

NORTH DAKOTA AVIATION ASSOCIATION

FLY-ND

www.FLY-ND.com

QUARTERLY

VOL. 34 • ISSUE 1

WINTER 2022

Register Today!

www.fly-nd.com/events/conference

**Become a NDAA
member before
the fees increase!**

See page 19 for details.

IN THIS ISSUE

Win a Pontoon
Page 10 - Good Luck!

Hall of Fame Inductee

FLY-ND **QUARTERLY**

www.FLY-ND.com

The official publication of the North Dakota Aviation Association

FLY-ND Quarterly Editorial Committee

Nicolette Russell, Editor (editor@fly-nd.com)

Elizabeth Bjerke, Chris Brown, Mike McHugh, Zach Peterson, Maria Romanick

Send Address Changes To: admin@fly-nd.com

FLY-ND Quarterly, P.O. Box 5020, Bismarck, ND 58502-5020

The Quarterly is published four times a year (winter, spring, summer and fall).

Advertising Inquiries: editor@fly-nd.com

Advertising deadline is the 1st of the preceding month.

COVER PHOTO:

2021-2022 BOARD MEMBERS



Justin Weninger – Board Chair
American Bank Center

Darren Hall – Past Chair
Fargo Jet Center

(Vacant) – Vice Chair

Don Larson – Treasurer
Dakota Territory Air Museum

Larry Mueller – Board Member
Red River State Bank

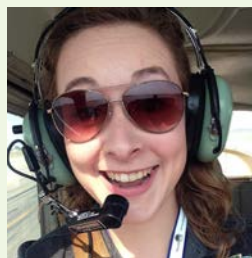
Tanner Overland – Board Member
Overland Aviation

Chad Symington – Board Member
UND Aerospace

Jake Werner – Board Member
Experimental Aircraft Association

ND Aeronautics Commission
Kyle Wanner, Director
Mike McHugh, Aviation Education Coordinator

NDAAA Executive Director
Staiger Consulting Group
admin@fly-nd.com



From the Editor

With the start of the new year comes an opportunity to pause, reflect, and make plans for the upcoming months. In this issue, we reflect on achievements,

milestones, and events from the past year, and share upcoming activities across the state. I encourage you to attend the North Dakota Aviation Association's (NDAAA) **Fly-ND Conference, March 6-8, 2022**, in Fargo, ND. It is a wonderful opportunity to network with other aviation enthusiasts, listen to inspiring speakers and learn from industry leaders, and partake in education opportunities.

You can find more information about the Conference and **NDAAA memberships** in this issue and at www.fly-nd.com. Though it may be cold outside, don't let the winter weather keep you from your favorite aviation activities, or take the time to discover a new one!

Wishing you clear skies and unlimited visibility,
Nicolette

Statements of fact and opinion are the responsibility of authors alone and do not imply an opinion on the part of officers and members of NDAAA, or FLY-ND Quarterly staff. If you've received more than one copy of this newsletter, please share it with a friend.

Our team is ready to help you reach new heights

FAA Diamond Award in Maintenance
Garmin Factory Trained Technicians

bismarckaero.com
701-223-4754



Justin Weninger, Chairman
North Dakota Aviation Association
chairman@fly-nd.com

What's Your Mission?

Back in 2017, when I started flying in earnest again, it started with looking for an airplane. As I started my search for the right airplane, everyone that I solicited advice from all asked me the same question, "what's your mission?". I didn't have a mission necessarily in mind, I just wanted to fly an airplane and have fun. I didn't know that we needed a mission to buy and fly an airplane. Now that I've owned the plane for almost five years, I do understand the necessity of defining your mission to find the right airplane. We as pilots also tend to feel the need to have a mission for each flight. These often include getting to a meeting, going on vacation or away for the weekend, or some other purpose.

I think we have to remember that one of our missions should be to have fun. To go for joy rides and remember that's what most likely started most of our passions in aviation. As I think back on flights that I've done that have been for the sole mission of enjoyment, many fun memories come back.

Shortly after a big snow storm blew across North Dakota diagonally, my dad and I decided to go check out the remnants from above. We rented a 172 and flew up towards Lake Sakakawea. Once we got just past Beulah, we saw the definitive line of where the blizzard had stopped. I remember to this day how cool it was seeing the path of a blizzard from above, a white covered ground to one side, and brown prairie on the other. After we toured over the Lake a bit, we made a stop in Hazen and I showed my dad what small town FBO's look like. As we jumped back in the plane for the rest of the flight, my dad grabbed out the catering for our journey, a package of strawberries he brought with for us to enjoy. A sweet ending to a great flight.

While in college at UND, my friends and I all returned home for a weekend. We decided to take a Saturday trip to Dickinson in the 172. Fun was our mission, but an added mission was to get Arctic Rolls from the Dairy Barn. My girlfriend also brought with one of her friends that had never been in a small plane before. A great way to introduce someone new to the world of general aviation. After a brief tour of the Enchanted Highway from above, we steered towards Dickinson and enjoyed a few Arctic Rolls.

Lastly, this past fall, my family and I jumped in our plane one Sunday afternoon and went out to do some sightseeing. I text my dad that we'd be coming up over the lake cabin soon to say "hi". As we made a few circles over the cabin, my dad waved to us from the middle of the yard, while we rocked our wings back. Pete Weisbeck was enjoying the afternoon at the cabin with my dad and their friends, and text me the next day how good the flyover looked. Sadly, this was Pete's last time at the cabin as he passed away a short few weeks later. After a few passes over the lake to check out the Salmon fishing report (lots of boats, and apparently some good fishing as well) I decided to check out the progress at the Hazen airport and the new runway with a flyover.

These are memories that will remain with me forever, and were born out of a desire to just have some fun.

Remember the next time you don't have a solid mission, but want to go flying to make fun your mission.



Register today!

North Dakota Aviation Association

FLY-ND



CONFERENCE

March 6-8, 2022 • Delta Hotel, Fargo



@FlyNorthDakota 

See the full agenda and registration details at www.FLY-ND.com

CONFERENCE HIGHLIGHTS

- Breakout Sessions for Pilots, Mechanics and Airport Operators • Networking
 - Learn from Aviation Industry Leaders • IA Renewal credits
- Attend Associations Annual Business Meetings • Exhibitors Night (Monday)
 - Learn more about the NDAA and member benefits

Be sure to attend the **Hall of Fame** Banquet Tuesday at the Fargo Air Museum

**Special Discount for
All NDAA Members!**
See www.fly-nd.com for details.

Be sure to join us for the Sunday night for
OPENING SOCIAL
Sunday, Fargo Air Museum • Passport Awards

Register Today! www.fly-nd.com/events/Conference

The agenda and speaker information will be updated on the website.

Sponsorship and Exhibitor Space Available!
See details at www.fly-nd.com/events/Conference

2022 Hall of Fame Inductee Leo Jostad



Leo Jostad to be inducted into North Dakota's Aviation Hall of Fame

The North Dakota Aviation Hall of Fame committee announces that Leo Duane Jostad has been selected for induction into the state's Aviation Hall of Fame. Leo will

join the prestigious aviation hall of fame group that currently includes 46 other individuals who have all had a significant impact to the growth, development, and promotion of aviation in North Dakota.

Leo D. Jostad was born 2 March 1939, in Bottineau, ND. His first flight at age five was sitting on his dad's lap in a Piper J3 Cub flown by flight instructor Bruce Wright. Leo's dad earned a private license in an OX-5 powered Curtis Monoplane, and the "seed" had been sown in father and son. Leo found creative employment opportunities to finance flying lessons while finishing his college degree at NDSU. He still remembers the thrill of his first solo flight.

After completing his bachelor's degree, he taught music in South Fargo for one year before being commissioned in the United States Air Force. Between 1966 and 1969, while stationed at Minot AFB, Leo earned his Commercial and CFI Certificates then was hired by Pietsch Flying Service. Service to his country took him out of North Dakota, where he was stationed at Kadena AFB, Okinawa, Japan, flying combat sorties in Vietnam and the Tonkin Gulf areas. During this time, he assumed operational responsibilities in the Kadena AeroClub. He was an active GA enthusiast and flight instructor, the club maintenance operator for a fleet of 15 aircraft, and test pilot for maintenance-released aircraft. He was awarded the Distinguished Flying Cross twice and the Air Medal 15 times for performance under extremely hazardous conditions during combat operations.

North Dakota Aviation



HALL OF FAME

Once stateside, he was involved in Offutt AFB Aero Club where he continued teaching military pilots, young and old, as well as non-pilots, about the beauty, freedoms, and adventures of civil aviation. After 24 years of service, Leo retired from the USAF as Lt. Colonel. He continued providing flight instruction over the next several years in Omaha at Offutt Aero Club.

In 1988, the family moved back to North Dakota. Over the following years, Leo was approached to act as Chief Pilot and Director of Flight Operations for Farstad Oil Co and later with Food Management Investors. Between his corporate flying positions, he acted as Chief CFI at Northern Plains Aviation in Minot, ND. The part 141 flight school was a labor of love and a source of pride.

Leo has taught and mentored several international students, local students, his daughters, and two granddaughters. He has been a principal member of his community, participating with the church, music, veterans, and the famed Club de Skinatique, of which he is a founding member. He is acting president of the Bottineau Municipal Airport Authority, spearheading many improvement projects for local general aviation. In addition to providing medical flights to those in need, Leo regularly donates plane rides for the Evergreen Scholarship fundraiser earning the Friend of Education Award from Dakota College at Bottineau. Leo Jostad is the embodiment of characteristics displayed in past Hall of Fame recipients.

For more information on the North Dakota Aviation Hall of Fame, visit <https://www.fly-nd.com/HoF>

Join us for the Hall of Fame Award Presentation

The induction ceremony will take place in Fargo at the annual **Fly-ND Conference** on Tuesday, **March 8th** at the Fargo Air Museum. The social will begin at 6 p.m. and the banquet begins at 7 p.m. To learn more about the state's aviation conference or to purchase tickets for the awards ceremony, visit www.fly-nd.com/events/Conference.

Questions can be directed to the North Dakota Aeronautics Commission at 701-328-9650.



Kyle Wanner, Director
North Dakota Aeronautics Commission
701-328-9650 | kcwanner@nd.gov

DIRECTOR'S Chair



Infrastructure Funding Update

This past fall, the North Dakota Legislative Assembly was called into special session and a part of their task was to determine how the state should utilize the Federal American Rescue Plan Act (ARPA) funds that have been received. Approximately \$1 billion in Federal Aid was appropriated and the final breakdown of these funds for use in North Dakota included: 56% for Infrastructure and Capital Projects, 37% for Workforce and Economic Development, and 7% for Health Care, Emergency Response, & Citizen Service Efficiency.

Prior to the start of the special legislative session, the Airport Association of North Dakota and the North Dakota Aeronautics Commission (NDAC) was able to proactively meet with state legislators and participate in the ARPA committee hearings to make the case that a portion of the funds should be considered for airport infrastructure funding. These efforts were met with success, as the final bill appropriated \$5 million of the ARPA funds to the NDAC for the purpose of providing additional airport infrastructure grants in the coming years. These funds will be put to good use to help reduce the local financial burden on project

costs, match federal grant dollars, and overall help multiple North Dakota communities move forward with high-priority airport projects.

At the national level, the Infrastructure Investment and Jobs Act was also signed into law, which will provide an additional \$3 billion per year, over the next five years, for eligible Airport Infrastructure Projects throughout the country. This will create new opportunities for additional federal funds to be leveraged to North Dakota projects. The NDAC is looking forward to working with the FAA and our 89 public-use airports to ensure that proactive and justified plans are in place to appropriately compete for these funds. This spring, our agency will also be providing the industry with a finalized Pavement Condition Index Study. This is



a project that we conduct every three years, where the pavement sections at the public-use airports are analyzed, inventoried, and provided with a recommended maintenance or replacement plan. This information helps us to prioritize and plan the most cost-effective and appropriate timing of airport pavement maintenance and rehabilitation projects throughout the state. The newly announced federal and state funding programs will make this information even more valuable for our planning efforts, as our goal is to be prudent and make informed decisions when allocating grant funds.

As we continue our work to improve and ensure the safety of North Dakota's airport infrastructure and airspace, feel free to contact the NDAC with any concerns, recommendations, or information that you may have to help provide us with a full understanding of the needs of the system. Smart investment decisions within our airports and communities will help to encourage growth opportunities and economic diversification while also helping North Dakota to strengthen its role within the energy and agricultural industries.

Wishing you blue skies and tailwinds, Kyle

North Dakota Aviation Association

BRAVERA
BANK

IT TAKES COURAGE
TO TAKE FLIGHT.

Aircraft financing with Bravera.

JUSTIN WENINGER
Loan Officer • Pilot
701-250-3616
jweninger@bravera.bank
bravera.bank

Member
FDIC



As I write this, we have just kicked off 2022, not with a bang, but easing in gently. Maybe sneaking into the year quietly, without much fuss or noise, as we certainly don't want to walk too confidently or boldly and disturb it too much! I'm here for 2022, whatever it looks like and whatever comes our way. Seems like the only way to go...right?

Speaking of going up, let's do that. Let's continue to elevate this association and celebrate all that we have accomplished. This strong organization eased into so many changes and new endeavors with caution but with optimism and enthusiasm. I challenge all of you to think about the progress we've made. Although, there has been a learning curve and an occasional glitch, overall, the advancement has been quite impressive. We have an active and engaged board of directors that is nimble and progressive.

These leaders established a highly successful scholarship program, a dynamic and robust online and social media presence, a stunning quarterly publication, and a structure of membership categories to reach all sectors of the industry. Now we have three annual events including the Career Expo, Summerfest and, of course, the Fly-ND Conference.

The individuals who serve on the board and the exceptional committee volunteers have done a stellar job moving this organization in an exciting direction and the trajectory of our future remains strong.


We're all excited to get back to meeting in person at the **2022 Fly-ND Conference**. This year we'll be meeting **March 6-8, 2022**, at the Delta Hotel in Fargo. So, mark your calendars now. The site committee is putting together a fantastic program with a variety of wonderful speakers and sessions! In addition, there will be networking and social opportunities as well as an Exhibit Hall with all the latest and greatest products and services from vendors and suppliers across the industry. In addition, we look forward to honoring award winners and the most recent inductee into North Dakota's Aviation Hall of Fame.


Look for more information on the conference in this publication as well as on our website. I encourage you to check it out and make plans to attend. We have special rates for members so be sure to join and renew your membership as well! Your support and participation really do make a difference and we appreciate you. I look forward to seeing long-time friends and meeting new faces at this year's event and please take a moment introduce yourself to our team.

I wish all of you a very Happy New Year with cautious and hope-filled optimism for 2022 and for all the great things happening in this organization. ***Thank you for the continued opportunity to serve to you!***

Stacy & Mike Krumwiede







JIM CHRISTIANSON
BROKER • PILOT

701.220.4888
414 E. Main Ave
Bismarck, ND 58501

EMAIL: gojc@qwestoffice.net
WEBSITE: nwrealtynow.com



Tailwheel Endorsements | Seaplane Ratings

Rick Mercil | 218.779.9161



Mike McHugh, Aviation Education Coordinator
North Dakota Aeronautics Commission
701-328-9650 | mmchugh@nd.gov



Aviation Education Opportunities

Thousands of flights were canceled during the holiday rush in December. Though COVID was said to be the blame for many of the cancellations, the root of the problem goes deeper. Where are all of the pilots? Having been predicted for many years, the pilot shortage is here, and has been amplified during the pandemic.

We have been working to increase interest in aviation careers for a number of years. Efforts have included developing our high school aviation programs (currently in six cities in North Dakota as well as distance education available to all schools), the aviation career expo and the



"...teachers will have the opportunity to attend professional development free of charge to learn more about student opportunities in aviation and aerospace..."

North Dakota Aviation Association (NDAA) Scholarship program to name just some of our efforts. Recently the NDAA and the University of North Dakota – Aerospace partnered on a grant proposal for an FAA Workforce Development Grant. This proposal was awarded in the amount of nearly \$500,000 which will be used to create professional development opportunities for teachers in our region.

Using grant funds, teachers will have the opportunity to attend professional development free of charge to learn more about opportunities for their students in aviation and aerospace. One of the professional development experiences will transport teachers, counselors and administrators to a variety of locations throughout eastern North Dakota and Minnesota highlighting careers in the aviation industry. In addition to learning about the opportunities for their students, teachers will be introduced to lessons, and curriculum available to bring into their classrooms. Our goal is to find more ways to bring aviation education into classrooms around our state. These may be in the form of aviation courses at the high school level, or integrated lessons at the primary level.

In addition to a tour of all things aviation, another opportunity for teachers being developed is professional development focused on unmanned aircraft. Funding will be available for equipment for classrooms as well as training and testing costs for teachers to receive their remote pilot certificate. We hope to see schools bringing drone racing or other UAS competitions into their offering of extra curriculars.

We know that the industry has a need for pilots, mechanics, UAS operators, and many other areas of the industry. I know that we will be talking about this for years to come. My hope is that through partnerships like this bringing together the NDAA and UND Aerospace with FAA funding will bring students closer to the amazing opportunities available in our industry.



AIRLOAN
LOCAL PILOTS | LOCAL LENDING

AIRLOAN.COM 218-456-2231

Charlie's CORNER

Did you know that three men were involved in the invention and development of the first powered airplane? You likely are familiar with the Wright brothers, but you may not know of Charles E. "Charlie" Taylor. If it hadn't been for Charlie, the first powered airplane would never have left the ground. Charlie Taylor is credited with designing and building the engine for the first successful aircraft. He proved to history that pilot's can't fly without their mechanics. Here in Charlie's Corner, we share stories from local aviation maintenance technicians.

Here in *Charlie's Corner*, we share stories from aviation maintenance technicians. All of these stories and situations are completely true. The names in the following story have been changed to protect the identity of the guilty. And as always, do not try this at work and certainly not at home.

“ I have been an Airframe and Powerplant (A&P) mechanic for over 30 years. I have worked as a maintenance controller for the commercial airlines for the last 12 years. Currently, I work for a regional airline on the CRJ200, CRJ700, and CRJ900 series Bombardier Canadair Regional Jets.

Every morning during the winter, I get four to five phone calls from new pilots in northern, overnight stations with frigid temperatures. Captain "Joe Pilot" calls, worried, because he powered up his CRJ and found a dozen Engine Indicating and Crew Alert System (EICAS) messages staring him in the face. The EICAS display in the cockpit shows all aircraft maintenance messages, and a dozen red, amber, and white alerts make the screen light up like a Christmas tree. Per his training, Joe Pilot calls Maintenance Control with his/her heart rate increasing, while mentally bidding an on-time departure goodbye. "I've never seen this before!" he says. I have to reassure him, "I have. Stay calm. We'll get it to reset and you'll be on your way before long."

I then instruct the pilot to:

- Start the Auxiliary Power Unit (APU).
- Get the air conditioning packs running & producing heat.
- Turn the hydraulics on.
- When the fluid temperature is warm enough, start moving the flight controls and the brakes to get the warm fluid moving.
- After a half hour and when everything is warmed up, power the airplane down and then power it back up.

After the aircraft powers back up, the computers reset and nine times out of ten, all the EICAS messages will clear. Joe Pilot is always so relieved when he can fix the problem himself, without having to request an on-site mechanic and further delay the flight. I tell him, "Now you know to always warm up your aircraft, and why we call the CRJ the 'Canadian Reset Jet!'"

Whether you are a commercial, corporate, or private pilot, this story serves as an important reminder to always take time to warm up your aircraft in cold weather. In addition to your normal preflight routine, make sure you:

- Give yourself extra pre-flight time.
- Start your aircraft and get operation temp up.
- Keep the engine at a low revolutions per minute (RPM).
- Check your flight controls.
- Make sure your cabin heat is working properly.

It is very important to never take off with a cold engine! It can cause serious problems on takeoff while you try to get your aircraft up to temp. In a smaller aircraft, when you give your engine and oil time to warm up, not only will your aircraft run better, but you will save yourself from potentially serious maintenance problems. Don't forget to warm up your "frozen brick!"

Wishing you clear skies and a tail wind,
John Derosier, Maintenance Controller

Are you an aviation mechanic with an interesting story to share? Submit your stories to: editor@fly-nd.com.



Thank You to the NDAA Allied Members

Bismarck Aero Center
Fargo Jet Center
HDR Engineering, Inc.
Helms & Associates

Interstate Engineering
MDU Resources
Mead & Hunt

Minot Aero Center
ND Aeronautics Commission
TKDA
University of North Dakota

Want to enjoy all the benefits of being a NDAA Allied Member too? Join today at www.fly-nd.com!

WIN A Pontoon, Support NDAA!



You've got a chance to win a 2022 Avalon Catalina Quad Lounge Pontoon with a Mercury 115 hp out board engine and a Karavan Tandem Axle Trailer. This beautiful pontoon is built with superior construction and great interior features. Avalon is a worldwide leader in the most innovative, exciting, and upscale pontoon boats that have been tested in some of the roughest waters in the world!

ENTER TODAY!
Scan the QR Code to
get 25% more tickets!

Or visit: <https://www.tapkat.org/nd-aviation-association/19xbGE?promo=QUARTERLY25>

Use promo code to get 25% more tickets code:
QUARTERLY25



FLY-ND
SCHOLARSHIPS



*Scan the QR Code to
get 25% more tickets!*



Buying tickets supports Aviation in ND

Proceeds from this contest will provide financial assistance to high school juniors, seniors or recent GED recipients who plan to pursue advanced education in the field of aviation. Students planning to attend post-secondary education in the areas of Professional Pilot, Aviation Maintenance, Aviation Engineering, Unmanned Aircraft Systems, Airport/Aviation Management, Atmospheric Sciences, Air Traffic Control, or other aviation related fields.... plus, you might win a pontoon! (that's pretty awesome!)

A few of the features with this luxurious and comfortable pontoon include:

- Four corners of comfortable seating options
- Open floor plan and plenty of space with central walking areas in the classic Catalina style
- Two aft and two forward sunbathing lounges or side-by-side seating with the driver
- Commander low back reclining drivers chair with self-leveling arms
- Privacy station curtain
- Fusion RA-670 Stereo with a USB input and charge

*Thank you for
your support!*

Military Aviator Spotlight

Name, Branch, Rank

My name is **Caleb Hamilton**, I am a Captain in the North Dakota Army National Guard and my branch is Aviation.

Hometown

My hometown is Sheridan, Wyoming

Tell us about your job...

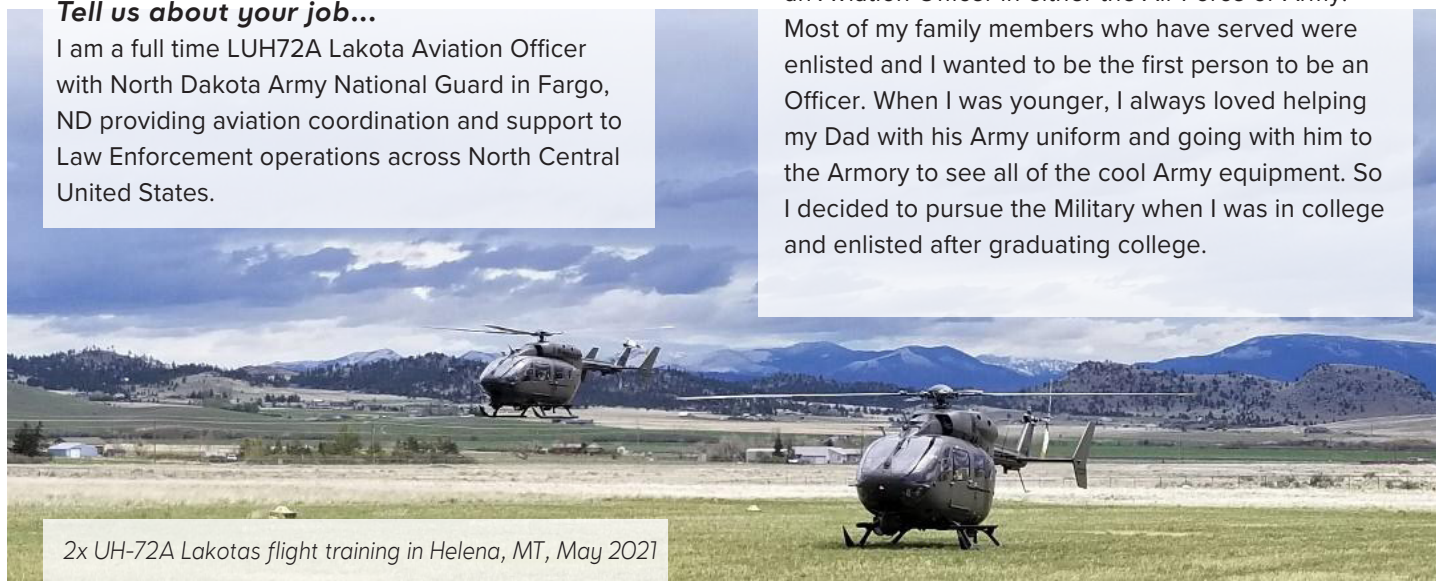
I am a full time LUH72A Lakota Aviation Officer with North Dakota Army National Guard in Fargo, ND providing aviation coordination and support to Law Enforcement operations across North Central United States.

How many years of service?

I have just over 6 years of service. I joined the North Dakota Army National Guard in 2015 after graduating from NDSU. I have 2 years of service as an Enlisted Soldier with the Engineers as a 12W Carpenter; 4 years of Aviation service as a Commissioned Officer.

What inspired you to join the Military?

Family tradition of Military service was my initial inspiration for joining the Military and I wanted to be an Aviation Officer in either the Air Force or Army. Most of my family members who have served were enlisted and I wanted to be the first person to be an Officer. When I was younger, I always loved helping my Dad with his Army uniform and going with him to the Armory to see all of the cool Army equipment. So I decided to pursue the Military when I was in college and enlisted after graduating college.



2x UH-72A Lakotas flight training in Helena, MT, May 2021

Fargo Air Museum
Education • Preservation • Restoration

Rotating Exhibits Ranging
from Wright Brothers'
Flyer to the MQ1 Predator

-  **Monthly Free Events for Kids and Veterans**
-  **Play Area, Interactive Exhibits and Scavenger Hunt for Kids**
-  **Unique Venue to House Your Private Event for up to 1200 People**
-  **Membership Only Events, Perks & Discounts**
-  **Visit Our Website for Current Hours and Other Updates**

1609 19th Ave North, Fargo, ND
701.293.8043 | fargoairmuseum.org



What is the most rewarding part of your job/time in the military?

The most rewarding part of my job is working with helicopters on a weekly basis and flying missions in support of law enforcement and responding to state emergencies.

Are you involved in the North Dakota aviation community outside of the military?

Yes, I am involved in ND Aviation community outside of the Military. I recently joined the Fargo Jet Center flying club and am working on my airplane private pilot license with a goal to build further flight experience outside of the Military.

What advice do you have for anyone interested in military aviation?

Military Aviation is very rewarding and exciting! However, it requires more of a time commitment than other jobs in the Military due to maintaining flight proficiency on an almost weekly basis. Recruiters are the gate keepers to all Military jobs; they have resources and the availability to provide information to individuals interested in ND Aviation. The North Dakota National Guard website is also a fantastic resource for someone to begin their research (www.ndguard.nd.gov).



Hamilton next to a UH-72A Lakota, Fargo, ND. December 2021

Hamilton by to a UH-60M Blackhawk, Ft. Rucker, AL. October 2018



Evolved.

Perfectly designed to thrive in its environment.
Adaptable enough to evolve with the times.
Building smart for a solid future. It's second nature at KLJ.

KLJENG.COM



ENGINEERING, REIMAGINED

Getting the Word Out: How Airports Issue NOTAMs

By Adam Dillin, C.M., A.C.E, Airport Planner, North Dakota Aeronautics Commission

A successful flight, and sometimes the very safety of crew and passengers, depends on pilots receiving timely information about any disruptive or hazardous circumstances at the airports they plan to use. This is typically accomplished through the issuance of the recently renamed Notices to Air Missions (NOTAMs), formerly Notices to Airmen. As a fundamental part of their training, pilots are intensively drilled in the use of NOTAMs. However, for the benefit of any North Dakota airport staff that may not be familiar, this article may serve as a quick introduction.

What is a NOTAM?

All public airports are required to promptly notify pilots when circumstances exist that may impact aircraft at or near their airfield. Common issues are runway closures, construction, wintry surface conditions, failed lighting, hazardous obstructions, and inoperative fuel systems. Issuing NOTAMs in a timely manner can help prevent accidents and legally protect the airport.

What does a NOTAM look like?

The graphic in this article breaks down the components of a typical field condition NOTAM that an airport might issue to advise pilots of hazardous winter conditions. Please note that all NOTAM times are published in Greenwich Mean Time (GMT), also known as “Zulu.”

Are there guides for NOTAMs?

NOTAMs are often complicated and loaded with acronyms and abbreviations. The Federal Aviation Administration (FAA) has some helpful references that can break down the details. A short primer is the NOTAM 101 presentation, found at the FAA’s NOTAM Modernization webpage at faa.gov/about/initiatives/notam/. To dig into the many different terms and examples, visit faa.gov/regulations_policies/ and search for *Advisory Circular 150/5200-28F Notices to*

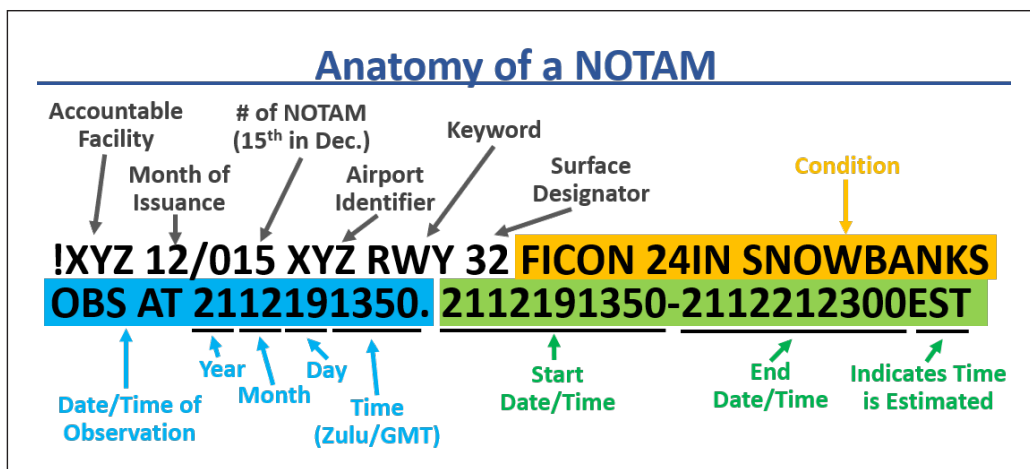
Airmen (NOTAMS) for Airport Operators, the draft *Advisory Circular 150/5200-28G*, and *Order 7930.2S CHG 2 Notices to Air Missions (NOTAM)*. Also available is the *Aeronautical Information Manual (AIM)*, which features a handy summary in Section 5-1-3. If your airport isn’t sure if a situation warrants a NOTAM or doesn’t know how to write it up, you can always chat with a Leidos briefer for help (see below).

How can my airport issue NOTAMs?

Getting a NOTAM out to pilots is quick and easy and can be done either online or via telephone. To submit online, airports utilize the FAA websites of either NOTAM Manager or ENOTAMS II. To issue a NOTAM via telephone, airport staff can call the *Leidos Outage Reporting and Notice to Airmen Line* at 1-877-4-US-NTMS (1-877-487-6867) and follow the prompts to speak with a live briefer. Once filed, it takes mere moments for the NOTAM to be published for pilots across the country and around the world. Please note that airport personnel must be officially registered and authorized before they are able to submit any NOTAMs for your facility.

How do I register to file NOTAMs? To get registered as

an authorized NOTAM issuer for your airfield, use the “New User Registration” link on the NOTAM Manager or ENOTAMS II websites. Or you can contact Leidos via phone at (817)541-3461.



How do I check my airport’s NOTAMs?

It is a good idea to regularly check your airfield’s published NOTAMs to make sure that pilots are getting up-to-date conditions as well as to clear out old or incorrect information. To check your NOTAMs online, go to notams.aim.faa.gov/notamSearch/ and simply enter your airport’s name or identifier.

I hope this article has helped to provide some insights into the NOTAM system. And thank you to all the hard-working airport personnel around North Dakota that help to keep our airfields safe!



2021 in Review: *A Look Forward and Back*

*By Ryan Riesinger, President, Airport Association of North Dakota and
Executive Director, Grand Forks Regional Airport Authority*

2021 was a busy one for the Airport Association of North Dakota (AAND). We kicked off the year with the North Dakota State Legislative Session, participated in the successful Fly-ND Conference virtually and the first annual Fly-ND Summerfest in Washburn, ND, and closed out the year with a win in the Special Session. I would like to highlight a few of these accomplishments.

The AAND strategy going into the 2021 Legislative Session was to take a team approach and split up the responsibilities of tracking and testifying by bill. This worked well and resulted in the following for our state's airports:

Bills that PASSED

Legacy Fund Infrastructure Loan Program and Bank of North Dakota Revolving Loan Fund: this bill will give airport authorities two additional financing tools for larger capital projects.

Transportation Network Companies (TNCs): in this bill, airports will now be allowed to enter into agreements with TNCs at their airports.

Airline Taxation Issue: this bill closed a loophole in the North Dakota Century Code, so that an airline must now pay a central assessed tax if they make a regularly scheduled landing.

State Interoperability Radio Network: this bill allows airports to receive a discount for radios purchased on the new state radio system.

Aeronautics Bill: we successfully supported the North Dakota Aeronautics Commission bill.

Bill that was successfully DEFEATED

Eminent Domain: this bill was defeated, which would have imposed numerous penalties on airports that use eminent domain to acquire land and would have restricted zoning changes.

These were all significant accomplishments during the Session and I would like to thank all of the individuals who assisted in these efforts. A special thanks goes to Odney, our legislative consultant team.

In March, the 2021 Fly-ND Conference was held virtually for the first time. It ran very smoothly and was a good opportunity to have speakers participate from other parts of the country. In August, we were able to get together in person at the first annual Fly-ND Summerfest in Washburn, ND. It included a golf tournament, with proceeds going to support youth aviation scholarships, and a wonderful dinner and presentation to honor 2021 North Dakota Aviation Hall of Fame inductee, Bill Beeks. Feedback on the event was very positive and there are plans to keep it going annually and move around the state.

With fall came the North Dakota Legislative Special Session to determine how to distribute up to \$1 billion of federal American Rescue Plan Act (ARPA) funding. This was a unique process, with Senate and House Appropriations Committees holding hearings and receiving testimony on nearly 200 proposals totaling \$10 billion in requests. A coordinated effort with the North Dakota Aeronautics Commission and strong assistance from Odney resulted in securing \$5 million in funding for state airport grants.

Yes, 2021 was busy! However, it was not without its challenges. Mask mandates, potential vaccine mandates, workforce shortages, and air service concerns are on-going topics as we continue to recover from the COVID-19 pandemic. But North Dakota airports are strong and brighter days are ahead.

We look forward to seeing everyone in person at the 2022 Fly-ND Conference in Fargo, ND, at the Delta Hotel from March 6-8. Please note that when you register online for the conference, you will have an opportunity to sponsor the **Jim Lawler Scholarship Endowment Fund**. This is an awesome way to honor Jim and will establish a perpetual endowment in his memory. Those who sponsor will be recognized at the conference.

Here's to an incredible
2022! Keep 'em flying.



Minot airport director, Jennifer Eckman, aims to take airport to next level

New director wants to take airport to next level

Minot's new airport director said she wants to use her diverse experiences in aviation management to enhance the activity at Minot International Airport.

Jennifer Eckman stepped into her new position Oct. 4.

She previously had served since January 2019 as project manager of the Northern Plains Unmanned Aviation Systems Test Site in Grand Forks. Working in the drone industry in Grand Forks exposed her to a different world of aviation.

"The concepts and the technologies that enable flying a drone were all pretty new to me. There's a whole new list of acronyms I had to learn, which in the world of aviation, that's amazing that there were more acronyms," she laughed. "I'm hoping with my connections with the Northern Plains that we can bring some of those technologies that I was working on here to this airport."

She said there are areas on airport property suitable for growing a UAS business.

"Actually, we have some of the infrastructure already, where certain types of drones we could already handle," she said.



Jennifer Eckman, Minot's new airport director, stands in the administrative office of the terminal Oct. 27.

Eckman sees potential for more robust industrial or commercial operations at the airfield. She would like to be involved in diversifying the businesses and opportunities at the airport as well as in developing the airline services and increasing passenger traffic as COVID-19 concerns ease.

"Obviously, the passenger ridership has been down, but we're starting to see us come back to the 2019 numbers — slowly, but we're hoping to get there. With the borders opening soon, I'm hoping and anticipating that we might be getting close to what we were in 2019 by the end of the year," Eckman said.

She added that airlines have been maintaining their flights and plan to add a few additional flights over the holidays.

Eckman said she's optimistic about the aviation industry, having witnessed its resiliency in the rebound from the 9-11 terrorist attacks and the Y2K transition to a new century in the year 2000.

A Bismarck native, Eckman said she grew up wanting to be an astronaut. Her career goal adjusted after enrolling in the University of North Dakota's aviation program.

"I really enjoyed my airport management classes, and I switched degrees to airport management," she said.

She did get a private pilot's license, although she hasn't done much flying. "My passion is more in the airport management side," she said.

It was that passion that drew her to Minot.

"I loved my job at the Northern Plains, but I really missed airports. I've been working in airports for almost 20 years," Eckman said. "I have a diverse knowledge of different airports and how they run because I've worked at quite a few of them, from interning at something as large as Minneapolis/St. Paul to a smaller airport like Jamestown, North Dakota."

She previously had been airport manager in Jamestown, the deputy airport director for finance and administration in

OPENING DOORS & PROVIDING SOLUTIONS



From concept and quality design to full-service installation and follow-up support, we'll partner with you for the best bi-fold and hydraulic doors to meet your needs. We offer customized solutions for new and existing buildings and unmatched customer service, **so you'll find the door is always open.**



1021 7th St. N.E. - West Fargo, ND 58078 // 701.277.8836 // www.MidlandDoorSolutions.com

Rapid City, S.D., and the airport administrative assistant and airport real estate specialist at Paine Field/Snohomish County Airport in Everett, Washington.

Eckman earned a bachelor's degree in business administration, with a major in airport management, from UND in May 1999 and a master's of fine arts from California State University-Long Beach in May 2004. She is working toward a master's in business administration. She also has completed the Accredited Airport Executive program.

Her husband, a contractor with Boeing, and children will be moving from Grand Forks to Minot later this year when an opportune time in the school year presents itself. The family enjoys biking and hiking and looks forward to getting outdoors in Minot.

Eckman also expects to be busy on airport projects that require attention, whether it is preparing for winter snow removal or next year's wetland mitigation projects.

Her initial weeks on the job have been spent getting to know the airport's personnel and tenants. Eckman said the chance to work in a beautiful terminal with a great staff has made for a good start. "The team is really great at what they do, and I'm hoping to enhance it to the next level," she said. "There's some processes that I've seen implemented at other airports that I'm trying to implement here to get us to the next level, to be the best airport we can be."

By Jill Schramm/MDN Reprinted with permission from The Minot Daily News

NORTHSTAR AVIATION INSURANCE, INC. ✈

At Northstar Aviation Insurance, our team can handle all your aviation insurance needs, including Aircraft insurance (Private & Corporate), Aerial Applicators, Airport Property & Liability, Unmanned Aircraft Systems, Repair & Avionics Facilities, Fixed Base Operators and more.

Our aviation insurance specialists will provide you with superior customer service and the best available insurance quotes.

When it's time to think about your aviation insurance, send us an email or give us a call!

(701) 235-2041 agency@northstaraviationinc.com
(877) 301-2041 www.northstaraviationins.com

The advertisement features a large, stylized graphic of an airplane in flight against a sunset sky. The text "Meade & Hunt" is prominently displayed in the upper right. Below it, the word "AVIATION" is written vertically in large, white, sans-serif capital letters. A circular icon containing a stylized airplane is positioned between the company name and the word "AVIATION". The background is a gradient of orange and yellow, with a pattern of small, light-colored dots. The overall design is modern and professional.

Meade & Hunt

AVIATION

Experience Exceptional

For us, it's not just a job. *We believe in going above and beyond for clients, and our full-service aviation team is solely focused on aviation—it's what we're passionate about.*

meadehunt.com

Destination: Grafton Municipal Airport (KGAF)

Exploring North Dakota Airports

Looking for a fun place to visit this winter? Check out historic Grafton, ND!

The airport is less than five minutes east of downtown Grafton. The North Dakota airport passport stamp can be found inside the GA Terminal building.

Here are a few local attractions to explore:

Heritage Village and Jugville Museum

- A collection of historic buildings and artifacts gathered to re-create life in the past. Special attractions include a furnished farmhouse, farm buildings, a country church, log cabin, depot with caboose, taxidermy shop and a working 1918-model carousel.

For hours, address, and more, contact 701-360-0088.
or 701-352-3280.

Historic Elmwood House

- Historic Elmwood is a 20-acre parcel of land located in an oxbow of the Park River in northeast Grafton. Seven acres are protected in the Natural Area Registry as an example of river bottom forest. About 10 acres are wooded or former fields no longer considered a natural area but containing wild flowers, plants and animal life. On three acres is a beautiful turn-of-the-century Victorian home that is on the National Register of Historic Places. The front doors and banister are oak, the fireplace is maple and remaining woodwork is pine painted to resemble either oak or maple, a technique common in the Victorian era.

For hours, address, and more, contact 701-352-1842 or
(701) 352-0152.

If you work up an appetite while exploring Grafton, here are a few dining recommendations:

Cabin Road Coffeehouse

The coffee is always served hot, but the menu changes every day. "As if you showed up at your friend's cabin and your friend had something baking in the oven and asked you to stay for a cup of coffee."

Hours: Tuesday-Friday, 7am to 2pm

Address: 24 E 5th St, Grafton, ND 58237

Website: <https://cabinroadcoffeehouse.com>

Granny's Family Restaurant

A sit-down diner with a wide variety of food.

Hours: Mon-Sat, 6am to 8pm, Sun, 8am to 8pm

Address: 910 W 12th St, Grafton, ND 58237

For more information, call (701) 352-2674

Please visit these locations' websites or call to confirm hours and availability.

Do you have a favorite attraction to explore or a dining recommendation at your North Dakota airport to share with our readers? Submit your discoveries to editor@fly-nd.com.



**GRAFTON
GAF**
GRAFTON HUTSON FIELD

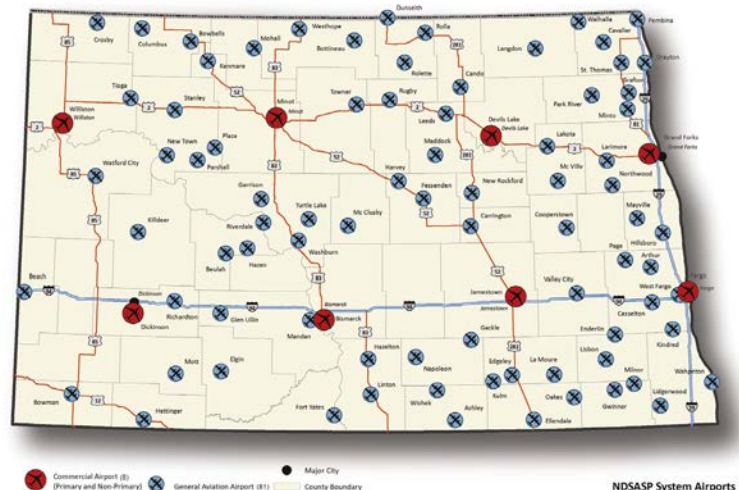
ATTENDANCE: M-F 8am - 5pm
FUEL: JET A, 100LL Self Service
Credit Card REPAIRS: MINOR

Pilot Controlled Lights: CTAF
SNOW REMOVAL: Confirm after storm
Instrument Approach: Non-Precision

CTAF: 122.8 WX: 118.625



FIELD ELEVATION	REMARKS	IN-PERSON CONTACT
824	AWOS: 701-352-0581 Runway 8/26 soft when wet Heavy aerial spray activity Rwy 8/26 closed winter months	Andrew Tibert PHONE: 701-352-0271 ADDL PHONE: 701-520-9174 PUBLIC TERMINAL PHONE: Yes





What NDAA Membership Level Fits You?

Join today for \$25 at www.fly-nd.com!

NDAA Membership Benefits

All Member Types of the organization will have the opportunity to participate in and benefit from the following items:

- *Fly-ND Quarterly* subscription
- Network with other aviation enthusiasts and industry partners,
- Invest in the future of Aviation in ND
- Advocacy and lobbying efforts which benefit the aviation industry
- “Regional Voice” through representation on other boards and other advocacy
- Collaborate with other member groups
- Help student members to fuel aviation for tomorrow
- Protect aviation in North Dakota
- Opportunity for committee involvement – Conference, Advocacy, Strategic Planning, etc.
- Communicate concerns or issues to the board and organization
- Information focus on website, jobs, blogs, advertising, etc.
- Stay informed on aviation – related issues through regular communication
- Participate in NDAA events and functions

*Sign up today!
Rates increase
March 1, 2022*



Individual Member category is intended for those with personal or employment interest in the aviation profession or industry and who support the purpose of NDAA.

- Member discounts from participating business partners
- Member discounts from participating North Dakota aviation museums
- IA renewals through ND PAMA at the Fly-ND Annual Conference
- Ability to vote at the NDAA annual meeting to elect officers, update bylaws, and vote on large issues and run for office and/or board position

Organizational Member category is intended for agencies and non-profit groups whose mission serves the aviation professions, industries, and supports the purpose of NDAA.

- Special Priority at the Fly-ND Annual Conference (Including hosting training opportunities, discounted booths, meeting rooms, and award recognition)
- Representation and link on the NDAA Fly-ND website
- Assistance with distribution of your organization’s information and dues processing
- Organization member websites and logos are advertised on NDAA website and at the Fly-ND Conference
- Ability to submit articles for the Fly-ND Quarterly regarding organizational updates

- **Allied Member** category is intended for firms, companies, and consultants who are actively engaged in providing products and/or services to aviation professions, and companies who support the purpose of NDAA. Allied members do not have voting rights.
- Listed in *Fly-ND Quarterly* and website as an Allied Member
- Certificate of Membership
- Opportunity for collaborative involvement in aerospace advocacy
- Network with the aviation community as well as participate in the Career Expo & other NDAA functions
- Advertise open job opportunities

Student Member category is intended for individuals enrolled in an institution of higher learning who have a keen interest in aviation and support the purpose of NDAA. Student Members are not entitled to vote or hold a board position.

- Explore all facets of aviation
- Eligible for scholarships
- Professional development credits
- Member discounts from participating North Dakota aviation museums
- Complimentary attendance at the annual conference
- Networking opportunities
- Mentorship & training
- Career advancement through job boards

A Look Back ... On Grand Forks Aviation Firsts

By Penny Rafferty Hamilton, Ph.D.

In 1910, Archie Hoxsey, who flew for the Wright Brothers, performed at the Grand Forks Fairgrounds. The special air performance was highly advertised. *The Grand Forks Daily Herald* proclaimed, "Don't miss the Aeroplane. The most thrilling and sensational marvel of the age...flights diving from dizzy heights to depths below, mounting majestically to the clouds, death defying but delightful. First and only opportunity to see this greatest of all thrillers in the Northwest." Wow, pretty compelling copy. North Dakota residents showed up, with over 17,000 attending the performance.

But wait! There is even more. A "lucky" Grand Forks citizen won a free demonstration flight in the aeroplane with sky star, Hoxsey. The Grand Forks postmaster, Frank V. Kent, was the



Air Force members of the 348th Reconnaissance Squadron and 319th Air Base Wing in Grand Forks, North Dakota, set a new record for the longest flight by a military aircraft without air refueling. On March 29, 2014, they broke the old record with their RQ-4 Global Hawk remaining aloft for 34.3 hours. The entire flight and ground crews were female. (U.S. Air Force photo/Staff Sgt. David Dobrydney)

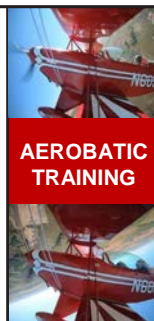
winner. Grand Forks earned more firsts because the night flight was the first in the nation with a passenger. This flight was the first under a searchlight. Shrieks and gasps were heard from the crowd. Passenger Kent reported it as the thrill of a lifetime. He was now ready to buy his own airplane!



MINOT AEROCENTER

www.minotaerocenter.com

**AEROBATIC
TRAINING**



MULTI-ENGINE INSTRUCTION



Contact Us:

2216 N. Broadway - Minot
Call: 701-852-4092

Find us on social media:   

AIRCRAFT MAINTENANCE

- Authorized Mooney Service Center
- Altimeter/static & transponder testing
- Annual/100 hr inspections
- Piston/turbine engine repairs & overhauls
- Propeller balancing
- Repairs & alterations
- Routine maintenance
- 24 hr on call maintenance

FLIGHT DEPARTMENT

- Flight instruction
- Multi-Engine Instruction
- Aerobatic Training
- Aircraft Rentals
- Pilot Services

TESTING CENTER

- FAA Regulated Testing

AIRCRAFT RENTALS



Fast forward over 105 years, Grand Forks was still making aviation history. In celebration of Women's History Month, an entire crew of U.S. Air Force women, dubbed *Lady Hawk*, set a world-aviation record. This all-female Air Force crew flew the Northrop Grumman Global Hawk-RQ-4 a record-setting 34.3 hours, nonstop back and forth across North Dakota. The Global Hawk is a high-altitude, remotely-piloted surveillance aircraft. Global Hawks are newer than the Lockheed U-2 with a similar mission. The Global Hawk has a wingspan of 130 feet, equivalent to the size of a Boeing 707 airliner.

This stellar team was led by Lt. Col. Amanda Brandt, along with Lt. Col. Catherine Todd, Maj. Mary Marshall, Capt. Natalie Winkels, 1st Lt. Joli Chaisson, and 2nd Lt. Kourtney Kugler piloted the RQ-4. In addition to the six women pilots managing the remote flight, more than 50 support staff and ground crew were also women. According to Lt. Col. Brandt, what differentiates this particular record from others like it, is that all of the women pilots included in the mission came from the same squadron.

Historically, groups have had to reach out to other squadrons or units to get enough women together to achieve a record. And while Lt. Col. Brandt is proud of the

Lady Hawk record-breaking flight, she also hopes that one day all-female feats will no longer be historic, but a regular occurrence. Amen, sister!

The newer technology in the Global Hawk uses high-resolution synthetic aperture radar (SAR) combined with long-range electro-optical/infrared (EO/IR) sensors. Star Wars over North Dakota. The Global Hawk crew from Grand Forks surveys as much as 40,000 square miles of ground terrain in a single day, comparable to the size of the nation of South Korea. The obvious intelligence collection capability to support military forces worldwide from the Grand Forks Air Force Base is key in our national defense.

In 2015, the mayor of Grand Forks declared a "Grand Forks Celebrates Lady Hawk Day." In 1955, the Grand Forks Air Force Base was established. By January 1957, it was opened and named after the city of Grand Forks. North Dakota has always been a leader in aviation and innovation.

—
Dr. Hamilton is a Laureate of the Colorado Aviation, Colorado Authors', and Colorado Women's Halls of Fame. Read about her aviation history books at www.PennyHamilton.com

Hillsboro Regional Airport 3H4



Simulator

www.flyhillsboro.org

Vantis' Next Steps: Building Out a Statewide UAS Network

Vantis is North Dakota's statewide unmanned aircraft system (UAS), or drone, network. So far the state of North Dakota has invested \$48 million to create and build out Vantis, aiming to enable safe, reliable, and economically-viable UAS flights across the entire state. Making UAS flights like this commonplace requires the ability to fly BVLOS, or beyond the visual line of sight of the pilot. This is why we need Vantis.

Why Vantis is a Game-Changer

Currently, UAS pilots are required to keep UAS they are flying within their visual line of sight unless they have a special waiver from the Federal Aviation Administration (FAA) allowing them to use "daisy-chain" visual observers or some other mitigation to ensure safe control of the aircraft.

This barrier is what prevents wide-spread package or medication deliveries, road and infrastructure inspections, large-scale precision agriculture, and large-scale search and rescue efforts using UAS. It's incredibly difficult, time-consuming, and expensive to execute a UAS operation within the space of a half-mile only to pack up, move a half-mile down the road, and continue. It also restricts UAS to following ground infrastructure, rather than as-the-crow-flies.

But getting an individual waiver for BVLOS flights is also incredibly difficult – it requires a significant investment of time and resources – and it doesn't make sense. Every UAS operator getting their own BVLOS waiver is like every truck company building its own roads. Vantis is a state-funded, common infrastructure that will be accessible to all UAS pilots with UAS that meet the minimum requirements – just like with vehicles on toll roads.

Enabling BVLOS flights for multiple users on a single network across the entire state of North Dakota means all of the use cases mentioned above – package delivery, infrastructure inspections, search and rescue efforts, etc. – will become commonplace. Vantis will be a blueprint for other states to follow, dramatically changing what is possible with UAS. After all, the people who built the first roads for Model Ts could never have predicted something like a Tesla.

Where We've Been

Since the initial investment in May 2019, the Northern Plains UAS Test Site (NPUASTS), which administers Vantis, has worked with aviation giants Collins Aerospace, L3Harris Technologies, and Thales USA as system engineers and integrators to develop the technology necessary to make Vantis possible. Vantis uses ground-based infrastructure in the form of radars, radios, and communications equipment attached to towers – the coverage area of these technologies overlap, creating a coverage area much like a cellphone network. This technology was installed at key sites in Williams and McKenzie Counties on the western side

of the state in the Bakken formation, where energy-related use-cases are abundant.

In addition to ground-based infrastructure, Vantis uses the state's fiber optic network to connect to the Mission and Network Operations Center (MNOC). The MNOC is housed at Grand Sky, the nation's first commercial UAS business and aviation park, which is located at Grand Forks Air Force Base.

We have completed our first increment of developmental and operational testing, which ensures that all of the different technologies involved in Vantis are working as expected with a variety of both manned and unmanned aircraft. Most of this testing has been conducted in partnership with uAvionix and Overland Aviation, though at the time of this writing we also have released an RFP soliciting additional UAS to assist in our rigorous testing processes.



Offering Aircraft Maintenance,
Avionics and Flight Instruction

Mandanaero.com
701.663.9925



In October 2021, we down-selected to Thales as our primary system integrator and partner in this endeavor as we move forward towards approvals, first official flights, and new locations.

Where We're Going

The Red River Valley will host the next Vantis sites. Our strategy in selecting locations has been to go where UAS use-cases already exist, so that once testing and approvals are finalized, flights can begin immediately. The Red River Valley is a region with extensive agricultural use-cases and is also home to two of the largest cities in the state. Thanks to the University of North Dakota (UND) and North Dakota State University (NDSU), there are also a number of UAS operators, researchers, and businesses in this area.

The Vantis team, including representatives from NPUASTS and Thales, have already begun reaching out to local leaders and scouting locations for the ground-based infrastructure. In Williams and McKenzie counties, we were able to use North Dakota Department of Transportation (NDDOT) towers for most of the technology installations. This will be the goal in the Red River Valley as well – using existing infrastructure saves taxpayer money and allows us to move more quickly in implementation. We expect installations to begin by early spring.

Our goal has always been to enable BVLOS flights without negatively affecting manned aviation, and we continue to pursue that goal as we build out Vantis. UAS on Vantis will always give way to manned aircraft, and we take responsibility for seeing and avoiding manned aircraft as well as other obstacles. Outreach in the Red River Valley will include meetings with manned pilots, just like we did in Williams and McKenzie counties, to answer questions, address concerns, and listen to feedback to ensure that the integration of UAS into National Airspace System is as seamless as possible.

Out West, we will be finalizing operational testing and working with the FAA in order to get approvals for BVLOS flights on Vantis. By proving that Vantis is a safe and reliable system, we're also helping the FAA establish criteria for similar technologies in the future. Once we are approved, pilots will have an expedited path to fly BVLOS, leveraging Vantis' approval and extensive safety testing process. We expect first official flights – true BVLOS flights – in the coming months.

Vantis will be available for research and testing, use by public and state agencies, and for commercial operations, providing North Dakotans with the unprecedented benefits of widespread UAS use. Package delivery at your doorstep is only the beginning. With Vantis, the sky is the limit.

We devote ourselves
to delivering the
**BEST
SOLUTIONS**
possible to each
individual client—
whatever it takes.

Bolton-Menk.com



**BOLTON
& MENK**

Real People. Real Solutions.

2021 UAS Summit & Expo Finishes with Record-Breaking Attendance

Having taken place October 13th and 14th in Grand Forks, North Dakota, the 15th annual UAS Summit & Expo hosted 683 attendees, as well as several presentations, demonstrations and networking events related to UAS (Unmanned Aircraft Systems). Notable speakers included Senators Kevin Cramer and John Hoeven, Rear Admiral Lorin Selby, director at the Test Resource Management Center George Rumford, UND president Andrew Armacost, sector vice president at Northrop Grumman Corporation Jane Bishop, Colonel Jeremy Fields of the Grand Forks Air Force Base and more. It was held virtually in 2020 due to the COVID-19 pandemic, and attendees were happy to finally be back in person this year.

"We couldn't have been happier with the turnout out of attendees and the large number of insightful presentations during the summit," said John Nelson, vice president of UAS Magazine and BBI International. "In addition to the content, this event really demonstrates the effort, investment and focus the state of North Dakota is putting into the UAS industry."

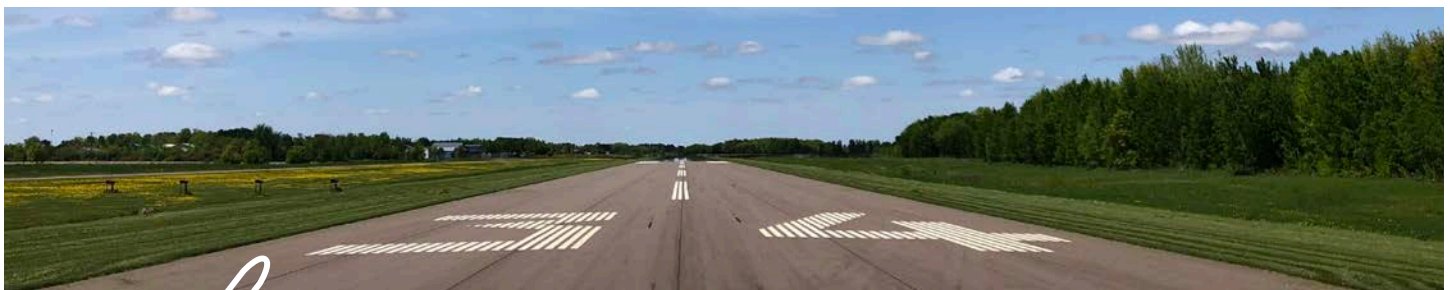
Grand Sky, a UAS-specific business and aviation park located at Grand Forks Air Force Base near Grand Forks, North Dakota was one of the sponsors at the summit. Its president and CEO Tom Swoyer commended BBI International for its work putting together the first in-person UAS Summit & Expo since 2019.

"We think that BBI has done a good job organizing the summit over the years and bringing really relevant topic matter together, but also it's our hometown." Swoyer said. "It's the hometown of Grand Sky, so we wanted to be very supportive of it."

Swoyer said he took a different approach to this year's event by foregoing any speaking and sitting it out to hear what others had to say in their presentations.

"I wanted to sit and listen," Swoyer said. "I think we are at a pivotal inflection point in the industry

Photo credits: BBI
International/Mike Hess
Photography



AIRPORT PLANNING, ENVIRONMENTAL, DRONE TECHNOLOGY,
ARCHITECTURE, DESIGN AND CONSTRUCTION

SOLVING YOUR MOST COMPLEX AIRPORT CHALLENGES.

With SEH, you are a true partner and collaborator.

Building a Better World for All of Us®

Engineers | Architects | Planners | Scientists

Kaci Nowicki | 651.894.2508 | sehinc.com/subscribe



where we're so close to so many really key things happening, like widespread beyond line of sight, much more commercial activity going on, and so I think the inflection point now is you can't really kind of be a jack-of-all-trades in UAS now, you really have to specialize in the field you want to work in. So, we wanted to take a real 'sit back and listen' approach to the summit and listen to the stories people were telling, the presentations they were making, the investments they're making and the technology they're developing so we can start to pick and choose some of the directions we can go in from Grand Sky's perspective."

Swoyer thanked people like Senators Cramer and Hoeven, the latter of whom also helped dedicate Grand Sky's new multi-tenant facility, for coming to town to draw attention to the industry.

"We have the senators come, the lieutenant governor come, and state dignitaries come and demonstrate their support for the industry and for Grand Forks by coming out

and talking about this," Swoyer said. "We get to talk about the investments we've made."

The summit draws people from across the country into North Dakota and the Grand Forks Region, which Swoyer said helps Grand Sky network with them. It creates local business opportunities, as well as bringing in revenue to the city.

"Grand Sky is great to talk about, but you really have to come out and see it to understand it, and so for us, the summit gives additional reason for people to come to Grand Forks," Swoyer said. "They say, 'Oh, I'm going to go to this conference and possibly speak at it. While I'm there, I'm going to go to this test site, and UND, and I'm going to go see Grand Sky,' and that makes now a trip really worthwhile, and companies instead of just sending one person to a conference, they send four, five or six. Then, we start getting into a dialogue about 'What are your operational needs, and how can they be met at Grand Sky?' Next thing you know, you have a new tenant."



PROPWORKS

PROPELLER SYSTEMS

Overhaul • Repair • Sales

Winnipeg 1-888-679-2965
Edmonton 1-888-457-1910

Avia • Dowty • Hartzell • Hamilton Standard
Hamilton Sundstrand • McCauley • MT Propeller
Sensenich • Governors • Non-Destructive Testing

FACTORY TRAINED TECHNICIANS - EASA APPROVED
AMO #105-99

www.propworks.ca

Native American Heritage Month: *First in Flight for Women of Standing Rock*

The first woman from her tribe to pursue commercial aviation at UND, Elspeth Thomas doesn't intend to be the last



As Elspeth Thomas tells it, her University of North Dakota aviation story began in Noren Hall, where she'd lived on campus since coming to UND in 2016. Noren is a residence hall popular with students in the aviation program. UND photo.

It took a while for Elspeth Thomas to determine what she wanted out of college, but she knew it when she saw it.

Sitting in the cockpit of an airplane was all it took for her to make up her mind.

With the flight controls at arm's reach, staring at the flat expanse of earth and its horizon below, Thomas sensed at that moment where her ambitions and her UND major belonged.

"I just knew it was exactly what I wanted to do," she said.

And, in making that decision, she likely became the first woman from the Standing Rock Lakota Tribe to pursue a commercial aviation degree at UND.

Miracles of flight

As Thomas tells the tale, her UND aviation story began in Noren Hall, where she'd lived on campus since coming to UND in 2016. Noren is a residence hall popular with students in the aviation program.

"I was trying a bunch of different classes at the time, and I ended up making a lot of friends in aviation," Thomas said. "And one day, I went flying with one of those friends, and I was in the front seat."

As the small aircraft hummed above UND, Grand Forks and the Red River Valley, she experienced life at the controls, if only for a moment.

That exposure to the miracle of flight likely brought forth long-forgotten memories, based on her childhood experiences and fascination with flying.

"Both of my parents and a couple other family members were in the Air Force, and I was exposed to aviation at a young age," Thomas told UND Today.

Though she has always called Grand Forks home, her mother was born and raised on the Standing Rock Reservation, and Thomas has been an enrolled member of the tribe since birth.

Her parents, though not on the flight line themselves, were stationed at bases in Cavalier and Grand Forks through much of Thomas' childhood.

She recalled a time in elementary school when the students were asked to dress like people who inspired them. Skipping the standard fare of superheroes and sports stars, Thomas dressed as trailblazing pilot Amelia Earhart.

"So, in a way, flying was always in the back of my mind, but I never thought I could actually go out and do it," she said. "It wasn't until I got to college that I thought this could be something I could pursue as a career."

First-generation aviation student

Of course, majoring in commercial aviation – especially at the start of one's junior year, as in Thomas' case – is a lot more complicated than just checking a box. But from her experiences and friendships, Thomas understood the gravity of her choice and took time to think it through.

The result was taking a full semester off to do her own research. Thomas spent hours reading things online, talking to advisors and doing what she could to understand the financial and academic implications, she said.

"I really wanted to think about my decision and see what it entailed, which turned out to be a lot," Thomas said with a laugh.

Today, she's certified as a commercial pilot with multi-instrument ratings, and she's working on her certification to become a flight instructor. Thomas estimates that she'll be graduating by summer 2022. In other words, "I'm very close to being done," she said.

Regarding her status of being "first" from Standing Rock, or among the few Native American women to go into aviation at UND, Thomas said she has thought about it, but knows that – despite the challenges she has faced – going into



Though she has always called Grand Forks home, Thomas' mother was born and raised on the Standing Rock Reservation, and Elspeth has been an enrolled member of the tribe since birth. UND photo.

the program would have been a lot more difficult if she had come from a reservation community.

"Having grown up in Grand Forks, going to the schools here, it wasn't a big transition coming to UND," Thomas said. "But I could see how going from life on the reservation to pursuing an aviation degree would be a totally different experience."

"Even for me, being a first-generation aviation student, I don't have parents who are airline pilots, which is the case for many other students," she continued. "That type of background turns out to be a valuable guide in knowing the right people to talk to and finding the right resources. So, in that way, there can be so many challenges and obstacles to overcome."

Also, the fact that Thomas is a woman enrolled in commercial aviation is almost as singular as the fact that she's Native American. Women pilots represent only 6 percent of the total pilot population, according to Women in Aviation International.

At UND's John D. Odegard School of Aerospace Sciences, which trains students for not only the cockpit but also other careers in aviation, women make up about 15 percent of the students, according to enrollment data.

As a result, starting out in the program was difficult, due to sitting in classes with only one or two other women in some cases, Thomas said. But as time went on, she made more friends, and the feelings of difference became more trivial as the litany of aviation "unknowns" went away with experience.

In addition, many of Thomas' female classmates also are first-generation aviation students, and those peers are among her most important resources on campus, she

said. She's taken an active role in a number of student organizations, including the UND Indian Association, American Indians in Science & Engineering, Women in Aviation and the Organization of Black Aerospace Professionals.

Thomas notes that while she is not Black, the Organization of Black Aerospace Professionals has rapidly grown and expanded its umbrella to represent other minorities at UND Aerospace. It has become a place for minority students "to come together and have a unified voice," she said.

"What you come to realize is that the people you meet come from all over the country and the world to fly here, and they all have different perspectives on life," Thomas said.

"So, even though I'm one of the few Native Americans in the program, I feel as though I'm among a diverse group of women in the field."

Sharing in success

Besides building the flight hours she'll need for her career in the clouds, Thomas is determined to do right by her tribal community, she said. That means advocating for Native Americans who are similarly interested in aviation careers.

"In our Lakota culture, and likely other Native nations, the expectation is to give back to your people and your community," Thomas said. "I want to see more Native people in this field, and I'm always going to try to inspire young people in my community – to open that door for them."

With most of her mother's family living on the Standing Rock Reservation, Thomas makes the five-hour journey to visit when she can.

"I wasn't raised in a traditional Lakota home, but my mom always made sure that we are connected to our family, community and culture," Thomas said. "And within that community, certain values such as humility, respect, compassion and generosity have shaped my decisions as a student pilot and as a person in general."

What that means for her career, she said, is that personal success is to be shared with others. The success of one is the success of the community, in other words; and, in return, she will never be short of support.

"People have heard about how I'm pursuing this career, and I'll be approached by people I met a long time ago and they congratulate me and say how proud they are," Thomas said, smiling. "It's talked about as if I'm doing this for all of us, for the entire community."

"That's what I think about and feel when I go in for my exams and my flight tests. Like, 'OK, I have all of these people behind me to do this.' It's a source of strength that I have to overcome challenges and succeed."

Eternal FLIGHT




Brigadier General Alan W. Palmer, 69, died on Tuesday, November 16, 2021 at Altru Hospital in Grand Forks, ND.

Alan was born April 26, 1952, in Tell City, IN, the son of Aaron & Maryetta (Jones) Palmer. He grew up in Tell City where he graduated from High School in 1970. He married

Peggy Detzer on May 26, 1973 in Tell City. Together they raised two children, living in Grand Forks, ND.

Alan began his military career with United States Air Force enlisted service in 1972. After serving as an Electronic Warfare Specialist in several assignments including a tour in Thailand, he joined the North Dakota Air National Guard in 1981. He served as a Maintenance Officer and Supervisor prior to serving in several command positions. Commands included the 119th Supply Squadron, 119th Maintenance Squadron, 119th

Logistics Squadron, and the 119th Support Group. General Palmer served as the State J-5 in Joint Force Headquarters during the transition from an Air National Guard State Headquarters to the current Joint Force Headquarters.

Al joined John D. Odegard School of Aerospace Sciences in 1978, where he spent more than 30 years, ultimately as Director of Flight Operations, a role he held for more than 10 years. Al was one of the original John D. Odegard young guns flying the jets and living the aviation dream. He was heavily involved with the original international training programs and to this day is well known in Taiwan, having given hundreds of China Airlines and EVA pilots their FAA check rides.

Al returned to the University of North Dakota following a short retirement to lead the Center for Unmanned Aircraft Systems Research, Education, and Training and was instrumental in working with the FAA to integrate UAS into the national airspace system and to establish test sites and training centers for the systems.

After his military retirement, Palmer continued to work



UND AEROSPACE COMMUNITY DAY

February 12, 2022 | 10-3pm

UND Aerospace | Grand Forks, ND



UND AEROSPACE
UNIVERSITY OF NORTH DAKOTA

Rydell

CHEVROLET
HeartlandChevyDealer.com



tirelessly on behalf of military members and their families. He co-chaired the military affairs committee of the Grand Forks Chamber of Commerce, volunteered with the Employer Support of the Guard and Reserve (ESGR), served on the Governor's Task Force for Veterans Affairs, and was the driving force in building the Grand Forks' Veterans Memorial Park, which was dedicated last September.

During his career, Palmer accumulated more than 9,400 hours of flying time, of which over 5,900 were as an instructor pilot. He was a designated pilot examiner for several aviation license ratings and held several type ratings (licenses to fly), including for Cessna Citation jets.

He enjoyed flying planes, hunting and spending time on the farm. He was a member of the Sertoma Club, American Legion Post #6, and the Patriot Guard.

Alan is survived by his wife of 48 years, Peggy; son, Randy(Je Kneps) Palmer of Moorhead, MN; daughter, Alison (Shawn Beckner) Palmer of Lakeville, MN; two grandsons, Ethan and Dylan; sister, Mary Lee McGinnes; niece, Shanon and nephews, Regis, Bobby and Tim.

He was preceded in death by his parents; parental guardians, Ronald & Athleen Pollard; brother, Regis and niece, Christine.

— — —



Robert William Robinson, 77, Bismarck, departed from Sanford Hospital on his final flight when he slipped the surly bonds of earth and arrived at his heavenly home on Tuesday, Nov. 23, 2021.

Bob was born on August 8, 1944, in Washburn, ND, to Robert Earl Robinson and Amanda (Hoff.) He

was raised and educated at Will Moore Elementary School and Bismarck High School in Bismarck. He later attended Bismarck State College, in Bismarck, North Dakota State University in Fargo, and the University of California in Irvine, Calif. where he received a Master's in Government Contract Management. In 1964, during an early March weekend, while both were students at Bismarck State College, he married Linda Gaasland of Tappen and they began their 57 year adventure together.

Bob was a good son, a loving husband, and a wonderful father and grandfather. A kind, gentle man, he knew no enemies and was never prone to raising his voice in anger. He approached every situation with a calm demeanor and an easy smile, always standing by his loved ones and always there for them in time of need with sage advice and loving support.

His love of family was followed by his love of flying, which began as a child watching airplanes fly above the North Dakota prairies. That youthful fascination with machines that

conquered the skies and his sense of duty to country led to his becoming a combat helicopter pilot in the United States Marine Corps. He became a member of HML-367 "Scarface Squadron" in Vietnam, where he flew 1,140 combat missions. His experience in Vietnam led him to later write "Scarface 42: United States Marine Corps Helicopter Air/Ground Support, Vietnam 'In Close.'". After five years in the Marines, he joined the North Dakota Army National Guard, where he became a full-time technician before becoming the aviation test pilot and maintenance officer, a capacity in which he flew numerous types of helicopters and fixed wing aircraft. During his career, he rose to the position of North Dakota Army Air Facility Commander. After 36 years of military service, he retired at the rank of Lt. Col. having acquired 5,800 hours of military flight time.

He is survived by his wife Linda, his son Jay (Amy) Robinson of Bismarck, his daughter Heather (Burt) Robillard, his grandchildren, Zane Hamar, Lola Robillard, and June Robinson, all of Bismarck, and his step-brother, Paul Paulson of Indianapolis, Ind.

Bob was preceded in death by his father, Robert Earl Robinson (killed in action on December 1, 1944), his mother Amanda Robinson Paulson, his step-father Alan West Paulson, his infant granddaughter, Isabella Robillard, his brother-in-law Richard Gaasland, his sister-in-law JoAnn Gaasland, and his grand-nephew Benjamin Leingang.



AUTO MASSAGE

"Pamper Your Ride"

DETAILING SERVICES

701-335-3940

Call Mike Hoekstra today!

www.automassagellc.com

SERVICES

AUTOMOBILES

BOAT & MARINE

AIRCRAFT

MOTORCYCLES

AG & INDUSTRIAL

ATV & UTV'S







Aerial Applicator License for Unmanned Aircraft

By Janell Pederson, Licensing Specialist, North Dakota Aeronautics Commission

This spring will be the first opportunity for operators to apply for an aerial applicator license specifically for unmanned aircraft. North Dakota Administrative Law 6-02-02 has been updated and now includes requirements and safety standards for unmanned aircraft operators to provide aerial application in North Dakota.

All aerial applicators, both manned and unmanned, are required to meet safety standard criteria and receive licensure from our office. The license fee for either of the aerial applicator licenses will remain at \$200. A manned operator that also meets the criteria of the unmanned operator license will need to complete a separate application to be granted that license. However, an additional fee will not be assessed.

Operators of all unmanned aircraft used for aerial application must hold FAA Part 137 (Agriculture Operator Certification) and hold a current air/ground core pesticide certification from North Dakota State University (NDSU). All unmanned pilots must also hold an FAA remote pilot certificate, attend annual safety training, and have attended an approved training program or have received at least ten hours of direct ground-supervised solo flights at operations loads while conducting aerial application. All unmanned aircraft used for aerial application must also be listed on the license, have a maximum operating weight of five-hundred pounds or less, and have paid an aircraft registration fee with our office.

It is also the operator's responsibility to ensure that any chemicals being disbursed from the aircraft are legal and meet the U.S. Environmental Protection Agency (EPA) and North Dakota Department of Agriculture guidelines.

If you have any specific questions on this new license, visit the North Dakota Aeronautics Commission (NDAC) website at aero.nd.gov or give us a call at (701) 328-9560.



SCHWEISS

DOORS

HYDRAULIC

ONE-PIECE DOORS

— OR —


BIFOLD

STRAP LIFT DOORS

SCHWEISSDOORS.COM

THE DOOR LEADER





507-426-8273



Embrace the Adventure

KINDRED


Newport Ridge: a unique aviation neighborhood close to FM! Large lots, great schools, parks & pool.

NEWPORT RIDGE

newportridgekindred.com

VISIT WEBSITE FOR LOT AVAILABILITY & PRICING, AND TAKE AN AERIAL TOUR



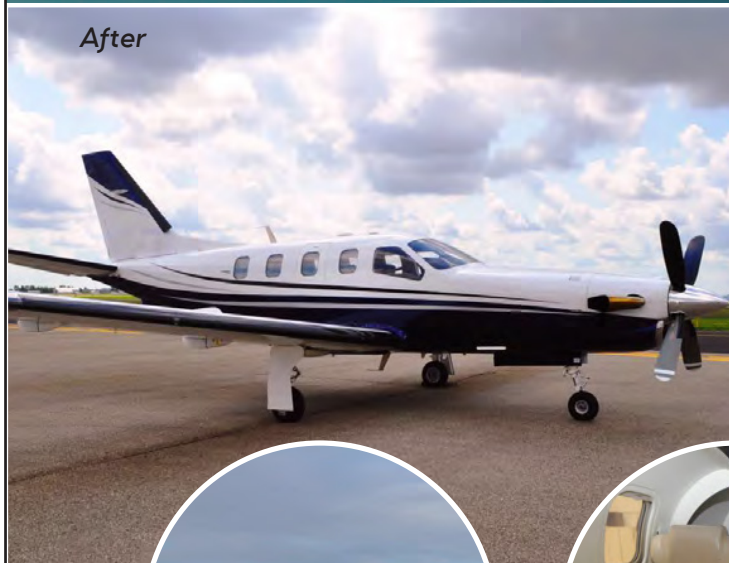
B BEYOND REALTY

Be Moved.

BEYONDREALTYFM.COM

MICHELLE BORUD REALTOR®

701.491.0296 | MICHELLE@BEYONDREALTYFM.COM



***With 30+ years of experience refurbishing aircraft of all sizes,
we can help bring new life to your airplane.***

PAINT SERVICES

- + Exterior Scheme Design
- + Paint Refurbishment
- + New Striping
- + Stripe Color Redesign
- + Registration Number Changes
- + Post Maintenance Care

INTERIOR SERVICES

- + Re-Foam + Re-Cover Seats, Divans
- + Customized Side Walls, Bulkheads
- + Seatbelt Rewebbing
- + Carpeting, Vinyl Flooring, Runners
- + Sound Insulation Kits
- + Custom Embroidery

Dave Utsch dutsch@flypremierjet.com | +1 (952) 697-3170

FLY-ND QUARTERLY

North Dakota Aviation Association
P.O. Box 5020
Bismarck, ND 58502-5020



Enter to Win!
See page 10
for details!

PRSRD STD
US POSTAGE
PAID
UNITED PRINTING

CALENDAR of EVENTS

Check out the online calendar for details
on these events: www.aero.nd.gov/events

February 2022

2022 Tri-State Aerial Applicators Convention
Feb 22-24, Alerus Center, Grand Forks, ND

North Dakota Aviation Association

FLY-ND



CONFERENCE

March 6-8, 2022 • Delta Hotel, Fargo

October 2022

NDAA Career Expo
October 6, Fargo Air Museum

Western Canada's **ONLY** Factory Authorized Propeller Facility for all Manufacturers



- Complete Overhauls, Repairs & Service
- Best Warranty in the Industry
- 24/7 & AOG Technical Support
- Guaranteed Best Pricing
- New Sales, Exchanges and Rentals
- AMO 175-91 EASA 145.7253

Contact us for industry best pricing on new propellers and blades!

Propeller service facility; Authorized Service Facility (ASF)
for Hartzell, McCauley and MT Propeller



**CANADIAN
PROPELLER**
& AIRCRAFT COMPONENTS

1-800-773-6853 • www.canadianpropeller.com • dwills@canadianpropeller.com