

NORTH DAKOTA AVIATION ASSOCIATION

FLY-ND

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QUARTERLY

VOL. 35 • ISSUE 2

SPRING 2023



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FLY-ND **QUARTERLY**

The official publication of the North Dakota Aviation Association

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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: Getty Images. Submit cover photo ideas to editor@fly-nd.com

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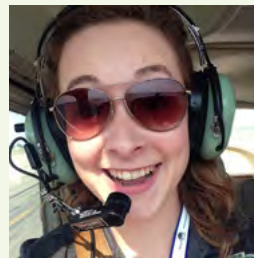
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From the Editor

Spring has finally sprung!
As snowy scenes melt away
and the golden fields below

begin to bloom, the time has come to take to the skies and enjoy the changing scenery from above. Springtime is also an excellent time to thaw out any frozen currency, learn something new about our ever-evolving industry, help a budding pilot grow, or plan your next adventure. We hope you will mark your calendar with all the events taking place in the upcoming months. Two especially exciting events to note: the annual Fly-ND Summerfest will be held June 17, in Bowman, ND. Also, the annual Air Race Classic, the epicenter of women's air racing, will be starting in Grand Forks, ND, in mid-June! We appreciate your support of the Fly-ND Quarterly and hope you enjoy the wide variety of history, stories, and celebrations within this issue.

*Wishing you clear skies and unlimited visibility,
Nicolette*

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CHAIRMAN'S COMMENTS

Spring Brings New Adventures

Hello to all of you once again! As always, I hope this edition of the North Dakota Aviation Quarterly finds you doing well. I'm excited to write today about a couple of happenings in the North Dakota Aviation Association (NDAA).

We are also very excited to announce the return of the **NDAA Fly-ND Conference to Grand Forks in 2024!** There has been a push over the past few years to bring the conference back to Grand Forks, and I'm excited that we're able to do that! We've got a great group helping to put the conference together, with leadership from Ryan Riesinger, Beth Bjerke, Trevor Woods and each of their teams. We already have some very cool events in the works for the conference, so stay tuned for more information!

We're also excited to announce the **2023 Fly-ND Summerfest**, to be held in **Bowman, ND**, on **June 17, 2023**. This year's recipient of the North Dakota Aviation Hall of Fame is Bowman local Rodney Schaff. To honor his induction, we are thrilled to bring this event to Bowman. This

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SUMMERFEST
June 17, 2023 • Bowman, ND

is also in conjunction with the Bowman Bottom Line Aviation Poker-Run and Fly-In. We have a number of events in store for this day, so stay tuned for those as well.

Take Care, Justin



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DIRECTOR'S Chair



Priorities for FAA Reauthorization

The 68th North Dakota Legislative Assembly has concluded its biennial session, and I want to express my appreciation to everyone who participated in hearings or provided written testimony on aviation-related legislation. The biennial North Dakota Aeronautics Commission (NDAC) budget has been approved for the period of July 1, 2023 to June 30, 2025, which includes additional state funding availability for airport infrastructure enhancements and aviation education grant opportunities. The budget also continues support for the “Operation Prairie Dog” airport infrastructure fund, with the caveat that the state’s oil revenues must be sufficient during the upcoming biennium.

Our airport planning team is reviewing grant applications for airport projects, and their funding recommendations will be presented to the Aeronautics Commissioners at the Annual Airport Grant Meeting on June 15, 2023. This grant round provides an opportunity for the NDAC to allocate funds from the airport infrastructure fund established through the “Operation Prairie Dog” legislation, passed in 2019. This funding is critical for matching federal funds and implementing high-priority airport projects throughout the state.

With state funding levels determined for the next two years, additional attention is now needed at the federal level. The future of aviation in the United States depends on the passage of a long-term Federal Aviation Administration (FAA) Reauthorization bill that determines funding levels and operating authority for the FAA while addressing critical aviation issues. The last such bill was approved in 2018 and provided five years of funding for the FAA to operate through September 30, 2023. The 2018 FAA Reauthorization bill was praised for ending a period of multiple short-term

extensions which provided uncertainty and instability for the aviation industry. We are hoping that Congress will prioritize the passing of a long-term FAA Reauthorization bill which will provide the FAA with the necessary resources that are required to maintain and modernize our aviation system.

The National Association of State Aviation Officials (NASAO) has been working with the states and national aviation industry groups to identify several priorities for FAA Reauthorization. These priorities include increasing investment in the Airport Improvement Program (AIP), modernizing the Non-Primary Entitlement (NPE) Program, and supporting a regulatory framework for advanced air mobility and unmanned aircraft systems (UAS). Additionally, it is essential to improve the timeliness of the FAA’s issuance of AIP grants, identify solutions to address the aviation workforce shortage, and ensure that air service opportunities are available to small communities.

As a member of NASAO, the NDAC has been advocating for the priorities that should be considered in FAA Reauthorization. Recently, I traveled to Washington D.C. to discuss these priorities with other state aviation directors, North Dakota’s congressional offices, and staff members from both the House and Senate subcommittees that are drafting language for FAA Reauthorization.

As the expiration date of the current FAA Reauthorization approaches, it is important that aviation users engage with their federal representatives and industry groups to advocate on behalf of their issues and priorities. By participating in these conversations, we can help shape policies and funding levels that promote safety, efficiency, and innovation in the aviation industry. Let’s take this opportunity to make a positive difference for the future of aviation.

Kyle



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Passport Program Flying Legacy

After the long winter we had this year, I anticipate there may be many pilots with an itch to get back in the air. If you are looking for a reason to get in the air, consider participating in the North Dakota Airport Passport Program. To date we have had 97 individuals complete the program, by landing at all 89 public use airports in the state. Starting this summer, in addition to the paper book and stamps located at each airport, users can collect check-ins digitally using an app. This collaboration with Aircraft Owners and Pilots Association (AOPA) will make it even easier for pilots to collect check-ins. If you already have a book with stamps, don't worry, we can combine the physical check-ins with those on the app. Check-ins with the AOPA app will be enabled VERY soon!



There is no deadline for completing the North Dakota Airport Passport Program, as long as the program remains in operation. Awards and recognition will be given at the annual Fly-ND Conference (formerly known as UMAS.)



How to participate

1. Download the AOPA app on your mobile device.
2. Open the Pilot Passport.
3. Under the state programs tab, select North Dakota and opt-in to the North Dakota Airport Passport Program when it becomes available.
4. Once that is completed, you can then start flying to airports, attending safety seminars, and visiting North Dakota's aviation museums. When you have obtained the proper number of check-ins at airports, aviation museums, and safety seminars, the North Dakota Aeronautics Commission will award your prizes to you.

Congratulations to this year's Passport completers!

Kai Engstroem - Bismarck, ND
Jon Solberg - Bismarck, ND
Steve Larson - Burlington, ND
Dan O'day - Moorhead, MN
Preston Page - Bismarck, ND
Monica Puetz - Wyndmere, ND

In addition to the completers mentioned above, **Allan Goerger** - Barney, ND, completed the program a second time. Congratulations to all!



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Dickinson and Watford City Receive 2022 Airport of the Year Awards

Congratulations to the Theodore Roosevelt Regional Airport, and the Watford City Municipal Airport!

Theodore Roosevelt Regional Airport in Dickinson, ND has been recognized as North Dakota's "2022 Commercial Service Airport of the Year". The airport hosted tours for schools throughout the state, allowing students from Kindergarten through High School to visit and see the world of aviation up close. The airport also worked to provide a wonderful experience for two families through the Make-A-Wish foundation, giving VIP treatment including a Fire Fighting water cannon salute on their departure.

In 2022, Dickinson completed a multi-year reconstruction and expansion of their new primary runway. The runway added 900 ft., bringing the total length to 7,300 ft. The project also included constructing a full-length parallel taxiway and installing a new ILS system to enhance safety on the airport. This project overall took 4 years to finish and allows much larger aircraft to operate at the airport.

Watford City Municipal Airport has also been recognized as North Dakota's "2022 General Aviation Airport of the Year." In 2022, Watford City completed a major renovation project, culminating approximately a decade of planning and hard work. Their runway underwent major reconstruction,

and was shifted to a new location with a new expanded length of 6,550 ft. The project included a new lighting system, and a full-length parallel taxiway to greatly enhance safety. These enhancements now allow the community in the epicenter of Bakken to accommodate most large jets.

Watford City hosted an annual fly-in/drive-in, coordinated with other local community events. The airport also continually hosts weather modification and crop spraying to aid local farmers and protect agriculture.

The airports received these awards for excellence in community outreach, facility management, construction and beautification projects, and participation and hosting of special events. The awards were presented at the 2023 NDAA Fly-ND Conference awards banquet. Presenting the awards was Ryan Riesinger, President of the Airport Association of North Dakota and Kyle Wanner, Executive Director of the North Dakota Aeronautics Commission. Accepting the award for Dickinson was Channing Wagner, DIK Airport Operations & maintenance Manager and Laurie Kasian, DIK Airport Administrative Officer. Accepting the award for Watford City was Steve Reeves, Airport Authority Board Member and Luke Taylor, Airport Manager.



The Dickinson Theodore Roosevelt Regional Airport receives the 2022 Commercial Airport of the Year award during the North Dakota Aviation Association's FLY-ND Conference awards banquet on March 7th, 2023. Pictured from left to right is Kyle Wanner (Executive Director, ND Aeronautics Commission), Channing Wagner (DIK Airport Operations & Maintenance Manager), Laurie Kasian (DIK Airport Administrative Officer), and Ryan Riesinger (President of the North Dakota Airport Association).



The Watford City Municipal Airport receives the 2022 General Aviation Airport of the Year award during the North Dakota Aviation Association's FLY-ND Conference awards banquet on March 7th, 2023. Pictured from left to right is Kyle Wanner (Executive Director, ND Aeronautics Commission), Steve Reeves (Watford City Airport Authority Board Member), Luke Taylor (Watford City Airport Manager), and Ryan Riesinger (President of the North Dakota Airport Association).

Bowman farm boy soars: A remarkable journey to the ND Aviation Hall of Fame

North Dakota Aviation



HALL OF FAME

Rodney Schaaf will be inducted into the state's Aviation Hall of Fame after a lengthy career and years of community service.

By Jason O'Day, Forum News Service

The North Dakota Aviation Hall of Fame committee recently announced that Rodney Schaaf of Bowman, N.D. has been selected for induction into the state's Aviation Hall of Fame on March 7. Rodney will join 47 other high flyers inducted before him.

Flying was a lifelong dream for this Western Edge wing master.

"It started in my childhood, when two of my neighbors' farms launched the Weather Modification Program. They do hail suppression, cloud seeding and rain enhancement," he said. "I'd always watch them go up and fight the storms and everything down in southwest North Dakota there and that kinda started everything, wished I could do it and just went from there. I know I can do it, and I did it."

Schaaf, 72, in Hettinger, N.D. After graduating from Bowman High School in 1968, Rodney attended NDSU and joined the Reserve Officer Training Corps. Following his graduation in 1972, Rodney joined the Air Force and was assigned to pilot training where was named a Distinguished Pilot Graduate with a top 10 standing within the class.

"Nowadays I'm retired so I've got all the farm ground leased to a couple of neighbor kids. And I still help with fencing, moving cattle, cutting hay and stuff like that," he said. "Sometimes I think I'm busier now than when I was flying."

Rodney's first military assignment sent him to the Grand Forks Air Base as a KC-135 flight crew member. Flying KC-135 missions involved completing in-flight refueling and passenger airlift operations worldwide, taking him from North Dakota to Alaska, Spain, England, Hawaii, Guam, Japan and South Korea. During his military service, Rodney achieved the rank of Captain. He was honorably discharged from the Air Force in 1978. The timing proved serendipitous, as Jimmy Carter signed the Airline Deregulation Act that year to foster greater competition and lower ticket prices.

"Everybody was hiring... Airlines were very restricted on what routes they could serve. So if Delta wanted to add another route, say Atlanta to Detroit, it had to go in front of the Civil Air Aeronautics Board at that time. And they would say no,



Rodney Schaaf (right) and North Dakota Aviation Association's FLY-ND Conference 2023 and Kyle Wanner, Executive Director, ND Aeronautics Commission (left)

Northwest already has that covered," Schaaf explained. "So now, airlines could go wherever they wanted. There were a few congested areas like New York that required a certain number of slots or else you'd overload the air traffic system."

Rodney was hired as a pilot for Delta Airlines in 1978 and continued a successful career through his retirement in 2004. In 2012, Rodney became the fourth pilot to complete the state's Passport Program, where he flew to all 89 public-use airports in North Dakota. Rodney has also assisted many others in their completion of this achievement as he believes in the importance of the program and how it allows people to interact with the aviation community across the Roughrider

State. He also continually advocates for youth aviation education and development.

Rodney was also appointed to serve on the Bowman County Airport Authority in 2007 and he acted as the chairman of the board for over a decade. In this role, he was the primary liaison between the Bowman Airport and the county, state, and federal agencies. This entailed the coordination of hail suppression, crop-dusting and medical flights. Rodney also goes out of his way to help incoming aviators



Rodney Schaaf was a Delta commercial airline pilot for 26 years.



Rodney was a U.S. Air Force Captain in the 1970s.

with obtaining fuel, ground transportation, and to provide information about the local area.

As the chairman of the airport authority, Rodney was instrumental in the planning, design and construction of the new Bowman Regional Airport which was opened to the public in 2015. He volunteered countless hours consulting with contractors, engineers and government agencies to ensure that the new airport would be an exceptional facility for Bowman and neighboring communities.

He explained the prior airport runway was too short for use during the summertime, but that rebuilding was an eight year process with a lot of regulatory complications. As part of the Federal Aviation Administration's Great Lakes Region, he had to compete with airports in four other states for grant funding.

"They determined that's a wetland, and you mention wetland to the government? Well, the world's gonna end. So we had to go through various options," he said. "Then you go through the construction bidding process which takes time because with the FAA, they have so many restrictions. The main one is to buy American. You know, there's almost nothing made in America anymore. So you've got to go through all the waiver processes. And then you got the Davis-Bacon wage system."

The Davis-Bacon Act of 1931 requires federally funded projects to pay prevailing wages to contractors. Many conservatives and libertarians argue this was originally implemented as a way to price black workers out of the labor market; and that it continues to unfairly favor union companies, discourage small businesses from entering bids and artificially inflate construction bills to taxpayers.

Rodney has also been an active citizen and volunteer. He has helped as a Cub Scout leader and has taken young aviators on introductory flights. Rodney has also served as a Talbot Township Supervisor and Bowman County Zoning Officer.

Kyle Wanner is executive director at the North Dakota

Aeronautics Commission. He said the aviation community is grateful for Schaaf's contributions.

"The aviation Hall of Fame recognizes the Aviators who have made a difference in North Dakota... Recognizing their volunteerism, their passion for aviation, the work that they've done to make a difference in the lives of their community members and the lives of those who are involved in the aviation industry throughout the state is incredibly important," Wanner said. "Rodney is very, very well deserving. The Bowman airport is really there because of all the time and effort he put in."



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Rodney Schaaf and friends at the opening social

Attendees enjoying Poker night with exhibitors



Congratulations to all the award recipients!



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Allan Goerger Platinum Passport Award



Mandan Aero Center - Diamond Award



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Dean Affolter Master Pilot Award



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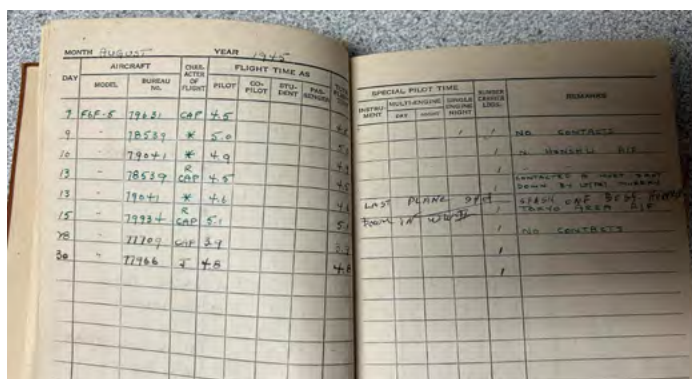
Fargo Air Museum Highlights Local WWII History

By Ryan Thayer, Fargo Air Museum Executive Director/CEO

The Fargo Air Museum is thrilled to share some local history right from our Collections Manager, Max Sabin from the archives!

The featured artifact is a U.S. Navy-issued flight log book that belonged to Fargo, ND, native Grant Herreid. Herreid flew the Grumman F6F in the Pacific Theater during the closing days of World War II and kept track of all of his missions in this logbook. It was issued to him on April 7, 1945. Many of the missions he flew were Combat Air Patrols (CAPs) over Japanese-held territory. Although most are uneventful, several of his log entries note the spotting and/or destruction of Japanese aircraft in combat. The most interesting logbook entry comes on August 13, 1945, when his flight intercepted and destroyed two Japanese aircraft. In his logbook, Herreid mentions that the second kill was the “[...] last aircraft shot down during the war.” Although this is unfortunately untrue, it is still an incredible piece of World War II history, made even more special in the fact that a North Dakota native was seeing action that late in the war.

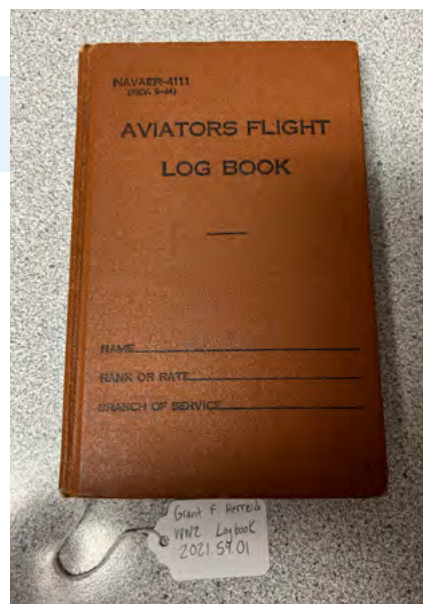
Grant Freeman Herreid was born May 14, 1917, in Fargo. In 1927, the family moved to Moorhead, MN, and Grant graduated from Moorhead High School in about 1935. He attended Moorhead State Teachers College for one year, and then attended and graduated from the University of North Dakota in Grand Forks, ND. Grant taught music in public schools in Twin Falls, ID. Following his discharge from the Navy after World War II, Grant and his wife Ruth made their home in Moorhead. After a brief time when Grant worked for a local bank, he joined the staff of Fargo Glass and Paint. He became their general manager, and worked there until his retirement in 1980. Grant served as a city alderman in Moorhead, from 1948 to 1949, and again from 1950 to 1951. He died on Sept. 14, 2004 at MeritCare Hospital South, in Fargo.



The Grumman F6F Hellcat was an American carrier-based fighter aircraft of World War II. Designed to replace the earlier F4F Wildcat and to counter the Japanese Mitsubishi A6M Zero, it was the United States Navy's dominant fighter

in the second half of the Pacific War. In gaining that role, it prevailed over its faster competitor, the Vought F4U Corsair, which initially had problems with visibility and carrier landings.

We are very thankful for all our sponsors, donors, friends, staff, our Board of Directors and the community. And a special thanks to the North Dakota Aeronautics Commission for grant support to allow us to continually expand our education programs! We could not have a special place like the Fargo Air Museum without your support. So on behalf of the staff at the Fargo Air Museum, thank you and include a stop at the Fargo Air Museum this summer!



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2023 Air Race Classic

The annual Air Race Classic (ARC) is a nonprofit 501(C) (3) organization with a mission. That mission is dedicated to:

- **Encouraging and educating current and future women pilots**
- **Increasing public awareness of general aviation**
- **Demonstrating women's roles in aviation**
- **Preserving and promoting the tradition of pioneering women in aviation**

It takes countless people to put this race together for a successful event. The volunteers are made up of a unique group of individuals who have an interest in participating and helping to make the race a success and support women of all ages, backgrounds, and professions.

If you would like to volunteer for this year's Air Race Classic, you can contact the volunteer coordinator with questions or submit a volunteer interest form found on the website: www.airraceclassic.org/how-to-volunteer.htm

If a financial contribution is more your speed, you can help sponsor the event or a team.

The University of North Dakota (UND) hosts a team of women aviators and this year UND's Frozen Force will get to launch from their home turf of Grand Forks, ND. This is an incredible opportunity to be a part of a wonderful event which will bring positive attention to general aviation. Visit www.airraceclassic.org.

UND and the Air Race Classic

By Sadie Blace, Reporter

The Air Race Classic, founded in 1977, is an annual race that provides women of all ages and aviation ratings to race against one another while positively representing and impacting women around the world. While the start of the Air Race Classic is hosted in various locations annually, this year Grand Forks has the prestigious honor of hosting. In mid-June, around 60 teams will migrate to Grand Forks for the start of yet another historical event. Women from ages 17-90 partake in the race each year, making it extremely impactful for both the racers and the supporters on the ground.

Historically, UND has formed teams of women filling four positions; Pilot, Copilot, Navigator and Ground Coordinator. Each position possesses its own tasks, together making teams successful year after

year. This year, I have the incredible honor of being the team's Copilot. The Powder Puff Derby inspired race consists of a journey across the country of over 2,400 nautical miles and is flown in just a couple of days over the summer.

Throughout the race, teams can compete to win prizes and

titles. Teams that do not compete are categorized in the "noncompetitive" category and are still able to fly alongside all the teams from start to finish. However, if you are involved, there is no doubt that it is an incredibly inspiring opportunity that many can partake in and enjoy.

As previously mentioned, each job is crucial to the proper functioning of the team. The pilot is tasked with being PIC, or Pilot-in Command, of the aircraft throughout the duration of the race. This means

that each decision made is at the ultimate discretion of the



Members of UND's team entered in the 2023 Air Classic Race are, from left to right, Ashley Almquist, Grace Heron, Sadie Blace and Tracy Mitchell. Photo courtesy of UND Aerospace.

Pilot. The race this year starts in Grand Forks, ND and is flown through a variety of stops all the way to Homestead, FL. With a route of over 2,400 nautical miles, the Pilot makes especially important decisions for the team, including decisions based on safety and efficiency. This year's Pilot is Grace Heron. Heron participated in the race last year as the team's Navigator and is the Pilot this year. The Copilot is tasked with aiding the Pilot in the air race operations. The Copilot may fly the aircraft, make radio calls, and overall assist the Pilot by encouraging the safety and efficiency of flight. I am extremely honored and excited to race in this position this year.

The team's Navigator is the individual that keeps the team organized. The Navigator carries all the race rules, fly-by diagrams, and is the main source of contact for the support team on the ground. The Navigator remains in the aircraft with the Pilot and Copilot and ensures a correct flow of information from the ground crew to the crew in the air, while abiding by the competition rules and regulations. This year's Navigator is Tracy Mitchell. This is Mitchell's first race, and she is beyond excited to represent the team and the University of North Dakota. The last position, but most definitely not the least, is the Ground Coordinator. The Ground Coordinator oversees all the team's social media posts. Throughout the race, the girls in the aircraft will send photos to the Ground Coordinator, who will post them regularly to various social media platforms. By making these posts, followers can respond via donations or support through various social media settings. This year, our Ground Coordinator is Ashley Almquist. This is Almquist's first race as well, and she is so excited to see what the race holds. All the women involved this year are extremely thrilled to race alongside one another, while positively representing the university.

Preparation for the race looks a little different this year, as we are hosting the start in Grand Forks. Traditionally, the preparation process includes selecting and naming an aircraft deemed suitable for the race, hours of paperwork and registration, and the selection of girls to fill a team. The team is thrilled to have two fresh faces representing the UND Air Race Classic Team. As previously mentioned, Almquist and Mitchell are patiently and excitedly awaiting the adventure of a lifetime. The race starts on June 20th, 2023, here in Grand Forks. The race will conclude in Homestead, Florida on June 23rd, 2023. The race will include dozens of teams representing all age divisions. In the Air Race Classic, there is a noncompetitive, competitive and EDMA category. The EDMA category will be what UND's team will compete in. EDMA stands for "electronic data monitoring aircraft." This will allow teams to compete against each other with a fair advantage. Here at UND, our Archer's, low-wing aircraft, are not equipped to operate at full throttle without exceeding dangerous speeds. With the new EDMA class, UND's Air

Race team will be able to compete and place, paving a new road in this category for UND.

As we draw closer to the start of the 2023 race here in Grand Forks, there are many ways to prepare. For starters, the UND The Air Race Team can race solely because of donations. The race costs money to sign up for and participate in, and every donation propels our team towards our goal of outreach and inspiring future generations of female aviators. The Air Race Classic has been providing women with the opportunity to race for years. Here at UND, we are a part of history. Year after year, the admitted first-year students here at UND has seen a higher percentage of women. Being a part of and supporting the Air Race Classic team is helping support women in their dreams to pursue successful aviation degrees, careers, and experiences. Being surrounded by such strong women on the team has made me a better pilot and teammate, building memories and friendships that will last indefinitely. One of the biggest goals of the UND Air Race Classic team is outreach. By supporting the Air Race Classic team, donors and supporters can aid in its mission. More information on the race, how to donate, and potential volunteer opportunities will be shared soon. Keep an eye out for updates on the road to getting prepared for this historical event.

Sadie Blace is a Dakota Student General Reporter. She can be reached at sadie.blace@und.edu. Reprinted with permission.



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A Pioneer in Women's Aviation History

2023 Air Race Classic, which originates in Grand Forks this year, traces roots back to early days of aerial racing

Editor's note: In honor of March as Women's History Month, UND Today presents this story that pays tribute to Florence Klingensmith, a North Dakota aviation pioneer; and previews the 46th Annual Air Race Classic, which will begin at Grand Forks International Airport in June and includes a team of four UND students.



Florence Klingensmith (left), North Dakota's first licensed woman pilot and a groundbreaking air racer, raised money from Fargo businesses to purchase her first airplane which she named "Miss Fargo." Photo courtesy Historical & Cultural Society of Clay County.

By Patrick C. Miller

The 1933 air race accident that ended the life of North Dakota's first licensed woman pilot was used as an excuse to diminish women's role in aviation.

Florence Klingensmith was born in 1904 and grew up in Moorhead, Minn., launching her aviation career from Hector Field in Fargo, N.D. However, the nature of her untimely death for decades masked her contributions to the burgeoning aviation field in the 1920s and 1930s.

"Florence Klingensmith was from the Fargo-Moorhead area and became North Dakota's first licensed woman pilot," said Beth Bjerke, associate dean for UND aerospace and professor for aviation. "She was truly one of the first air racers who rose to national prominence by learning to fly and being very successful."

While Klingensmith wasn't as well-known as Amelia Earhart – perhaps the most famous woman pilot of the era – her influence on women in aviation was significant. She was 29 when she lost her life during an air race in Chicago, determined to demonstrate that when it came to flying, women had just as much skill as men.

In the spirit of Klingensmith and other women pioneers in air racing, this summer, the 46th Annual Air Race Classic will

begin at the Grand Forks International Airport and include a team of four UND students. They will compete with other women to fly a 2,400-mile course from North Dakota to Homestead, Fla., from June 20-23.

"We are hosting the start of the Air Race Classic, an all-female race with its roots back in the 1920s," said Bjerke.

"The race isn't about getting to Homestead, Fla., first; it's about flying as lightweight as possible and knowing little tricks and tweaks," she explained. "But mainly it's understanding the weather, knowing when to take off and what altitudes to fly at."

Following in Klingensmith's footsteps, members of UND's 2023 Air Race Classic team are: pilot Grace Heron, a senior from Tampa, Fla., majoring in aviation safety, commercial aviation and sociology; copilot Sadie Blace, a sophomore from Mankato, Minn., majoring in commercial aviation and aviation management; navigator Tracy Mitchell, a sophomore from Billings, Mont., majoring in commercial aviation and unmanned aircraft systems; and ground coordinator Ashley Almquist, a freshman from Bay Village, Ohio, majoring in commercial aviation and aviation safety.

UND's decade of air racing

As UND's John D. Odegard School of Aerospace Sciences celebrates its 10th anniversary of participating in the Air Race Classic and Grand Forks prepares to host the event, it's worth noting that during Women's History Month, Klingensmith was among the pioneering women pilots in the early years of aviation and air racing.

Mark Peihl, senior archivist and 36-year employee with the Historical and Cultural Society of Clay County, did detailed research on Klingensmith for a 1991 article he wrote for the organization's newsletter. He spoke to people who remembered Klingensmith, calling her "an amazing woman with an amazing story."



The 46th Annual Air Race Classic will cover a 2,400-mile-long flight route from Grand Forks, N.D., to Homestead, Fla..

"She was known all over the country, a household name at the time," he said. "She was a very remarkable character in her own right, someone who was absolutely fearless and would try anything. She's one of my favorite characters from Clay County history."

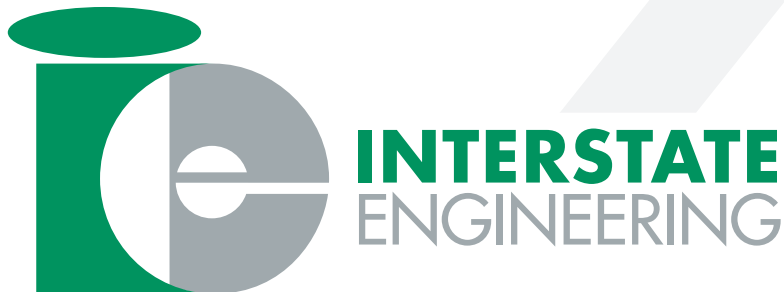
But the circumstances of her death in an air race crash while competing against male pilots caused her to fade into the shadows of history. Keith O'Brien, a former Boston Globe reporter, changed that with the 2018 publication of his book, "Fly Girls: How Five Daring Women Defied All Odds and Made Aviation History."

"Fly Girls" author Keith O'Brien, shown in 2021 with a photo cutout of Florence Klingensmith during a ceremony to honor her.

Photo courtesy of The Extra Newspaper.



(Continued on the next page)



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Klingensmith is one of five women aviators featured in the book. The other four women pilots are Earhart, Ruth Elder, Ruth Nichols and Louise Thaden. A chapter of “Fly Girls” is devoted to Klingensmith and her aviation exploits. The book became a New York Times best seller and helped revive Klingensmith’s historical importance in the aviation field.

In a 2018 interview with GBH News, O’Brien said, “Florence Klingensmith, of this bunch, was just, objectively speaking, the most skilled pilot. She flew in the pylon races. Not only did she fly in the pylon races, she won them and actually competed against the men. That required the utmost coordination and skill. Florence was incredible at it.”

The daredevil from Moorhead

Klingensmith spent her early years on a small farm north of Moorhead before her family moved into town. She gained a reputation as a daredevil, racing motorcycles and working as a sky diver and an airshow stunt girl.

Determined to fly, she earned money to complete electrical school and then worked as an apprentice airplane mechanic at Fargo’s Hector Field while taking flying lessons. She raised money from local businesses to buy her first airplane, which she named “Miss Fargo.”

North Dakota’s first licensed woman pilot launched an aviation career that included winning some of the biggest air races of the day, earning the Amelia Earhart Trophy and setting a world record for flying the most continuous loops – a 4 ½ hour flight during which she completed 1,078 loops. Klingensmith earned the nickname “Tree Tops” for her flamboyant flying style.

One of her goals was to demonstrate that women could compete against men, who almost always had the advantage of wealthy sponsors, enabling them to fly the latest and fastest aircraft.

As O’Brien wrote in his book, “It was not surprising, then, that the few women who dared to enter the elite, male-dominated aviation fraternity endured a storm of criticism and insults. They weren’t aviators, as far as men were concerned.”

Klingensmith’s big break came in 1933 when, in conjunction with the World’s Fair in Chicago, she was signed on to fly in the national Frank Phillips Trophy Race against a field of male pilots. O’Brien compared the event to today’s Super Bowl game.

Klingensmith would fly one of the fastest aircraft of its time, the Gee Bee Sportster built by the Granville Brothers. The stubby plane designed around a powerful radial engine, had a reputation for being difficult and dangerous to fly.

In fact, Lowell Bayless, a pilot for the Granville Brothers, was killed while trying to set an air speed record in the plane when it lost a wing. The aircraft suffered a number of fatal crashes, but, as O’Brien wrote in his book, “Plane manufacturers had no required regulations – and instructors, no required training.”

Thus, fatal crashes at air races were common occurrences in those days.

A sad situation

Klingensmith started the race strong, impressing spectators with her flying ability. She was in fourth place and challenging for third when disaster struck. The Bee Gee began to shed its fabric skin, causing Klingensmith to leave the race and fly away from the crowded airfield. Before she could bail out, the airplane plunged to the ground, killing her.

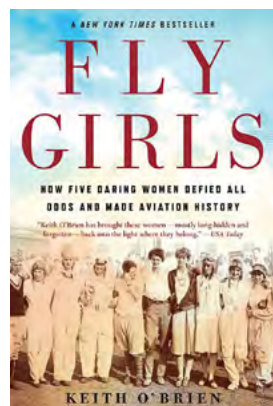
Rather than demonstrating that women had the ability to compete against men, Klingensmith’s fatal crash had the opposite effect. It was said that women pilots were too weak, too easily confused to participate in air racing. One Chicago newspaper went so far as to speculate that Klingensmith might have been menstruating when she died.

“The whole situation was so sad,” Peihl said. “She had such a great opportunity to prove herself, and she probably would have, if not for having a defective aircraft. If she would have finished third in that race, it would have been huge.”

Although it’s taken nearly 90 years to recognize Klingensmith’s contributions to aviation history, the path she opened for women aviators is coming to light. In 2021, the city of Moorhead named its municipal airport Florence Klingensmith Field. A mural downtown and exhibits at the airport celebrate and call attention to her many accomplishments.

Peihl’s article quotes the “Flying Parson,” Rev. J.C. Brown, who eulogized Klingensmith’s during her funeral in Moorhead.

“If she could speak to us now, she would tell us not to lose faith in aviation because of the tragedy that ended her flying career,” Brown said. “She would say it was not usual, but in the pursuit of the thrills upon which she thrived.”



A mural in Moorhead, Minn., honors Florence Klingensmith. Photo courtesy of The Extra Newspaper.

Published in: *Discovery, Equity, John D. Odegard School of Aerospace Sciences*

Congratulations to the winners of the Aviation Art Contest!

This year, the North Dakota Aeronautics Commission received over 100 pieces of art, from a number of school districts in the state. The annual contest is part of a larger national and international effort to inspire youth to illustrate the importance of aviation and aerospace through art. Contest submissions were grouped into three separate age categories for judging, allowing students ranging from 6–17 years old to compete. The contest theme was “Air Sports & The Environment.”

This annual contest is a conduit for students to explore aerospace and aeronautics. We hope educators will use this contest at the earliest ages to start conversations about aviation careers.

THE WINNERS ARE:

Junior Division



1st Peyton - Elk Ridge Elementary



2nd Carmella - White Shield



3rd Harper - Sweet Briar Elementary

Intermediate Division



1st Sophia - Sweet Briar Elementary



2nd Eli - Sweet Briar Elementary



3rd Harper - Sweet Briar Elementary



1st Alyssa - Drayton Public School



2nd Elizabeth - Bismarck High School



3rd Sierra- White Shield

Senior Division

HAI Applauds North Dakota Rotor Pathway Program Rollout



Helicopter Association International (HAI) applauds the leadership of the University of North Dakota (UND) in rolling out the North Dakota Rotor Pathway Program.

The program provides aviation classes that incorporate vertical aviation to high school students by teaming up with industry members, high schools, post-secondary schools, and other stakeholders. The students earn college credits while still in high school and are offered mentoring, internships, and job interviews upon completing the college-level aviation program.

"The rollout of the North Dakota Rotor Pathway Program is a testament to the dedication, professionalism, and love of aviation found among aviation leaders in North Dakota. UND has consistently brought innovative solutions

"We are excited to extend the opportunities in the helicopter industry to more students and show them that the future is very bright..."

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forward and once again steps up to tackle the issue of workforce development,” says HAI VP of Government Affairs Cade Clark. “UND is well known for the caliber of pilots it produces. I am excited to see the Pathway program introduced in North Dakota with such great partners.”

“Our state relies on aviation, especially for agricultural and emergency services. I am excited that North Dakota can stand up this program advancing opportunities for the next generation of pilots as well as growing the numbers of those pilots,” says Mike McHugh, Education Coordinator at North Dakota Aeronautics Commission. “I look forward to working with all our stakeholders in growing this program.”

“Our school is committed to providing the highest-quality training for our students,” says Wesley Van Dell, chief flight instructor, rotorcraft, flight operations, at UND. “We are excited to extend the opportunities in the helicopter industry to more students and show them that the future is very bright.”

Mark Schlaefli of Black Hills Aerial Adventures and Yellowstone Helicopters has stepped forward as an eager industry partner. “Part of our stated purpose as operators is to help develop the next generation of technicians and pilots

who have an interest in vertical aviation. It is imperative that we as an industry help turn that interest into a passion. I was fortunate to have mentors throughout my journey, and we have a calling to give back and help a new generation of rotor pilots find their place in vertical aviation.”

Leslie Martin, associate professor, aviation, at UND,

teaches the program at a local high school in Grand Forks. “Interacting with these young students with such passion is inspiring,” says Martin. “These students are excited to learn about how they can participate and succeed in vertical aviation. Their passion is genuine, and I have no doubts about their success. I am excited to bring the benefits of this program to them.”

The North Dakota Rotor Pathway Program builds on the success of the inaugural Rotor Pathway Program established in Utah, which serves as a national model for education and training programs that prepare students

for STEM careers. “This type of program creates a win for everyone involved: students get the education they need for in-demand careers while industry creates a workforce development pipeline that enables it to grow. I applaud all stakeholders involved for being willing to step up and be part of a solution,” Clark says.

“The rollout of the North Dakota Rotor Pathway Program is a testament to the dedication, professionalism, and love of aviation found among aviation leaders in North Dakota...”

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ENGINEERING, REIMAGINED

Learning from Others' Mistakes

By Ron Lundquist

There's an old saying that goes something like this, "Learn from the mistakes of others; you won't live long enough to make them all yourself."

I'm not quite sure who said this first. Some say it was Oliver Wendell Holmes, others attribute it to First Lady Eleanor Roosevelt. I've even heard that the late great Bob Hoover used the phrase to remind us to learn from those who have had incidents or accidents, so we don't repeat them. I think it's solid advice. Aircraft accidents have been around since the Wright brothers, as they are an unfortunate consequence of aviation. It's both what we learn from them and how we improve that makes these accidents not in vain.

I'd like to highlight several accidents (most in the airline world) that helped in part change the way we do things, or have in some part dictated the equipment we are now used to. My goal is to bring awareness to the crash itself and how it helped change aviation. It may not have been the sole reason things changed, but they certainly helped. My intent is not to trivialize anyone's misfortune. These all happened, were horrible, and people died. They did, however, help prevent future disasters by what we learned from human behavior and helped develop technology, which did the same. That being said, just because an accident happens and we require a change of some sort, there's nothing that says the same exact event can't happen again.

So, let's get started. On July 19, 1989, United Flight 232 had an uncontained failure of the #2 (tail) engine, which severed the lines of all three hydraulic systems, rendering the flight controls unresponsive. Controlling it with thrust from the #1 and #3 engines, the crippled aircraft made its way to Sioux City, IA, and crashed landed on closed runway 22. A few of the ways this accident contributed to aviation safety:

- It was a fine example of Crew Resource Management (CRM) and illustrates the need for crews to train for it. It's still used today as a case study in CRM.
- It reinforced the need for emergency response plans. Sioux City Airport had been perfecting theirs for several years before the event, but it really pushed other airports to rewrite their own.
- Mechanically, it forced McDonald Douglas to rework the hydraulic systems in the DC-10 (and the MD-11.) Fuses were installed, to isolate sections of the hydraulic system if they were punctured, to prevent a total loss of fluid.
- A crack in the fan blades on the #2 engine was initially the culprit for the engine coming apart. After the crash, General Electric developed new inspection processes for these fan blades. They also started to use a higher temp and vacuum process for the titanium from which the blades were made.

For the next one, we go back to December 29, 1972, when Eastern Airlines Flight 401 crashed in the Florida everglades, while on approach to Miami, FL. The Lockheed 1011 had a burned-out light for one of the landing gear. While circling west of the airport, the autopilot became disengaged and the aircraft entered a slow descent. While all three crew members were focused on the light, no one was watching the airplane, which subsequently crashed. It helped coin the term Controlled Flight Into Terrain (CFIT).

- This accident continues to send the message that someone has to fly the airplane at all times. This is a major component of CRM and continues to be highlighted in CRM training.
- Not in 1972 but today, Part 121 aircraft have Ground Proximity Warning Systems (GPWS). If the L-1011 would've been equipped with this, it's quite possible the crew would've been alerted to the impending impact with the terrain and could have arrested the descent.
- The approach controller at Miami did see the L-1011 deviating from its altitude, but the type of radar he was using was ancient by today's standards. The controller testified that his radar would indicate incorrect information for up to three sweeps, but instead of directly asking them about their altitude, he asked them, "How are things coming along?" After this, air traffic procedures were developed to aid flight crews, when marked deviations in altitude are noticed by the controller. It also kept the push going for development of more accurate and timely radar.
- While waiting for rescue after the crash, many of the flight attendants were trying to help passengers evacuate the aircraft but couldn't see, as it was night and they did not have flashlights. A recommendation from the National Transportation Safety Board (NTSB) was to have flashlights at all flight attendant stations. Also, the shoulder harnesses from the rear facing flight attendant seats had been removed, as it wasn't a requirement at that point. It is now.

September 25, 1978, a Boeing 727 operating as Pacific Southwest Airlines (PSA) Flight 182 crashed northeast of San Diego's Lindbergh Field while on approach to runway 27, after colliding with a Cessna 172. There are many facets to this crash, but essentially the PSA jet was talking to San Diego tower and the 172 was talking to nearby Miramar approach control. Both aircraft were on roughly the same heading, with the 172 climbing and the 727 descending for landing. The PSA crew thought they had spotted the Cessna but then either lost it or had mistaken another airplane for the Cessna. Blame for the accident is still being argued, but it did yield some high profile recommendation from the NTSB,

North Dakota Aviation Association

- Air traffic procedures were extensively overhauled at San Diego and a terminal radar service area (TRSA) was installed at Lindbergh Field.
- Traffic Collision Avoidance System (TCAS) was recommended to be installed in all Part 121 aircraft. Had the 727 been TCAS equipped, it certainly could have alerted the crew to the Cessnas altitude and track.
- Sterile Cockpit: a requirement for pilots to refrain from any nonessential activities during critical phases of flight. This includes taxi, takeoff, landing, and while in flight below 10,000 feet. An off-duty PSA pilot was catching a ride to San Diego on the accident flight and was in casual conversation with the flight's crew for much of the approach into San Diego. While this may not have been a cause, it certainly took the crew's attention away from effectively scanning for the Cessna. This was yet another accident that would show the need for sterile cockpit procedures.

Korean Air Lines Flight 007 was shot down when it strayed into Russian airspace on September 1, 1983. The 747 was enroute from Anchorage, AK, to Seoul, Korea. It is believed that the aircraft's autopilot was operating in 'Heading' mode versus 'INS' or Inertial Navigation System mode, which sent it on a slow diverging path that would cross over the Russian Kamchatka Peninsula.

Until this time, the Global Positioning System (GPS) was controlled by the military. Long-range navigation in the civilian

world was done with an INS, which is a device that uses accelerometers, gyroscopes and a computer to continuously calculate the position, orientation, and velocity of an object. It's fairly accurate but does have limitations and doesn't compare to GPS.

- The Flight 007 event changed long range navigation in several ways. It forced a protocol that required long-range military radars to assist in managing civilian air traffic. Three years after the shootdown, the United States and Russia established a joint air traffic system that would aid in preventing future tragedies.
- Two weeks after the tragedy, President Ronald Reagan announced the release of GPS technology to use in the civilian world. This fundamentally changed not only aviation but nearly every person's life on the planet.

Pilots that have learned to fly in the last 30 years are no doubt very familiar with the term "microburst." Before that, it was probably referred to as a downdraft, but the seriousness of them were really brought to light after Delta Airlines Flight 191, which crashed short of the runway at Dallas/Fort Worth International Airport (DFW) on August 2, 1985. The L-1011 had been skirting thunderstorms on their approach to the airport and were configured for landing, when they encountered a microburst they couldn't out fly.

- After the investigation, the NTSB recommended that onboard windshear detection equipment become

(Continued on the next page)



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required on all airliners and were by the mid 1990's.

- Low Level Windshear Alert Systems (LLWAS), a series of sensors stationed around the airport to detect wind direction and velocity, were installed at DFW but were very basic in their ability. They could only detect changes close to the ground, not up in the air 1000 feet, where Delta Flight 191 was. After the crash, updated versions of LLWAS were developed and continue to be improved today.
- Terminal Doppler Weather Radar (TDWR): TDWR has the ability to "see" turbulence, cloud rotation, etc. Almost every weatherman on television today has access to TDWR. The technology was in its infancy in 1985, but by 1994 was in service and now protects at least 46 high capacity airports (and cities) in the U.S. It's worth mentioning that the last accident attributed to windshear was July 2, 1994.

The last one wasn't an accident and no one was hurt, but it could've been one of the biggest disasters at Chicago's O'Hare International Airport. On July 23, 2006, an Atlas Air 747 had just landed, while a United 737 was departing on an intersecting runway. Too late to abort its take off, the United aircraft cleared the tail of the 747 by 35 feet. The incident was attributed to many things but ultimately blame was given to the tower controller, who did not monitor both aircraft with respect to them using intersecting runways.

- Runway Status Lights (RSL) had been in development for a few years, but after this incident, the number of towered airports that saw the implementation of RSL's increased dramatically. They are used at busier airports, so depending on where you fly, you may or may not have seen one. It is important however to know what they mean if you do. RSL's are fairly simple in their operation. The system communicates with Airport Surface Detection Equipment (ASDE) and warns runway users that a runway is occupied, either by another aircraft or ground vehicle. Red lights will illuminate, indicating to not cross a hold short line, a runway intersection or not to take off if you were on a line up and waiting for clearance. You will see more of these as airports become busier.

When we discuss accidents/incidents that contribute to safety and technology, these are just the tip of the iceberg. There are many more advances in aviation, whether in mechanical or human factors that have come from unfortunate events. Remember that rarely does any one thing cause a crash. It's normally a chain of events, so the reasons for an event can vary from a few to many. I try to learn from every single one and become a better pilot from them. In no way am I second guessing crews, controllers, or investigators when highlighting what happened. I'm merely mentioning them in an effort to bring awareness.

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Pilot Qualifications

- Any pilots who are identified on the aerial applicator's license must hold a Federal Aviation Administration Remote Pilot Certificate. Information on obtaining this licensure can be found here: bit.ly/401354O
- Before conducting solo flights, pilots must have attended an approved training program or have received at least ten hours of direct ground-supervised solo flight at operational loads while conducting aerial application.

Pesticide Certification

- A pilot who is identified on their Aerial Applicator License must hold a Commercial Air Core Pesticide Certification from the North Dakota State University Extension Pesticide Certification and Training Program.

Annual Aerial Applicator Safety Meeting Requirements

- The North Dakota Aeronautics Commission (NDAC) requires an annual safety meeting, which can be fulfilled through attendance of a Professional Aerial Applicators' Support System (PAASS) program or by attending the NDAC annual safety meeting. The North Dakota Department of Agriculture requires attendance at PAASS at least once every three years.

Maximum UAS Weight

- The maximum operating weight of an unmanned aircraft while conducting aerial application in North Dakota is five hundred pounds.

If you would like to receive additional information and/or learn more about the required steps to take to provide unmanned aerial applicator services, contact the North Dakota Aeronautics Commission office at 701-328-9650.



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‘SAVED BY SETH’

Local aircraft mechanic restores Minot AFB man’s Cessna

Seth Boyko, an aircraft mechanic at Minot Aero Center, is an extremely talented workaholic who grew up near Turtle Lake with a North Dakota “If it’s broke...fix it” ethic.

Eighteen-year-old Seth was tasked with restoring my 1959 twin Cessna aircraft.

Consulting with Minot Aero Center’s Director of Maintenance Jay Blessum we decided to fly my sick little bird (1959 twin Cessna aircraft) back to Minot for the possible salvation – restoration to airworthiness condition.

Should we wish to proceed, “It Just So Happens That (I.J.S.H.T.)” Jay would generously give Seth uninterrupted space and time to tackle this massive project.

The issue came about in January 2022, when I dropped off my 1959 twin Cessna aircraft for its first major inspection at TAS Aviation maintenance facility in Defiance, Ohio. Our horrific Midwest winter weather subsided at the same time I had Air Force leave and it was the last week of the last month before my annual inspection expired. In May, I was told what every vintage vehicle owner dreads hearing – corrosion was discovered. Specifically, a four-inch area along the right wing’s spar, which is basically the airplane’s spine. Pictures looked like a Great White shark took a bite out of it.

The shop in Ohio did not have the capacity to take on such a long-term restoration project.

Alex Finneseth, friend and fellow aviator, flew with me to bring my twin Cessna back to North Dakota from Ohio. With the Minot ferry flight completed, now began the search for a suitable wing donor. My friend, Dennis Rehr, unearthed a 1960 Cessna 310, taken apart and stored in Iowa and put me in touch with the D model’s owner. Once we learned that a 1960 model’s wing will fit on my 1959 model, hope and prayer began to take action.

The obvious determinant for most of us in restoring a vintage car, truck boat or aircraft is money. In my case, I went by the standardized aviation insurance industry



Seth Boyko, left, and Buddy Walker pose for a photo following the first successful test flight after a major aircraft restoration of Walker’s plane. MIDDLE: Seth Boyko plies his trade on the 1959 Cessna 310 rescue project.



Seth Boyko plies his trade on the 1959 Cessna 310 rescue project.

formula: If the repair estimate exceeds 70ish% of the aircraft value, it is considered a total loss.

The U.S. Air Force stationed me at Minot, North Dakota, these past three years, affording me the chance to hang out with aviation legends and icons like Kent and Warren Pietsch. Before plunging into major restoration surgery on 90B, Warren and I discussed this topic of When-To-Rescue vs When-To-Let-Go. We considered all the factors including money.

Enter Seth the Savior and Minot Aero Center.

Seth had a free weekend, a brother, loads of enthusiasm for our project and a huge pickup truck with flatbed so, one round-trip to Iowa later, and we have us a donor aircraft wing.

So, we got my plane back at Minot a replacement right

wing, lots of local airport enthusiasm, an adventurous shop and Seth.

To say this young man possesses skill and initiative is understated. Daily I visited the maintenance hangar during this project and received updates from Seth akin to: "Well,

the wiring in this new wing is crap so I replaced it all with new."

Every visit I liken to witnessing a miracle in progress, and I'm in the business of believing in those, so I shouldn't have betrayed such shock! (Walker is an Air Force chaplain.)

Main fuel tank removed. Engine hoisted. Wing amputated. Wheels,



From right to left, Austin Greenheck, Alex Finneseth and Scott Rustad advise Seth Boyko regarding his right aircraft wing work and boot selection. Plane owner Buddy Walker is at left.

(Continued on the next page)

AIR RACE CLASSIC 2023

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brakes and lines swapped. Flight control surfaces traded. Ribs and cowlings parts exchanged between old wing and new. Anachronistically shiny replacement skin: fabricated in-house.

Blending two airplanes together creates obvious color differences, ranging from beige and maroon to green, gold and white, so when asked about a name, I struck a dramatic pose like Dr. Pretorius from the 1930s horror classic and pronounced her, "The Bride of Frankenstein."

I cannot stress enough that this entire project was 99% Seth. Wise beyond his age of 18 years, he consulted with local experts and experienced maintenance gurus throughout the process, all under the watchful eye of Jay Blessum.

Meanwhile, a funny thing was happening around the old airfield: a case study in what we mean by, the aviation community. At one point, I saw three mechanics, two flight instructors, one student pilot and an airman from my base... all assisting in saving this old air companion of mine. How do you place a value on that?

The entire wing replacement plus annual inspection was all accomplished in just two months.








On Dec. 1 the day arrived for the test flight. To be expected, Seth was right there in the co-pilot seat and

righteously monitoring/manipulating everything that extends, retracts, moves, registers, lights up or ignites: everything we could think of to check after such a massive undertaking was tested to the max. Anything I could write about that moment is best summarized by looking at the two faces ignited by cell phone camera flash (which I forgot to disarm), where you can catch a glimpse of grinning VICTORY.

Seth is an icon of assurance that the USA has a bright future, with folks like him pouring their all to make each day a success story. Taking what he learned from family and farm, Seth climbed into aviation and is a proud owner, aircraft mechanic, commercial single engine land pilot and the most optimistic, proficient troubleshooter you will ever see tackling gremlins in the maintenance hangar.

As of now, 90B and I are back to FMC status. That's Air Force-ese for Fully Mission Capable. We have resumed our business/pleasure sky time together doing what twin Cessnas do best. If you find yourself at Minot International Airport, swing by AvFlight. We would love to share more of this rescue story with you all. Just look for the beige, maroon, black, white, gold, silver and green 1958/1959/1960 twin Cessna 310 with "Saved by Seth" painted on one wing.

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New Flight Simulator Helps Bismarck Public School Students Launch Dreams of Becoming Pilots

By Emmeline Ivy, KFYP

The Bismarck Public Schools Career Academy staff is dedicated to helping students realize their full potential and achieve their goals. Now, it's one step closer to helping those interested in becoming pilots – even before graduating high school.

The BPS Career Academy boasts 18 student pilots who have been certified by the Federal Aviation Administration to fly with an instructor.

Three of those kids are looking to secure their Commercial Pilot Certificate before graduation. Thanks to a donation from one generous local, the students are now able to receive flight credit without leaving the classroom.

There are many reasons why these students have chosen a path to the skies.

"I've always wanted to be a pilot my whole life," said 17-year-old student pilot Logan Lawrence.

"I'm looking to teach aviation," said 17-year-old student pilot Jefferson Miller.

"I'm studying to get my private pilot license and pass the written test," said 16-year-old student pilot Garen Crouse.

The one common denominator linking them together? Passion for flight.

Jefferson Miller is hoping to get his dream of joining the aviation industry off the ground. "Ever since I was young, I would look up, and I'd see planes in the air. I'd just think, 'I want to do that.'"

At a young age, Miller caught a flight that changed his life. "One of my mom's friends, he took me and my older brother up into a plane, and I was just awestruck. It was just the coolest experience of my life," said Miller.

Miller's classmate, Logan Lawrence says he's been preparing for takeoff for as long as he can remember.

"I've just always been fascinated by it. Ever since I've been a little kid, I've only wanted to be a pilot," said Lawrence.

Logan's friend, Garen Crouse says his interest developed over time, but now his goal is as clear as the summer sky.

"My dream? Being a commercial pilot for any kind of airline," said Crouse.

A new class tool is helping the students learn on the ground while giving them the skills to soar.

"We got the simulator a couple of weeks ago. It's an advanced aviation training device, which allows us to actually train the pilots and also students too for a more immersive and hands-on learning experience," said Aviation Technology Instructor Brad Stangeland.

Brad Stangeland's class says the simulator is a game

changer. "If you wanted to practice getting out of some kind of dangerous scenario, you wouldn't really want to do that in an actual plane. You'd want to do it in a simulator," said Crouse.

"It's definitely a huge advantage that us students have over anyone else that's trying to be a pilot," said Lawrence.

You can feel almost what it feels like to be in an actual airplane," said Miller.

These three will soon land jobs. And for future students, the possibilities are now endless.

"I'm experiencing history in the making. I can see the impact of the generations to come," said Miller.

Time spent in the simulator can be logged for flight hours - up to 2.5 toward private pilot licenses and 50 toward commercial licenses.

Bismarck resident and aviation enthusiast Kerry Carpenter donated the flight simulator to the Career Academy.

"One of my mom's friends, he took me and my older brother up into a plane, and I was just awestruck. It was just the coolest experience of my life,"
said Miller

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Airmen of the Year

The North Dakota Air National Guard's (NDANG), 119th Wing, known as the "Happy Hooligans," recognized the organization's top officers, noncommissioned officers and Airmen of the Year on March 4, during a ceremony at the Hilton Garden Inn, Fargo, N.D. (National Guard story by Senior Master Sgt. Mike Knodle, 119th Wing Public Affairs)

Airmen were nominated for the awards based on their military and civic service throughout 2022. The Outstanding Airman Program annually recognizes officers and enlisted members for superior leadership, job performance, community involvement, and personal achievements.



Field Grade Officer of the Year: Maj. Daniel Sly, 119th Mission Support Group.



Maj. Daniel Sly joined the NDANG in 1999 and commands the 119th Communications Flight. His 2022 accomplishments include helping build a mobile STARLINK communications kit which significantly improved communications in support of domestic operations in remote areas of North Dakota. He led the

design, engineering and installation of a vastly improved communications infrastructure to include a core fiber optic mesh network that is more robust, resilient and faster than legacy systems. Sly served as an expert panel member for two separate Fargo Moorhead West Fargo Chamber of Commerce cyber events, serving to educate small business and community leaders on cyber network security. He led the design and creation of a research and development network now used by the U.S. Coast Guard to test improved search and rescue capabilities. Sly volunteers as a coach for Moorhead Youth Football and the Moorhead Crush Softball program. He also serves as a volunteer at the Christ the King Church in Moorhead leading the Call Committee.

Company Grade Officer of the Year: 1st Lt. Cody Chick, 119th Mission Support Group.



1st Lt. Cody Chick joined the NDANG in 2009 and serves as the operations officer for the 219th Security Forces Squadron in Minot, N.D. Prior to his current role, Chick served as a fire team leader, training instructor, training noncommissioned officer in charge, and support operations officer.

His 2022 accomplishments include successfully leading 80 Airmen in performing 24/7 nuclear security operations for Global Strike Command at Minot Air Force Base. Chick is the only ANG member certified as a Nuclear Convoy Commander and only one of six in the entire U.S. Air Force. During this time, he commanded 25 nuclear weapon convoys and securely transferred over \$672M worth of nuclear war assets over a combined distance of 1,700 miles. He participated in the 119th Wing Strategic Planning Team, developing goals and objectives to support the Wing's priorities. He volunteers his time and home as a host family sponsor for the Minot State University Women's Hockey Team, providing a home and support for non-local women to play college hockey and get an education.

Senior Noncommissioned Officer of the Year: Senior Master Sgt. Erica Carruth, 119th Mission Support Group.



Senior Master Sgt. Erica Carruth joined the NDANG in 2005, and currently serves as the flight chief, Military Personnel Flight in the 119th Force Support Squadron.

Her major 2022 accomplishments include deploying as the personnel support for contingency operations team chief at Ali Al

Salem Air Base, Kuwait. There he led the collaboration to create the first ever 119th Wing Strategic Plan and developed an online platform for wing personnelists to track training. Additionally, she was recognized as a superior performer by the 119th Wing Inspector General for her efforts in creating intricate scenarios for a mass casualty exercise. Carruth recently became a certified hot yoga instructor and teaches fitness classes at Inspire Health and Wellness. She is a member of the Harwood American Legion and the Enlisted Association. She is also an active member of her

parish, Holy Spirit Catholic church, where she volunteers with her husband. Her most memorable NDANG moment was in August 2021 when she was deployed to Ali Al Salem Air Base, Kuwait and directly supported the citizens and military members that were evacuating Afghanistan. She led a Personnel Support for Contingency Operations team that worked around the clock to track and aid Noncombatant Evacuation Operations.

Noncommissioned Officer of the Year: Master Sgt. Taylor Wolford, 119th Operations Group.



Master Sgt. Taylor Wolford joined the NDANG in 2009 and currently serves as an operations intelligence flight chief in the 178th Attack Squadron. His major 2022 accomplishments include expanding relationships with the U.S. Special Operations Forces community by facilitating joint exercises and providing a Live

Virtual Constructive training environment. This led to the development of tactics, techniques, and procedures integrating MQ-9 operations into the joint domain. Wolford has been deployed “in-garrison” supporting numerous contingency operations since 2013. He is honored to serve as an intelligence flight chief and relishes the role of “taking care of Airmen.” Taylor volunteers for the Salvation Army and serves as a coach for Tri-City Youth Soccer.

Airman of the Year: Senior Airman Maria Sornsin, 119th Mission Support Group.



Senior Airman Maria Sornsin joined the NDANG in 2018, and currently serves as a services journeyman in the 119th Civil Engineer Squadron.

Her major 2022 accomplishments include identifying 425 safety hazards resulting in the creation of 1,700 work orders for corrective

action. Her efforts improved the quality of life for 7,200 joint coalition warfighters and earned her the U.S. Air Force Central Top Performer award. In July 2022, her humanitarianism took her to Medjugorje, Bosnia where she engaged in activities that provided shelter, necessary medical care, pharmaceutical treatment, nourishment, supplies and critical winter clothing. These efforts directly contributed to the health and wellness of the local community. Finally, Sornsin supported the movement of 825 total force students within 12 different career fields,

from 25 visiting teams at the 119th Civil Engineer Squadron’s Regional Training Site. Her most memorable 119th Wing moment was a deployment for training to Yokota Air Force Base, Japan.

“We are extremely proud of these Airmen and their continued dedication to excellence and service to our state and nation,” said Col. Mitch Johnson, 119th Wing commander. “Their contributions to the N.D. Air National Guard ensure that the Happy Hooligans’ outstanding reputation is maintained and enhanced throughout the U.S. Air Force and Department of Defense.”

Family of the Year

Master Sgt. Taylor Wolford, left, and Master Sgt. Laura Wolford and daughter were recognized as Family of the Year at the annual North Dakota Airmen of Year Banquet, March 4, 2023, Fargo, N.D. (National Guard photo by Senior Airman Christa Anderson, 119th Wing Public Affairs)

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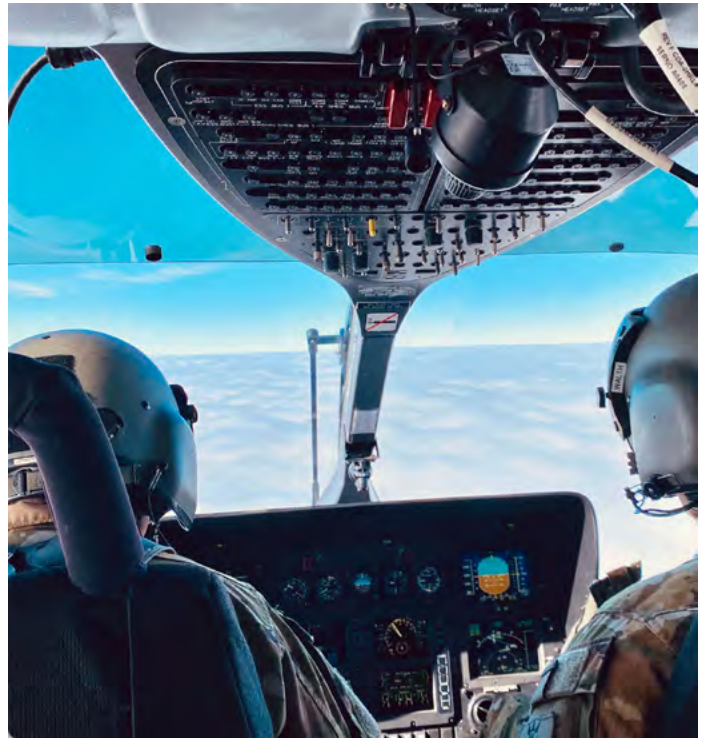
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North Dakota Airports Receive Nearly \$1 Million to Advance New, Existing Projects

Sen. Cramer: North Dakota Airports Receive Nearly \$1 Million to Advance New, Existing Projects

U.S. Senator Kevin Cramer (R-ND) announced the Federal Aviation Administration (FAA) awarded North Dakota airports \$964,500 for allocation as follows:

- **\$484,800** for the Adams County (Hettinger) Airport Authority to repair Taxiway C and build a 490-foot taxi lane connecting a hangar area with a parking area.
- **\$239,700** for the Tioga Municipal Airport Authority to improve its airfield guidance fixtures and the Taxiway A lighting system.
- **\$150,000** for the Bowman Municipal Airport Authority to support the partial construction of an 8,000-square-foot storage hangar.
- **\$90,000** for the Ashley Municipal Airport to expand its general aviation apron by 3,333 square yards.



Maj. Eric Lothspeich, left, and Chief Warrant Officer 2 Alex Walth, fly a UH-72 Lakota helicopter from Aberdeen Proving Grounds, Maryland, to Bismarck, N.D., Nov. 16, 2022. Staff Sgt. Dahlstrom was aboard as crew chief.

*(Photo by Staff Sgt. Dahlstrom, 1st Battalion, 112th Aviation Regiment)
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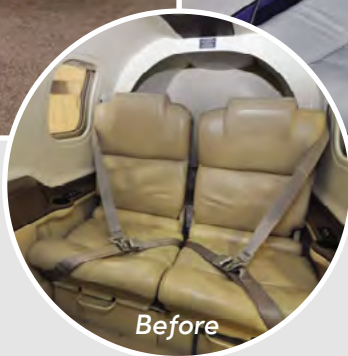
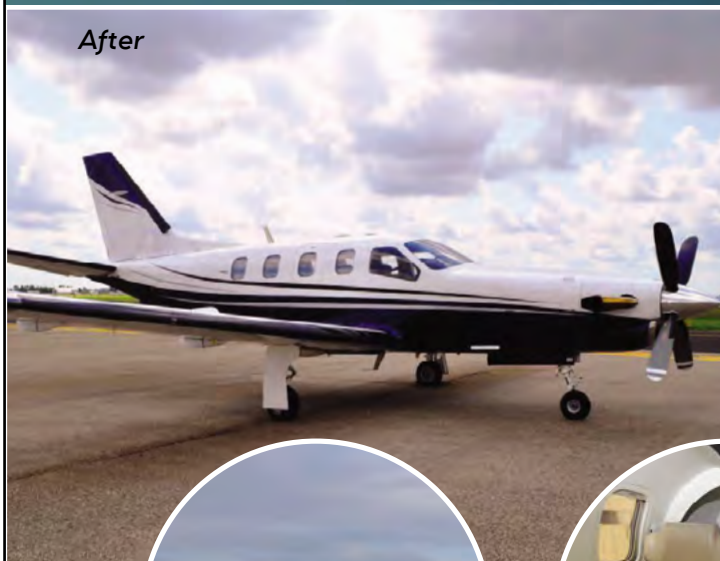
AVIATION

Sustainability Solutions for the Future

A large field of wind turbines in a desert landscape, with several small aircraft parked in the foreground. The turbines are white and stand against a backdrop of rolling hills and a clear sky. The aircraft are parked in a row, and the overall scene suggests a focus on sustainable aviation.

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CALENDAR of EVENTS

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

JUNE 2023

Mandan Fly-In

June 11, Mandan, ND, Planes & Pancakes

3rd Annual Bottom Line Aviation/KBWW Poker-Run/Fly-In

June 17, Bowman, ND (KBWW)

For details or questions email Brent Kline at
fuel@bottomlineaviation.com

NDAAs Summerfest

June 17, Bowman

*Details
to come!*

New Town Fly-In

June 17, 05D

Garrison Fly-In Breakfast

June 18, Garrison, ND

Father's Day - Pancakes and eggs with ham!

Dunn County Airport Fly-In/Drive-In

June 24, 9Y1, Terminal Grand Opening, 10-2 MST

SEPTEMBER 2023

See the Berlin Express – Sept 1-3

BISB-52 Flight Experience (outside Hangar 53)

Beulah Fly-In Breakfast

Sept 9 • Beulah, ND 95D

Bismarck Fly-In

Sept 10 • Bismarck ND

OCTOBER 2023

7th Annual Props & Hops

Oct 5, Y19 Mandan, ND

Fly-ND Career Expo

Oct 5, Dakota Territory Air Museum, Minot, ND

UAS Summit & Expo

Oct 10-11, Alerus Center, Grand Forks, ND