wEn_hcjuIuDoDG1-E&index=3)

Interested students may apply and view qualifications on the State of Montana's website at <https://mtstatejobs.taleo.net/careersection/200/jobdetail.ftl?job=19142573&tz=GMT-07%3A00>.



Tim Conway, Administrator

**Montana and the Sky**  
Department of Transportation

Steve Bullock, Governor  
Mike Tooley, Director

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### **Aeronautics Board**

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**Jeff Wadekamper, Member**

**Editor:** Patricia Trooien

Follow MDT on social media!





## Are You the Owner of a Private Airport?

If you own property with a private landing facility, it is important to keep your information up to date and respond to any information requests from the FAA

or Montana Aeronautics to ensure the most accurate information is available to pilots flying in and around Montana. The FAA depends on the private owners' to inform them of changes to landing facilities. Many landing facilities are being redeveloped and can no longer be utilized for landmark reference or emergency operations, both of which pilots take into consideration during flight planning.

The FAA Aeronautical Information Services is validating and revising questionable private landing facility operational statuses from "operational" to either "closed indefinitely" or "abandoned." Statuses will be revised within the National Airspace System Resources database, resulting in amendments to all applicable aeronautical products utilized by pilots. If you own or manage a private airstrip, it is imperative that you notify the FAA or Montana Aeronautics of any changes.

Information may be updated through the Aeronautical Information Portal at this link:  
[https://www.faa.gov/air\\_traffic/flight\\_info/aeronav/Aero\\_Data/](https://www.faa.gov/air_traffic/flight_info/aeronav/Aero_Data/)  
or by contacting Montana Aeronautics at 406-444-2506.

## Missoula Announces ATIS Phone Number

The Missoula airport created a new ATIS phone line:  
(406) 549-2989.

## FY2021 Loans & Grants

November 15<sup>th</sup> was the deadline for airports to submit FY2021 Loan and Grant Applications. The Aeronautics Division received 39 airport applications with grant requests totaling \$4,733,950 and loan requests of \$106,675. Applications were submitted by two primary airports, five nonfederal airports, and 32 federally funded (NPIAS-National Plan of Integrated Airport Systems) airports. There is \$3,300,000 in available grant funds and \$350,000 available for loans for the FY2021 award period. During the last ten years, the grant fund has varied between \$250,000 and \$435,000. The substantial increase in available grant money is a result of HB661, which passed during the 2019 legislative session. The Aeronautics Board will meet in Helena on January 15 and 16, 2020, to award loans and grants.

## What Do You Know About Winter Flying?



Photo Credit: Aeronautics Staff

**W**hy does your airplane have better performance on a cold winter day, as opposed to a hot summer day?

- A: Cold air is less dense than hot air
- B: Cold air is more dense than hot air

**On average, one inch of rain is equivalent to how many inches of snow?**

- A: 8 inches
- B: 10 inches
- C: 12 inches
- D: 14 inches

**You need to fly through visible moisture to get carburetor ice?**

- A: True
- B: False

**Sun dogs form by sunlight passing through?**

- A: Dissipating clouds
- B: Suspended ice crystals
- C: Supercooled large droplets of water
- D: Sublimated snowflakes

**You just cancelled your flight because ice pellets started falling during your preflight. The temperature at the airport is 28 degrees F. What is the temperature of the air above the airport?**

- A: Above freezing
- B: Below freezing

**How much can frost reduce your wing's maximum lift?**

- A: 10%
- B: 20%
- C: 30%
- D: Frost doesn't affect lift on a wing

See answer key on page 7

# Tips for Safe Winter Flying

by General Aviation News Staff

Recently published by AOPA Insurance were several tips to help pilots get into the air during the coldest time of the year: Winter.

“Pilots who enjoy winter flying acknowledge that while your preflight might be a shiver-inducing experience, you will likely not face thunderstorms, one of warmer weather’s traditional hazards,” the report begins. “The cold air also provides increased visibility to enhance your flight.”

Another positive aspect of winter flying is air density. Cold air is denser, so engines produce more thrust and wings generate more lift causing an airplane to take off shorter and climb faster in the winter.

Winter flying, though, requires some extra caution:



**Don’t forget a thorough preflight.** It may have been a while since you’ve last flown, so now’s an important time to complete a full preflight inspection. Check everything as if you are demonstrating for an examiner. Remember that tires may lose pressure when the temperature drops; all frost or snow needs to be removed; and small animals want out of the cold too, so they may have made a home in an engine cowling.

**Avoid fuel contamination.** Fuel contamination can happen anytime, in any climate, and even at FBOs with the best fuel-pumping equipment. If an airplane has been flown and parked in a hangar while it is still warm, those half-empty tanks can produce condensation, which can contaminate your aircraft’s fuel with water.

**Be careful when preheating your airplane.** The danger here is fire. The process works better when your airplane starts out in a heated hangar. If you are going to preheat your airplane, make sure the heater and cords are in good condition.

**Never fuel the airplane while the heater is in use.** Other commonsense suggestions include not leaving your airplane unattended during the preheating process. Take care that the heat ducting is not blowing on flammable parts of the airplane such as upholstery, canvas engine covers, and flexible fuel, oil, and hydraulic lines. Truly careful pilots will have a fire extinguisher at the ready during the preheating process.

**Take extra caution when planning a daylight flight.** You should become night current if you are flying in the winter. With winter days so much shorter than those in the summer, you can easily find yourself departing in the afternoon, only to be caught short of daylight. Sunsets and darkness come early in the winter, so make sure you are thoroughly prepared for night operations prior to taking a cross-country flight.

## Protect your deicing equipment.

Visually inspect your deicing boots for cracks and cuts. Some aircraft owners recommend applying a compound such as Age Master No. 1 to the boots to protect the rubber and slow the aging process.

In addition, an ice-shedding product such as ICEX will help keep your boots clear of ice accumulation by reducing the ability of ice to stick to the boots.



**Prepare for an emergency situation.** A successful off-field landing in July means you sit around until help arrives. On a pleasant summer day, your worst case-scenario may be hunger, thirst, or sunburn. Not so in the winter. The jacket that was warm enough for a flight is no match for an unheated airplane in a snowy field over several hours or more. Consider, too, that in less-populated areas, roads that are clear and accessible most of the year may be left unplowed in the winter, and help may take a long time to arrive. Emergencies happen, even to the most cautious pilot, so be prepared with survival equipment, including a fully charged cellphone and fresh batteries for your flashlight.

## 36th Annual Montana Aviation Conference

### Early Registration Discount for MT Aviation Conference!

Please visit <https://www.mdt.mt.gov/aviation/conference.shtml> to register online.

#### Registration Rates

- \$85 through January 31, 2020
- \$100 February 1, 2020 and after
- \$10 high school & college students (discounts do not apply)

#### Pilots currently registered with the Montana Aeronautics Division

- 50% discount (a savings of \$42.50) on conference registration fee through January 31, 2020.
- 25% discount (a savings of \$25) on conference registration fee from February 1, 2020 through February 23, 2020.

Conference registrations will be accepted at the door at full price of \$100; no discounts will be available. Online registration closes on February 23, 2020.

Discounted registration for MT registered pilots, high school and college students is made possible through increased funding from House Bill 661.

# Montana Aeronautics Division Proposes New Administrative Rules to Capture Existing Aircraft Registration Process

The Aeronautics Division has published an adoption notice for administrative rules encompassing the existing aircraft registration process. The rules can be found online and will be available for public comment from December 6, 2019, through 5:00 p.m. on January 3, 2020. It is important to note that this is not a proposed registration fee increase, but does include the new registration fees passed by the last legislature. The new fees went into effect July 1, 2019.

To read the rule notice, please visit: <https://www.mdt.mt.gov/pubinvolve/scripts/news.pl>

## Winter Survival Clinic Full, but Waiting List Available!



Students learn survival skills during the 2017 Winter Survival Clinic Photo Credit: Aeronautics Staff

Due to popular demand and funding made possible by HB661, the winter survival clinic is back for 2020! The course filled up very quickly, but there is a waiting list for additional attendees. If you would like to get on the waiting list, please contact us as soon as you can. The clinic is happening soon!

The Winter Survival Clinic is geared for pilots in the event an emergency landing takes place and survival is necessary until help arrives. These skills can be used by anyone that finds themselves in a survival situation. Also included is emergency medical training. Meals (except Saturday evening) are provided, lodging will be optional. Rooms have been reserved for Friday evening at the Motor Lodge Inn in Seeley Lake. Classroom instruction will start at 5:00 p.m. Friday evening at the Quick Response Unit building (QRU) adjacent to the Seeley Lake Airport campground. Participants will meet Saturday morning for breakfast and a brief equipment check and then head to the Seeley Lake Airport where participants will learn techniques on winter survival and later spend the night in their own survival shelters after making and eating bring-your-own dinner.

Clinic cost is \$150.00 with hotel or \$60.00 without hotel (both options include 4 meals). The clinic starts at 5:00 p.m. on January 24 and ends at 11:00 a.m. on January 26. For registration form and clothing/equipment list, visit <https://www.mdt.mt.gov/aviation/events.shtml>, call MDT Aeronautics at (406) 444-2506 or email [MDTSafetyEd@mt.gov](mailto:MDTSafetyEd@mt.gov).

We hope to see you there!

## WANTED: Your Montana Aviation News

Do you have exciting aviation news to share? Did you know you can send it to the Aeronautics Division to be considered for inclusion in the *Montana and the Sky* newsletter? We love to hear about and share your Montana Aviation news, photos and stories. Please send contributions to [MDTSafetyEd@mt.gov](mailto:MDTSafetyEd@mt.gov).

# Montana Aircraft Mechanic Refresher & IA Renewal Seminar

**Heritage Inn**  
1700 Fox Farm Road  
Great Falls, Montana  
(406)761-1900

*(Reference rooming block  
Montana Aviation Conference to  
receive the prevailing state rate.)*

#### Registration Rates

- \$85 through January 31, 2020
- \$100 February 1, 2020 and after
- \$10 high school & college students (discounts do not apply)

#### Pilots currently registered with the Montana Aeronautics Division

- 50% discount (a savings of \$42.50) on conference registration fee through January 31, 2020.
- 25% discount (a savings of \$25) on conference registration fee from February 1, 2020 through February 23, 2020.

#### Pilots not registered with the Division, and non-pilots

- \$15 off conference registration through January 31, 2020.
- Conference registrations will be accepted at the door at full price of \$100; no discounts available.*



## **ONLINE REGISTRATION NOW AVAILABLE!**

To register, visit: <https://www.mdt.mt.gov/aviation/conference.shtml>

Online registration closes February 23, 2020.

Walk-in's will be accepted at the door at full price on a first come, first-served basis if there is space available.

For more information regarding Federal Aviation Administration (FAA) Inspection Authorization Renewal requirements and forms, visit:

[https://www.faa.gov/about/office\\_org/field\\_offices/fsdo/hln/](https://www.faa.gov/about/office_org/field_offices/fsdo/hln/)

**When registering, please indicate the sessions you plan to attend.  
Only 8 Hours are required to meet Part 65.93.**

### **Friday, February 28th, 2020**

#### **Session 1**

- 7:00 a.m. – 7:15 a.m. – Welcome & Introductions
- 7:15 a.m. – 8:15 a.m. – Jeff Vercoe, FAA
- 8:15 a.m. – 9:15 a.m. – Kristi Dunks, NTSB
- 9:15 a.m. – 9:30 a.m. – BREAK
- 9:30 a.m. – 10:30 a.m. – Robert Craymer, Covington Aircraft
- 10:30 a.m. – 11:30 a.m. – Alan Jesmer, Precision Airmotive

#### **Session 2**

- 12:00 p.m. - 1:00 p.m. - FAA AMT Video

#### **Session 3**

- 2:00 p.m. – 3:00 p.m. – Jessie & Mike Ellis, PinnaCal
- 3:00 p.m. – 4:00 p.m. – Darrold Hutchinson, Hutchinson Aircraft Upholstery
- 4:00 p.m. – 4:15 p.m. – BREAK
- 4:15 p.m. – 5:15 p.m. – Greg Cross, Cross Petroleum Service
- 5:15 p.m. – 6:15 p.m. – Tim Gauntt, Hartzell Engine Technologies

### **Saturday, February 29th, 2020**

#### **Session 4**

- 7:00 a.m. – 7:15 a.m. – Welcome & Introductions
- 7:15 a.m. – 8:15 a.m. – Jeff Vercoe, FAA
- 8:15 a.m. – 9:15 a.m. – Steve Vold, Aerotronics
- 9:15 a.m. – 9:30 a.m. – BREAK
- 9:30 a.m. – 10:30 a.m. – Dick Jacobs, Northwest Propeller
- 10:30 a.m. – 11:30 a.m. – Johnny Portillo, FAA

#### **Session 5**

- 12:00 p.m. - 1:00 p.m. - FAA AMT Video

#### **Session 6**

- 2:00 p.m. – 3:00 p.m. – Tim Gauntt, Hartzell Engine Technologies
- 3:00 p.m. – 4:00 p.m. – Bryan Hansen, FAA
- 4:00 p.m. – 4:15 p.m. – BREAK
- 4:15 p.m. – 5:15 p.m. – Tim Gauntt, Hartzell Engine Technologies
- 5:15 p.m. – 6:15 p.m. – Greg Cross, Cross Petroleum Service

**Please Note:** Date and time for speakers at Aircraft Mechanics Refresher Seminar & IA Renewal are subject to change without notice.

Alternative accessible formats of this document will be provided on request. Persons who need an alternative format should contact the Civil Rights Bureau, Department of Transportation, 2701 Prospect Avenue, PO Box 201001, Helena, MT 59620. Telephone 406) 444-9229. Those using a TTY may call (800) 335-7592 or go through the Montana Relay Service at 711.

# Flight Instructor Refresher Course (FIRC)

The MDT Aeronautics Division is hosting Aviation Seminars for the 2020 FIRC February 7th and 8th at the Wingate Hotel in Helena. This two-day, FAA-approved course will run from 9:00 a.m. until 6:00 p.m. on Friday and from 8:00 a.m. until 5:00 p.m. on Saturday. This course meets FAA renewal requirements for certified flight instructors and includes IACRA renewal.

Registration can be completed online at [https://www.aviationseminars.com/registration-form/?type=firc&course\\_id=2020177](https://www.aviationseminars.com/registration-form/?type=firc&course_id=2020177). Tuition for Montana Aeronautics Registered Pilots: \$170.00, promo-code required; Non-Montana Aeronautics Registered Pilots: \$195.00.

Discounted registration for Montana Aeronautics registered pilots has been made possible through increased funding from House Bill 661. Montana registered pilots can contact Aeronautics at [mdtaerosafetyed@mt.gov](mailto:mdtaerosafetyed@mt.gov) or call (406) 444-2506 to get your promo-code and save \$25.00 off the registration fee.

Not a MDT Aeronautics Division registered pilot? Register now with the Division for \$10.00 per year and save \$25.00 off the FIRC registration. You will receive a pilot registration card, Montana Airport Directory and newsletter subscription.

Visit <http://www.mdt.mt.gov/aviation/regpilot.shtml> for online pilot registration, vendor fees apply.

A block of rooms has been reserved at the Wingate Hotel at prevailing state rate plus tax (\$94). Reserve your room by calling (406) 558-4490 and reference rooming block MDT-Flight Instructor Refresher Course (FIRC).

For more information contact [Matt Lindberg](#) or call (406) 444-2506.

What Do You Know About Winter Flying? See quiz on page 3.

Answer key: 1. B, 2. B, 3. B, 4. B, 5. A, 6. C

DID YOU PASS?

## Calendar of Events

**January 15-16, 2020 — Aeronautics Board Meeting.** For further information contact (406) 444-2506.

**January 19-21, 2020 — Association of Montana Aerial Applicators (AMAA) 2020 Convention and Trade Show.** Attend the AMAA trade show at the Heritage Inn in Great Falls, Montana, for educational opportunities, networking with peers, visiting with new vendors and suppliers, and having FUN! Preregister by email at [eccampbell@yahoo.com](mailto:eccampbell@yahoo.com). For more information contact Colleen Campbell at (406) 781-6461.

**January 24-26, 2020 — Winter Survival Clinic at the Seeley Lake Airport.** Learn winter survival skills. For further information, contact Matt Lindberg at (406) 444-2506 or [mlindberg@mt.gov](mailto:mlindberg@mt.gov). The clinic is currently full, however we are accepting names for a waiting list.

**February 7-8, 2020 — Flight Instructor Renewal Course (FIRC).** The MDT Aeronautics Division will hold the two-day, FAA-approved course at the Wingate Hotel in Helena. This course meets the FAA's renewal requirements for Certified Flight Instructors (CFIs). For more information contact Matt Lindberg at (406) 444-2506 or email [mlindberg@mt.gov](mailto:mlindberg@mt.gov).

**February 27-29, 2020 — The 36<sup>th</sup> Annual Montana Aviation Conference.** For conference/registration information visit: <https://www.mdt.mt.gov/aviation/conference.shtml>. For more information, contact Aeronautics at (406) 444-2506 or email [MDTAConf@mt.gov](mailto:MDTAConf@mt.gov).

**February 28-29, 2020 — Aircraft Mechanic Refresher and Inspection Authorization Seminar.** Held in conjunction with the Montana Aviation Conference. For conference/registration information visit: <https://www.mdt.mt.gov/aviation/conference.shtml>. For more information, contact Aeronautics at (406) 444-2506 or email [MDTAConf@mt.gov](mailto:MDTAConf@mt.gov).

**March 1, 2020 — Aircraft Registration Deadline.** Please postmark or timestamp your registration payments or affidavit on or before March 1, 2020 for renewal or before 30 days after a new aircraft purchase to avoid the penalty. For questions, please contact the Aeronautics Division at (406) 444-2506.

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**VISION ZERO**

zero deaths · zero serious injuries

MONTANA DEPARTMENT  
OF TRANSPORTATION

**January 2020**

5403

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



## **Vision Zero: A Goal for Everyone**

In 2018, there were 181 fatalities on Montana roads.

What does that mean? 181 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 2018 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](http://www.mdt.mt.gov/visionzero) for more information.

**VISION ZERO** ★  
zero deaths · zero serious injuries

**MONTANA DEPARTMENT  
OF TRANSPORTATION**

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