

# Aviation QUARTERLY

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North Dakota Aviation Council

Fall 2014

## More than half a century of flight with the same plane

By Brian L. Gray

Leon Basler has been piloting since the age of 14. His interest in flying has paved the way for a multitude of opportunities and jobs over the years, from his service in the Air Force to work as a corporate pilot. Throughout his career he has owned several planes, most of which have come and gone. But these days only one particular plane remains in his possession – a 1946 Aeronca Champ 7AC. And it just so happens the plane he owns today is the very plane he first flew in as a teenager.

Leon was raised in historical Ste. Genevieve, Missouri, a small town 60 miles south of St. Louis and located along the west bank of the Mississippi River. One of his favorite activities growing up in Missouri was riding through town and the countryside on his bike. Having a fascination with flying as far back as he can remember, Leon lived only a couple of miles away from a neighboring farm that contained an airstrip and hangar, in addition to the Ste. Genevieve Flying Club's airstrip located on the outskirts of town. Oftentimes a plane would be spotted making its way to one of the airstrips, and Leon would almost impulsively grab his bike and follow behind them to watch

them land.

"I loved chasing after planes as a kid," Leon said. "It didn't matter what I was doing – whenever a plane flew overhead I stopped whatever I was in the middle of, jumped on my bike, and followed it to the airstrip."

Leon's curiosity led to a friendship, both personal and professional, with the operator of the farm, a man in his 30s named Louis Sexauer. Louis, who was known by others as Louie, soon took Leon under his wing and began teaching him the mechanics of flight and the various functions of the plane.

Where most kids his age were learning to drive cars, Leon was substituting his bike for planes and learning to fly with Louie at the helm, serving as Leon's instructor and taking him up in the air in his 1946 Aeronca Champ.

Instruction from Sexauer was conducted in an informal and non-conventional fashion. Leon learned how to become a pilot by receiving flight lessons whenever Sexauer was able to fit it into his schedule.

"I got over to the airstrip as often as I could," Leon said. "Some days Louie was

too busy working on the farm to take me up, other days we only had enough time to fly for a few minutes. And then there were days where we were able to complete a full hour in the air."

In exchange for the lessons, Leon helped with work around Louie's farm, which included haying, maintaining the airstrip and washing and polishing Louie's 1946 Aeronca Champ.

The instruction continued into Leon's senior year of high school. When Leon became competent enough for solo flight, Louie and Leon flew to the Sparta Regional Airport in Illinois, located just across the Mississippi River. Louie spoke to a flight examiner, and told him he had been working with Leon. He assured the examiner that Leon's skill level met the standards required to receive a solo endorsement. Based on Louie's guarantee, the examiner gave Leon a pre-solo and flight examination to demonstrate his abilities and knowledge, which he passed.

All because of Louie's generosity and

(Continued on page 9)





## *North Dakota Aviators!*

You can help provide information to communities, local elected officials, and state elected officials on the many ways North Dakota benefits from its airports. Here are some examples:

- Specialty doctors fly to see patients at local clinics that cannot support full-time staff.
- Farm equipment breaks down and parts are flown in to reduce down time.
- Travelers from around the U.S. fly to North Dakota to enjoy unique hunting experiences.
- Area colleges use the airport to fly in teaching candidates and to expand their geographic base for student recruitment.
- Agricultural production is exponentially increased when crops are treated by ag operators.
- Life flight airlifts critically ill patients to larger medical facilities both within and beyond the state.
- Businesses increase their efficiency and reduce the number of hours their employees are out of the office by using general aviation.

The North Dakota Aeronautics Commission is conducting a study to identify economic and other benefits that are supported by 89 North Dakota airports included in the study. You can help by identifying specific benefits supported by each airport; you can provide this information by participating in a general aviation user's survey.

Copies of these surveys will soon be available at airports and FBOs around the state. The survey is also available online at: <http://NDAC.GA-Pas.sgizmo.com/s3/>. Scanning the QR code provided here will also take directly to the online version of general aviation user's survey.



North Dakota's Economic Impact Study is being conducted by Jviation. If you have questions on the survey or other information that you would like to share on specific airport benefits please contact:

Travis Vallin  
303.524.3045  
[travis.vallin@jviation.com](mailto:travis.vallin@jviation.com)

or

Joe Pestka  
573.658.9475  
[joe.pestka@jviation.com](mailto:joe.pestka@jviation.com)

*Results of the study will be available August 2015.  
We appreciate your help with this effort!*





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## AROUND the PATTERN



Kris Magstadt, Editor

As I sit here to write, I marvel at all the aviation activities and the wonderful people in North Dakota Aviation. It is my dad's birthday ... he would have been 101. He was always educating and encouraging people to understand and enjoy aviation. Not only the flying part, but the economic impact to the area as well. He saw a need for an air ambulance, after many, many hours of loading patients into a 210 after removing the front passenger seat in order to lay a stretcher and accommodate a doctor or nurse. Now Stat Air flies hundreds of flights a year because of his collaboration with the hospital. Our high school had an active ground school, much like Mike McHugh mentions in his article, only without the technology of today. I'm not saying these things to brag, although I am very proud of my father and the man he was, I'm simply stating that those of you with a passion for aviation can change the world, one community or one person at a time. Sean Davis has an article about taking students to AirVenture — what an amazing opportunity! The fly-ins that I have heard about, the hangar dance, ramp movie nights and the AMAZING museums in our state, truly make me believe in not only North Dakota's aviation future, but in aviation's future throughout our great country.

Leon's journey with his airplane reminds me that anything can happen if you only take that first step. I love the part of the story where he rode his bike following the airplanes until they landed. It reminds me of the story my dad told me about the first time he saw a plane — he KNEW he was destined to fly. He watched that plane until it was a speck in the sky. Now my Grandma, she always asked him when he was going to quit playing and get a real job. Wouldn't she be surprised to see the stone at the Glasgow Airport engraved "Wokal Field?"

Thank you to all of you who share your passion through stories and articles. Please remember that this is your newsletter, and we want your stories and articles. Everyone seems to shy away from writing, but just put your words down, and I will help with the rest. Take that first step and give it a try. We'd love to hear from you!

***"All of these great events and fond memories would not have happened if it weren't for his dream as a young child to fly," said daughter Kris. "I admire my dad's passion for flight and appreciate all he has taught me about living life to its fullest. He truly is an inspiration for all those with dreams—they can become reality!"***



Kyle Wanner, Director  
North Dakota Aeronautics Commission



## DIRECTOR'S Chair

# Share Your Aviation Story

I have recently had the privilege to travel to Providence, Rhode Island to participate in the annual NASAO (National Association of State Aviation Officials) conference. At this event, I met with 33 other state directors from across the country to discuss related aviation issues and receive updates regarding critical industry movements, such as NextGen, FAA Reauthorization, and the integration of Unmanned Aircraft Systems.

As I shook hands with aviation leaders around the country, it quickly became apparent from our conversations that North Dakota has become well known for its booming economy and record growth rates. It is true that our state has many challenges associated with infrastructure, however, when I listened to updates on the challenges that other states are currently facing, I realized that there is no better place to be right now than in North Dakota. I would rather deal with the challenges associated with growing the industry than the alternative. You could see a smile on my face when I arrived back in North Dakota regardless of the fact that the weather was much colder upon my return.

As members of the North Dakota aviation community, we have so much to be thankful for. My hope is that many years from now, we should be able to look back at the time when our aviation leaders throughout the state rose to the occasion of identifying the problems and providing adequate solutions. Ensuring that our communities maintain the aviation infrastructure needed to stay at the forefront of the industry is a very worthy effort and you can help this effort by sharing your aviation stories.

The North Dakota Aeronautics Commission is currently undertaking an update to our statewide economic impact study. This update will expand on the positive economic impacts associated with commercial and general aviation airports in North Dakota. It will also focus on collecting specific examples on the ways each airport supports the communities in which it serves. The information that comes from this study will help educate elected officials at the local, state, and federal levels, regarding the importance of our airport system.

In the near future, you may be asked to complete a survey regarding your experiences in aviation within North Dakota. I respectfully request that you consider taking the time to complete any surveys related to this update. The North Dakota aviation community may benefit immensely from this study, but only if people like you support the survey efforts.

As the next state legislative session soon approaches, be sure to thank your local state representatives for all of their support for the aviation community and consider providing them with information regarding the future needs of your aviation community. Inviting them out to your local airport, sharing

pictures of a recently completed infrastructure project, or explaining how your local airport has been a large benefit to the local community will all go a long way. If you are a pilot, business owner, airport manager, or aviation enthusiast with a success story or pictures that you would like to share, please feel free to also send them to me. I am always looking for ways to share the story of aviation in North Dakota.

Lastly, I am excited to announce that the North Dakota Aeronautics Commission staff has recently hired Benjamin West and Jared Wingo as full-time airport planners. They are excited to begin their work with our aviation leaders and volunteers to help advance airport infrastructure projects throughout the state. My hope is, that by having two hard working airport planners within our office, we will be able to provide an even higher level of support to our aviation and airport community.

As we work together to promote and develop aviation throughout the state, please feel free to stop by our office, send us an e-mail, or give us a call if you have any questions or issues. I am always eager to listen to your stories.

*Fly Safe! Kyle*

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*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 NDAC, or NDAQ staff. If you've received more than one copy of this newsletter, please share it with a friend.*



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# ND Aeronautics Commission's new employees



## **Benjamin West, Airport Planner**

Originally from Petal, Mississippi, Benjamin is a graduate from Embry-Riddle Aeronautical University Worldwide, where he received a Master's degree in Aeronautical Science, specializing in Aviation Operations. He also holds a Graduate Certificate in Airport Planning, Design, and Development and an FAA Aircraft Dispatcher's License. He is a veteran of the US Air Force and was formerly stationed at Minot Air Force Base.

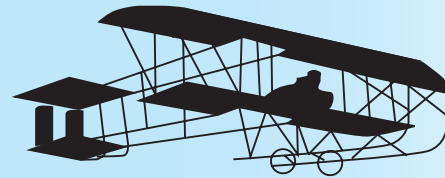


## **Jared Wingo, Airport Planner**

Originally from Sulphur, Oklahoma, Jared has a Master's degree in Aeronautical Science, specializing in Aviation/Aerospace Safety Systems from Embry-Riddle Aeronautical University and a Bachelor's degree in Aviation Management from the University of Oklahoma. Jared is an active pilot and holds an FAA Commercial Pilot's License. Prior to joining the Aeronautics Commission, Jared was an FAA contractor in Oklahoma City, where he developed instrument procedures for airports.



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Rod Brekken, Chairman  
North Dakota Aviation Council

## CHAIRMAN'S COMMENTS

# 2015 "Symposium Season" has begun!

Well, here's the kick-off! The 2015 "Symposium Season" has begun as you read this issue of the North Dakota Aviation Quarterly! I know you all will be able to get a seat for this season ticket. The plan is to have the registration information available to everyone online this year, so just click on the [www.ndac.aero](http://www.ndac.aero) website. In a few short clicks you will be registered for the Upper Midwest Aviation Symposium, you will have reserved your North Dakota Aviation Hall of Fame banquet tickets, and you will have everything ready to go for the Big Show. September is our kick-off month, which is kind of cool, since it coincides with your favorite football/volleyball teams' season, whether high school, college, or professional. The only difference is our season runs a little longer with the Upper Midwest Aviation Symposium being the first weekend in March, 2015. Be sure to make your reservations at the Fargo Holiday Inn. There will be a reduced rate for the rooms when you tell them you're coming for the symposium. This reduced rate offer will probably "run out" by the middle of January, so don't wait too long to give them a call.

I vaguely remember summer. It was really slow to get started, it couldn't decide if it was actually here or not, gave us very few days of "summer style" weather, and seems to have decided to leave us early. I'm still hoping for a "Native American summer" in October, but the signs of that aren't strong. Our summer was the same as yours. Short, with an untold amount of events that I can't even begin to list. Events that I really wanted to attend, but it seems others took their place and completely filled up the time anyway.

"A Time of Remembrance" – if I may, "I think every one of us remembers exactly where we were that day. It's unfortunate that some of the younger generations are too young to remember how things were before that fateful day. How some of the things we took for granted before that day, we are no longer able to enjoy. Before that day we felt safe, while now sometimes we don't. We felt secure, while now there's a federal agency that is supposed to provide that, but sometimes it's unable to. We felt admired, while sometimes now that feeling has eroded, as well. What we must still hold dear is our faith. Faith in that those who paid the price with their lives did not do so in vain. Faith that those of us who carry on, do so with a conviction to regain the feeling of being safe, work together toward making our borders more secure, of striving to provide a good place to live and raise our children, our children's children, and to all the generations who come after us. It all comes by faith, because without faith, we are also lost."

I wrote this on social media on 9-11-14. No, I didn't get a million "likes," a thousand "likes," or even a hundred "likes." I think most

people agree with what I wrote, but are reluctant to "like" it. I can't blame them. No one likes change unless it's for the good. No one likes change unless it has their best interest in mind. The events that happened that day changed our lives, our society and the expectations we had for our lives the day prior, and no one "likes" that to happen. I pray you did not lose a loved one on that fateful day in September of 2001, but if you did, I hope your faith fuels your desire to work together to ensure it doesn't happen again, ever.

Not wanting to leave you without a little "spring to your step," remember there may still some late summer fly-ins out there to attend. If they seem to all be complete, start a new one! Call up some friends, make a plan to fly for fun for that \$100 burger (it's probably more now but that's what they used to call them). Probably most important of all, bring your kids along, or your neighbors kids, or their friends kids. That's our future folks, sittin' right next to you on the trip for that burger. Keep the dream alive and well.



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friendship, Leon was able to receive his certification at such a young age.

"Louie was very courteous and giving with his time. He never asked for anything in return, he was just happy to pass along his knowledge and love for flight with someone who shared the same passion," Leon said.

After high school Leon enlisted in the Air Force. He remained in touch with Louie and learned years later that he sold the plane Leon first learned to fly in. It was the early 1970s, a time where Leon was just beginning his career as a pilot.

For the next three decades Leon continued to work for a number of private sector companies as a corporate pilot, living in various areas through the United States. In addition to piloting, Leon also worked for the companies as an artist, another lifelong passion of his.

Several years later, Leon began to wonder about the current state of the plane, and whether it was still operational. In the early 2000s, Leon was transitioning to a move to Bismarck and decided to find out who owned the plane, more than thirty years after last flying it.

"I always wondered where the plane was," Leon said. "I wanted to find out who had it. So I was able to track down the tail number through the FAA Registry, and learned it was sold to a pilot who lived in Farmington, Missouri, about 20 miles west of Ste. Genevieve."

The owner of the plane was Mick Coleman. Leon phoned him and learned Mick had restored it in the late 1970s. Leon asked if

he was willing to sell the plane, but Mick resisted, telling Leon the plane wasn't one he was willing to part with.

That didn't stop Leon from occasionally calling Mick or other members of his family on the status of the plane, and if he was ready to let it go. Still, Mick's answer remained the same.

The calls continued off and on for several years. One call got Leon in touch with Mick's brother, and during the conversation Leon brought up the possibility of selling the plane. Mick's brother said Mick probably wouldn't sell, but he took Leon's information and told Leon he would pass it along to his brother.

Not long after that call, Leon received a call from Mick, asking if he was still interested in buying the aircraft. Before agreeing, Leon wanted to see what condition the plane was in. So, he arranged for a friend who lived in Missouri to travel to Farmington in order to see it firsthand.

Leon learned from his friend, that while the plane had been restored, one critical element had been neglected – the plane was no longer in one piece.

"This had me worried.

I was concerned about the possibility that it had deteriorated after being taken apart. I had no idea

how long it had been sitting there unused. With the construction of the plane being primarily metal, wood and fabric, mice or other rodents could have chewed through the fabric, the wood could have been water damaged or rotted, or the metal frame could have been rusted or corroded after sitting untouched," Leon said.

He decided to take a chance and see it for himself. With a borrowed trailer from Kent Pietsch, Leon traveled from North Dakota to Missouri, all the while unsettled about the overall condition of the aircraft that had been stored away and virtually left alone for more than three decades.

But when he showed up and laid his eyes on the plane for the first time in more than three decades, he was surprised by what he saw.

"I couldn't believe how good its overall condition was after sitting over that period of time. Other than a little dust, it was reasonably well represented for the amount of time it sat," Leon said.

Leon purchased the plane and brought it to its new home in North Dakota. For the next year he worked to reassemble the plane with the professional assistance of Gary Johnson and the crew of Pietsch Aircraft and Restoration in Minot.

And now, the plane that Leon learned to fly in nearly fifty years earlier is back in his hands.

These days, every time Leon steps into his plane, he recalls those early days of life in Missouri, chasing planes on his bike and eventually following his dream of becoming a pilot.

"Each flight brings back the memories of learning to fly as a young kid and the lifelong relationship with the person that made it happen, Louie Sexauer," Leon said.



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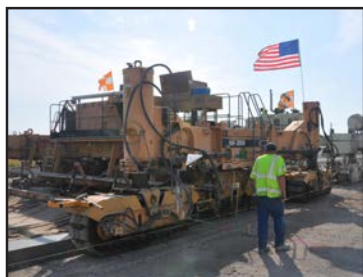
## Another Go-Around

I was thinking the other day, and that alone can be dangerous, what is one of the most neglected areas of flight instruction? I spent some time researching accident and incident reports, and it became statistically clear what we as flight instructors are not teaching enough. No surprise that off runway excursions, or rather loss of directional control during landing, is still the number one cause of accidents. But why? Is it because we fail to stabilize the approach, meaning we have failed to stabilize the airspeed, power, pitch and/or rate of descent? Have we lost focus during the round out and flair? Have we relaxed during the roll out? But we teach all of these to perfection, right? So, what are we missing? I looked back into some of my recent instruction records. It became clear. Once we teach the basics of a landing we then coach the student to a landing. We even help him from time to time, and that facilitates the student into thinking that he can rescue a bad approach, a flair that is too high or an approach that has missed the target airspeed.

We need to spend more time teaching go-arounds. We need to teach it early in the flight training, and we need to practice it often. Today, there are more students learning to fly in high performance aircraft, and the higher the horse power, the greater the risk of losing control of the airplane. All of the left turning tendencies are prevalent in this maneuver, and the bad part is, we are close to the ground. P factor is great because of the high angle of attack; gyroscopic effect is there because of the rapid change in pitch; torque is maxed because of the slow speed and the addition of full power; and, of course, the slip stream is also a factor. All of these, coupled with a late decision to abort a landing and do a go-around, can lead to disaster. The earlier an un-stabilized approach is detected and the decision made to execute a go-around, the easier the go-around will be.

When was the last time you executed a go-around? Is it about time to do it again and again and again?

*Until Next time, HAPPY LANDINGS, Bob Simmers*



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# Tail Feathers – Old Man Winter

By Anonymous Guest Writer

Winter is coming! Yup, no one wants to talk about it but I've been around North Dakota long enough to know it's going to be coming soon. It's never disappointed us, cuz it always shows up, without fail, so we might as well plan for it again.

Is your plane ready for Old Man Winter? Is your bird ready to brave the cold North wind when it comes howling around the side of the hangar? Well, let's just talk about some things you might want to check!

Preheating your engine reduces the chances of engine damage that can be caused by cold starts. Put a little "pre-heat" on your engine on those cold winter days before you give her a whirl.

Be sure to be using some of that multi-viscosity oil. It works good when your engines cold, and it works just as well when you get her warmed up. Good clean oil is important to keep the engines parts sliding better with less friction, and it protects against corrosion caused by moisture.

Make sure your battery is up to snuff too! Check that fluid level in the battery and using a little trickle charger on your battery might not be a bad idea when you have your airplane bundled away in the coldest weather.

Make sure you have a good, reliable source of aviation fuel. No water means no ice, and that's a good thing. Maybe some of that fuel system icing inhibitor would be a good insurance policy for that.

Don't be giving her too much fuel when you prime her in cold weather. She might backfire on you and then you've got a problem on your hands. If that happens be sure to keep crankin' her over, so the flames are drawn into the engine. Here's a real good reason for the pre-heating I talked about earlier and, of course, ALWAYS know where the fire extinguisher is!

When you get her started, don't "give her the goose" right away either! Let her warm up! Watch your oil temp gauge; make sure it comes up off the bottom within a few seconds. The best temperature to start taxiing around is when the oil temp gauge gets into the green. I know, that may take a while, but it's better than having an engine "hatch" on ya!

There are a few more points I could have brought up, but I think you got the idea, so have a nice winter flying season and be good to your engine.

**Quarterly Joke** As migration approached, two elderly vultures doubted they could make the trip south, so they decided to go by airplane. When they checked their baggage, the attendant noticed that they were carrying two dead raccoons. "Do you wish to check the raccoons through as luggage?" she asked. "No, thanks," replied the vultures. "They're carrion."

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Darrel Pittman, Lt Col, Civil Air Patrol (Retired)

## Retirement, It Happens to all of us Eventually

Yes, as the above title indicates, I have retired from the Civil Air Patrol. However, I am still an air traffic controller at heart. You can still hear my voice at the Mandan (Y19), and perhaps more fly-ins for as long as I am able to do so.

I do plan to stay on the aviation council at least until the next Symposium. I've truly enjoyed being a part of the council, especially the North Dakota Aviation Hall of Fame. The next Symposium is in Fargo, March 2015. After that, we will see. I've informed the Pilot Association folks that they will need to get another officer to fill the Treasurers position.

We are trying to make life a little less complex and are not planning on leaving any time soon. Marlette still has her Real Estate business to consider; besides somebody needs to support us in our style of living.

In my previous articles, I've told you a lot about my involvement in various assignments in the FAA, plus some history about different FAA happenings. Now, I want to do some memory testing.

- This one should be easy, what day and year did the Air Traffic Controller strike occur?
- What day and year did the MOT tower get a Commission to operate as a contract tower?
- What year did the midair collision occur over the Grand Canyon? Which airlines were involved, and what kind of airplanes was each flying?
- What month and year did the first lunar landing occur, and who were the Astronauts that walked on the moon? (Hint: one was from North Dakota, and he spoke at one of our Symposiums.)

Answers will be in the next issue of the *North Dakota Aviation Quarterly*. Hint: in my articles I've written about all the above topics.

*Cleared for takeoff, Darrel*

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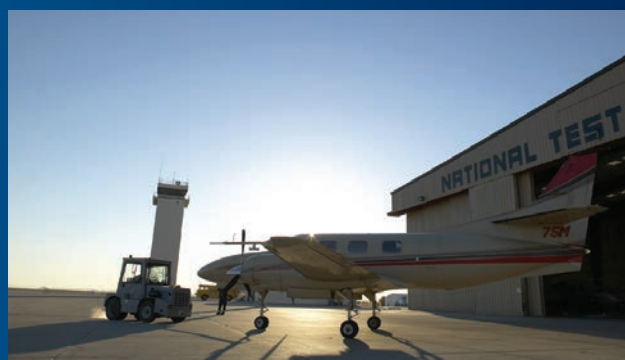
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# Learning more than Reading and Writing

Mike McHugh, Aviation Instructor, Bismarck Public Schools - Career Academy

When students enroll in our high school class, they not only get the chance to learn about aviation from a pilot's perspective, but we also introduce the subject with the focus of becoming a professional in the aviation industry. Although not all of our students become pilots, or move into the career field, we have had many successful students in most occupational areas. In our class students learn the fundamentals of flight, but also apply skills learned throughout their education, including communication, collaboration, critical thinking and creativity. We complete many projects in our first year class and spend a good deal of time on flight simulators.

If students choose, they can return for "Aviation 2" in which we do a much larger project. Students in this class have completed a J3 cub, which is on display in our building for visitors. We are currently working on a Vans RV-12, and this project has students excited. We currently have 23 students enrolled in the class. This

project is a part of the Eagle's Nest group; This aircraft is Eagle's Nest 7. This group has the goal of students all over the country – building and flying aircraft.

While this project introduces students to many aeronautical occupations, including engineering and mechanics, students must work together in teams (collaboration), communicate via a blog and discussion forums, as well as with each other. They must also be critical thinkers, and be able to self-assess their work while thinking outside of the box for solutions to problems.

While it may not be possible for every student in North Dakota to build an airplane, I believe having the opportunity to apply the skills they need for the future, in any occupation, is unparalleled. Feel free to stop in for a visit if you are in the area and see the progress on this project.



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# CAPITAL AIR TOUR

The challenge of flying a private “general aviation” airplane to all 49 state capitals in the “lower 48” plus Alaska in just two weeks is one that most private pilots would never accept. It was however, the flight plan for an inspiring journey attempted by two veteran pilots to raise public awareness about smaller, “municipal” airports that are an important business asset for cities and can be a gateway for bringing new tourism traffic into the area.

Called the Capital Air Tour, the flight was flown by Field Morey, an FAA-Certified Flight Instructor from Medford, Oregon, and Conrad Teitell of Greenwich, Connecticut, an attorney with the law firm Cummings & Lockwood. The pilots used Morey’s 2013 Cessna Corvalis TTx four passenger airplane for the flight that departed Tuesday, September 16, 2014 and landed in several states each day.

Along the Capital Air Tour route, Morey and Teitell planned media availabilities in cities where that day’s series of flights concluded. They distributed information from the Aircraft Owners and Pilots Association to help demonstrate the value of local airports, while allowing electronic and print media reporters to get a close-up look at the airplane being used for the flight. Morey said that their flight plan was subject to diversions caused by unsafe weather situations. “September is the heart of hurricane season and that could be the biggest influence on our route,” he said. “The major route decision was made prior to leaving Wisconsin on September 20, 2014, as we prepared to continue east. The remaining route of our flight plan depended on the weather moving up through the Gulf States along the Atlantic coast at the time.”

The idea of flying the Capital Air Tour came to Teitell when he wanted to “raise the bar” after he and Morey completed Teitell’s quest to fly from the highest airport in the United States to the



Field Morey and Conrad Teitell with the 2013 Cessna Corvalis TTx.

lowest airport in 2013. “It was Conrad’s idea to land at every state capital in the lower 48 and Alaska,” Morey explained, “but I thought we should do it all in two weeks to show just how capable and technologically-advanced a modern private airplane can be.”

An unexpected development occurred when Morey spoke with an elementary school teacher about the Capital Air Tour. Because the entire flight was tracked using an on-board Spot Generation 3 GPS tracking device showing the real-time location of the Corvalis TTx, the flights offered teachers a chance to give lessons in time, distance and state capitals. A complete itinerary with tentative schedule, along with the tracking map, was available for the public to see on Morey’s website.

Morey is an expert in adventure flights, as he has instructed hundreds of instrument flight students on exciting “real world weather” flights to Alaska, the Rocky Mountains and the Idaho backcountry through his company, Morey’s West Coast Adventures ([www.ifrwest.com](http://www.ifrwest.com)). One of those students, Dr. Oliver Smithies, when accepting the Nobel Prize for Genetics, said “Field taught me a lesson very important in the sciences; that you can overcome fear with knowledge.”

“The Cessna Corvalis TTx is the fastest single-engine, fixed gear production aircraft on the market,” Morey said, “and has a maximum cruising speed of 235 knots. With that level of performance, we were able to plan a mission profile for the Capital Air Tour that involved covering over 12,000 miles with stops at 57 airports in two weeks.”

The airplane used on the Capital Air Tour is nicknamed “The Green Hornet,” and is equipped with a Garmin G2000 “glass cockpit” panel that includes NEXRAD radar for storm avoidance, anti-ice equipment, and terrain and traffic avoidance devices, along with the latest autopilot technology essential for avoiding crew fatigue.

The tour finished successfully in the originating city of Medford, Oregon as planned in 14 days on September 29 after landing at 57 airports. They were welcomed home with a Water Arch Salute with the sun just right to create a rainbow, by the airport fire trucks and greetings from airport and FBO administration. They are ready for another adventure and will reveal the plans for their next one soon.



Field Morey live on KFYR.





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# Drones and Unmanned Aircraft, some restrictions do apply!

By Jay M. Flowers, FAA Safety Team Program Manager, ND & MN, Operations, Fargo Flight Standards District Office

Over the past few months, I have started receiving more and more calls regarding unmanned aircraft or UASs, and the question is usually the same, "can they do that?"

No bones, the FAA is diligently working towards getting a rule out that will accomplish the task of protecting the public. Keep in mind that the FAA is here to protect you and the airmen that fly over this great land of ours. Some think we should dictate or regulate privacy, but truly, is that facet of protection that the FAA has administered in the past?

Before I go any further, I would be amiss if I did not recognize the local UAS Groups that have worked very diligently to operate within the safety guidelines set forth by the FAA and ATC and have over the past five plus years been, in fact, operating their

UASs under specific controls in the National Airspace System (NAS). Thank you for taking the time and making the efforts you have towards keeping the public safe.

Let's cover what we can on some Drone/UAS issues. The NAS is "the common network of U.S. airspace; air navigation facilities, equipment and services, airports or landing areas. Included are system components shared jointly with the military." The FAA's safety mandate under 49 U.S.C. § 40103 requires it to regulate aircraft operations conducted in the NAS, which include UAS operations, to protect persons and property on the ground and to prevent collisions between aircraft and other aircraft or objects.

Here is a link to additional information on the NAS: 16 See FAA Pilot/Controller Glossary (Apr. 3, 2014), available at [www.faa.gov/air\\_traffic/publications/media/pgc\\_4-03-14.pdf](http://www.faa.gov/air_traffic/publications/media/pgc_4-03-14.pdf).

**Hobby / Recreational Flying**

## What Can I Do With My Model Aircraft?

Having fun means flying safely! Hobby or recreational flying doesn't require FAA approval but you must follow safety guidelines. Any other use requires FAA authorization.

**AVOID DOING ANYTHING HAZARDOUS TO OTHER AIRPLANES OR PEOPLE AND PROPERTY ON THE GROUND.**

- ✓ **DO** fly a model aircraft/UAS at the local model aircraft club
- ✓ **DO** take lessons and learn to fly safely
- ✓ **DO** contact the airport or control tower when flying within 5 miles of the airport
- ✓ **DO** fly a model aircraft for personal enjoyment

- ✗ **DON'T** fly near manned aircraft
- ✗ **DON'T** fly beyond line of sight of the operator
- ✗ **DON'T** fly an aircraft weighing more than 55 lbs unless it's certified by an aeromodeling community-based organization
- ✗ **DON'T** fly contrary to your aero-modelling community-based safety guidelines
- ✗ **DON'T** fly model aircraft for payment or commercial purposes

**MODEL AIRCRAFT OPERATIONS LIMITS**

According to the FAA Modernization and Reform Act of 2012 as (1) the aircraft is flown strictly for hobby or recreational use; (2) the aircraft is operated in accordance with a community-based set of safety guidelines and within the programming of a nationwide community-based organization; (3) the aircraft is limited to not more than 55 pounds unless otherwise certified through a design, construction, inspection, flight test, and operational safety program administered by a community-based organization; (4) the aircraft is operated in a manner that does not interfere with and gives way to any manned aircraft; (5) when flown within 5 miles of an airport, the operator of the aircraft provides the airport operator and the airport air traffic control tower...with prior notice of the operation; and (6) the aircraft is flown within visual line of sight of the operator.

For more information about safety training and guidelines, visit [www.modelaircraft.org](http://www.modelaircraft.org)

For more information, visit [www.faa.gov/go/uas](http://www.faa.gov/go/uas)

**Federal Aviation Administration**

## A UAS is an Aircraft

First, the definition of an aircraft, as it relates to the NAS:

- A UAS is an "aircraft" as defined in the FAA's authorizing statutes and, is therefore, subject to regulation by the FAA. 49 U.S.C. § 40102(a)(6) defines an "aircraft" as "any contrivance invented, used, or designed to navigate or fly in the air." The FAA's regulations (14 C.F.R. § 1.1) similarly define an "aircraft" as "a device that is used or intended to be used for flight in the air." Because an unmanned aircraft is a

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contrivance/device that is invented, used, and designed to fly in the air, it meets the definition of “aircraft.” The FAA has promulgated regulations that apply to the operation of all aircraft, whether manned or unmanned, and irrespective of the altitude at which the aircraft is operating. For example, 14 C.F.R. § 91.13 prohibits any person from operating an aircraft in a careless or reckless manner so as to endanger the life or property of another.

An important distinction for UAS operators to be aware of is whether the UAS is being operated for hobby or recreational purposes or for some other purpose. This distinction is important because there are specific requirements in the FAA Modernization and Reform Act of 2012, Public Law 112-95, (the Act) that pertain to “Model Aircraft” operations, which are conducted solely for hobby or recreational purposes.

### Model Aircraft Operations

Section 336(c) of the law defines “Model Aircraft” as “... an unmanned aircraft that is —

- (1) capable of sustained flight in the atmosphere;
- (2) flown within visual line of sight of the person operating the aircraft; and
- (3) flown for hobby or recreational purposes.

Each element of this definition must be met for a UAS to be considered a Model Aircraft under the Act. Under Section 336(a) of the Act the FAA is restricted from conducting further rulemaking specific to Model Aircraft as defined in section 336(c) so long as the Model Aircraft operations are conducted in accordance with the requirement of section 336(a). Section 336(a) requires that —

- (1) the aircraft is flown strictly for hobby or recreational use;
- (2) the aircraft is **operated in accordance with a community based set of safety guidelines** and within the programming of a nationwide community-based organization;
- (3) the aircraft is limited to **not more than 55 pounds** unless otherwise certified through a design, construction, inspection, flight test, and operational safety program administered by a community-based organization;
- (4) the aircraft is **operated in a manner that does not interfere with and gives way to any manned aircraft**; and
- (5) **when flown within 5 miles of an airport**, the operator of the aircraft provides the airport operator and the airport air traffic control tower (when an air traffic facility is located at the airport) with prior notice of the operation (model aircraft operators flying from a permanent location within 5 miles of an airport should establish a mutually-agreed upon operating procedure with the airport operator and the airport air traffic control tower (when an air traffic facility is located at the airport)).

Note: Agreements, although binding, verbally lose their weight when one or the other party is unavailable. Agreements should always be in writing with the airports authority or manager.

Section 336(b) of the law, however, makes clear that the FAA has the authority under its existing regulations to pursue legal enforcement action against persons operating Model Aircraft in accordance with section 336(a) and 336(c) when the operations endanger the safety of the NAS. Nothing in section 336 otherwise alters or restricts the FAA’s statutory authority to pursue enforcement action against any UAS operator, even those whose



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operations are conducted in accordance with sections 336(a) and (c) that endanger the safety of the NAS. So, for example, a model aircraft operation conducted in accordance with section 336(a) and (c) may be subject to an enforcement action for violation of 14 C.F.R. § 91.13 if the operation is conducted in a careless or reckless manner so as to endanger the life or property of another.

#### **UAS Operations that are not Model Aircraft Operations**

Operations of UASs that are not Model Aircraft operations as defined in section 336(c) of the law and conducted in accordance with section 336(a) of the law, may only be operated with specific authorization from the FAA. The FAA currently authorizes UAS operations that are not for hobby or recreational purposes through one of two avenues: (1) the issuance of Certificates of Waiver or Authorization; and (2) the issuance of special airworthiness certificates. The FAA also has a third avenue with which to potentially authorize UAS operations through its exemption process when it determines that such operations are in the public interest.

1. **Certificate of Waiver or Authorization (COA).** In accordance with 14 C.F.R. § 91.903 the FAA grants Certificates of Waiver or Authorization to applicants waiving compliance with certain regulatory requirements listed in 14 C.F.R. § 91.905. The applicants must be able to show that they are able to safely conduct operations in the national airspace system. The COA contains terms with which the applicant must comply in order to conduct operations. The FAA generally has restricted the issuance of these certificates to government entities that operate UASs as it implements the provisions in its "Integration of Civil Unmanned Aircraft

Systems in the National Airspace System Roadmap." The entire Roadmap is available on our website at: [www.faa.gov/about/initiatives/uas/media/UAS\\_Roadmap\\_2013.pdf](http://www.faa.gov/about/initiatives/uas/media/UAS_Roadmap_2013.pdf).

The FAA also issues COAs on an emergency basis when:

- 1) a situation exists in which there is distress or urgency and there is an extreme possibility of a loss of life; 2) the proponent has determined that manned flight operations cannot be conducted efficiently; and 3) the proposed UAS is operating under a current approved COA for a different purpose or location. The FAA is also using the COA process to expand the use of civil UASs in the arctic region as required under section 332 of the law.
2. **Airworthiness Certification.** Civil operators can apply for a special airworthiness certificate under 14 C.F.R. Part 21. See FAA Order 8130.34C - Airworthiness Certification of Unmanned Aircraft Systems and Optionally Piloted Aircraft. The full civil type certification process allows for production and commercial operation of UAS and is a lengthy process typically undertaken by aircraft manufacturers.
3. **Issuance of Exemptions.** In accordance with 14 C.F.R. §§ 11.15 and 11.61-11.103 and the FAA's authority in 49 U.S.C. § 44701(f), the FAA may grant exemptions from regulatory requirements. The exemption process allows for the submission of a petition to the FAA outlining why the granting of an exemption would be in the public interest, the need for the exemption, and the reasons why granting the petition would not adversely affect safety or would provide a level of safety equal to the rules from which the exemption is sought. The FAA has indicated its willingness to review petitions for exemption by civil UAS operators that want



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to operate for other than hobby or recreational purposes. Under section 333 of the Act, operators in appropriate circumstances can be exempted from airworthiness certification and other related regulatory provisions.

Finally, UAS operators must understand that all UAS operations that are not operated as Model Aircraft under section 336 of the Act are subject to current and future FAA regulation. At a minimum, any such flights are currently required under the FAA's regulations to be operated with a certificated aircraft, with a certificated pilot, and with specific FAA authorization.

### **For all UAS Operators**

More information regarding UAS operations is available at the FAA Unmanned Aircraft Program Office's website: [www.faa.gov/about/initiatives/uas](http://www.faa.gov/about/initiatives/uas). If you require additional information, please contact me at (701) 492-5800.

Over the past 100 years, model aircrafter's or hobbyists have done a pretty fantastic job of keeping it just that, a hobby. Silently enjoying their passion, and, if the opportunity presented itself, share that passion at an airshow or local fly-in. Either way, the public was always safe from something unmanned flying near their position of view. These days, some so-called hobbyists have taken to the skies for profit or "just because they can" without ensuring your safety on the ground. Therein lies the issue.

The FAA will do what it has always sought to do and that is to protect the public without being so regulating that the task is impossible. Given the time and latitude, we will do whatever is necessary to protect the public from any aircraft or airman.

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# What's Happening at Fargo Air Museum?

*Blue Skies, Robert Miller, F.A.M.*

Short glances into the rear view mirror provide valuable clues as to where an organization headed. This is very true of the Fargo Air Museum, particularly during the past 14 months. We began this period with several significant events. First, there was a ground breaking for a new building. And then, as 2013 came to a close, construction was underway on a 150'x100' addition to our floor area. There have also been changes and additions to the staffing roster, and we have enjoyed several successful fund raising events.

Activity highlights during this period included the "Wings Of Freedom Historic Tour," which brought several rare WWII era aircraft to Fargo. These included a P-51, B-17, B-24, and "Fifi," the world's only flying B-29. Hundreds of enthusiasts, educators,



students, and historians flocked through the museum gates to view, tour, and in some cases, actually fly in these legendary aircraft. This event was rapidly followed by the very successful conclusion of the Mustang Boss 302 car raffle.

The final months of 2013 found the museum hosting a wide variety of activities, including a Quiet Birdman Wing Ding, two book signings, Steve Stark's presentation of the Carl Ben Eielson story, Young Eagle rides for kids between 8 and 17, business conventions, a meeting place for public service organizations, helicopter visits from Santa Claus, and a plethora of corporate Christmas parties.

## **2014 has been even busier.**

The Celebrity Auction was a huge success early in the year. The entire ticket run was sold out, all tables were filled, and the museum was packed to capacity for an evening of fun, celebration, music, and fine food. The auctions, both live and silent, were very entertaining and profitable.



The spring of 2014 also brought some somber moments. Thirty two memorial funds were established for lost friends of aviation,

including two unexpected losses. Jim Maroney, past board member and widely known aviation personality, was taken from us in March. The museum was honored to provide a setting for friends from all across the nation to gather and pay their respects. In June of 2014, the museum paid tribute to past director Bill Cowden.



As mentioned earlier, staffing has been adjusted. By mid-year the management team included Scott Fletcher as CEO, Helen Walkinshaw O'Conner as Director of Operations, Courtney Ficek as Director of Communications, Lesa Hagen as Retail Manager, Ruth Rivera as Event Manager, Matt Swangler as Maintenance Coordinator, and Ashley Aurdal as Marketing and Events Coordinator.

The current year has provided an increase in donations, both financial and otherwise. The museum was pleased to receive several gift aircraft, including a Cessna 182, Piper J-3, Grand 51, Global Hawk replica, and an R2800 cut-away engine. The new building was made possible by local contractors donating time, construction materials and internal fixtures. Finally, volunteer numbers are up, providing a critical component to the operation of our nonprofit organization.

Activities at the museum have remained strong through the balance of 2014. The Fargo Air Museum education programs ranged from Saturday in the Sky lectures, Plane Camps for youth, living history airplane tours, school tours, scout tours, Young Eagle events, and restoration activity. In July, the Collings Foundation's WINGS OF FREEDOM TOUR presented the Boeing B-17 Flying Fortress "Nine O Nine" WWII Heavy Bomber, the Consolidated B-24 Liberator "Witchcraft" and a P-51 Mustang fighter. These aircraft were on display from July 3-6. Having them here offered





another rare opportunity to visit, explore, and learn more about these unique and rare treasures of aviation history.

Currently the Museum is preparing to occupy the new building, then build a connector to that facility. Following that, we will have room to bring many exhibits "home" that have been stored off-site. These items will soon be available to the general public. They range from museum quality models donated by the Jim and Maury Maroney estates, to a full size B-25 bomber.

Plans for the future include continuation of the many programs that have been so successful in the past, and one very ambitious new project. Design work has begun on a phase three construction effort. Once completed, this building will connect the current structures, and provide space for a movie theater, conference rooms, coffee bar, gift shop, observation deck, and an expanded reception area.

In the immediate future, the Fargo Air Museum's 2014 raffle drawing will be held on October 25 at 11:00 am. Readers are encouraged to participate in the activity. Tickets are available at the Air Museum for \$50. Or, send a \$50 check and self addressed envelope to the Fargo Air Museum, 1609 19th Avenue North, Fargo, ND 58102. Make sure to include your name, physical address, phone number and email address, and we will send your raffle ticket to you.

Prizes include: 2014 Ford F150 4x4 XLT Crew Cab with Honda Rancher FA420 4x4 ATV, a P-51 Mustang flight, a Browning® X-Bolt .243 Rifle, a Winchester® SX3 Semi-automatic 12ga Shotgun, a \$500 cash prize, (5) \$100 cash prizes, and (20) Fargo Air Museum Family Memberships.

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# Dakota Territory Air Museum

By Don Larson

When Minot Air Force Base (Minot AFB) was opened in the late 1950s, the first unit assigned was the 5th Fighter Interceptor Squadron. The first aircraft assigned to the new base was a



Lockheed T-33, tail number 70616. By the early 1980s the T-33s were being phased out and replaced by the Northrop T-38 Talons. At that time, the Air Force Museum asked the City of Minot if they would be interested in signing a loan agreement and displaying the first aircraft assigned to Minot AFB. With the air museum just being started, Minot mayor, Dr. George Christianson felt it would be very appropriate that it be loaned to the Dakota Territory Air Museum. It was our very first static display and has been on display since our inception. The key to this whole story is that the T-33 was a 5th Fighter aircraft. The first interceptor aircraft that were flown at Minot AFB were the Convair F-106 Delta Darts. They were flown by the 5th Fighter Squadron for a period of nearly 25

years. In 1985, they were replaced by the McDonnell Douglas F-15 Eagles, which were flown at Minot AFB until 1988, when the squadron was deactivated.

Now for the rest of the story. Several years ago there was an F-15 Eagle flown to Minot AFB with the intent of having it demilitarized and used as a static display aircraft on base. Budget



cutbacks and other reasons prevented that project from being completed. During that same period of time our museum was communicating with the US Air Force Museum in an effort to get one of the few remaining F-106 Delta Darts from the "Bone Yard" near Tucson, Arizona. When we finally learned that an F-106 was available to us, we made an asserted effort to get the F-15 that was at Minot AFB. Initially, the Air Force Museum said that there were nearly a dozen other requests for an F-15 ahead of us. Finally, the Air Force Museum said we could have the F-15, however, we would have to pay for the crew to come from Arizona to de-mil the aircraft. They came up with a cost of nearly \$80,000

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to get the job done. Darrel Kerzmann, one of our museum board members and a retired USAF Chief Master Sgt., contacted the F-15 squadron at Malmstrom AFB in Great Falls, Montana and asked if they would be interested in helping some Minot AFB folks de-mil the F-15. They were very excited about helping with the project and the use of some of their equipment to remove the engines. A short time later the USAF Museum agreed to let it happen. It cost us less than \$3,000.00 to pay for the expenses of the Malmstrom crew. A few weeks later, Darrel arranged for a local house moving crew to tow the F-15 Eagle from Minot AFB to our museum. Darrel and his crew, some active military and some retired military, spent several weeks last winter cleaning and repainting the Eagle with 5th FIS markings. As this article is being written the F-106 Delta Dart is being disassembled to load on a couple of trucks for its final trip to the Dakota Territory Air Museum. This winter Darrel and his crew will re-assemble the F-106 and clean it up for repainting with the 5th Fighter Interceptor Squadron markings. Our goal is to have an outdoor static display of the three aircraft that were flown by the 5th Fighter Interceptor Squadron during its 30 years at Minot AFB.

To conform to the requirements of the North Dakota Aeronautics Commission education grant program, the Secretary of our Board of Directors, Michelle Saari agreed to head up a committee to develop and conduct a youth education program. We contracted with a local educator, Melessa Bosch, to help with the curriculum and conduct the camps. Together, they developed what is called the Aviation Camp Experience (ACE) and Passport Aviation Camp Experience (PACE). The camps were held on one Saturday per month for six months. The ACE camps were for 3rd and 4th grades with a maximum of

30 students in each class and met for three hours. Those students met only one time and were exposed to The Wright Flight, Science of Flight, Careers in Aviation, and Airplane Preflight. The PACE program students were committed to one Saturday per month for six months. Each Saturday they were exposed to one of the following: Inspired Dreams – Science of Flight, On the Wings of Giants – History of Aviation, So You Want to Fly – Careers in Aviation, Honor and Courage – Military Aviation, Up Up & Away Day. The PACE campers received a stamp in their passport for each completed camp. After the final camp, those campers with completed passports received a ride in an airplane or helicopter. These camps were extremely successful and touched the lives of just under 275 students. The ACE and PACE Program could not have happened without the help of the numerous mentors. Couple that with numerous organized school field trips to our museum and other class tours, both conducted by our curator Glenn Blackaby, we exposed over 1200 students to the history of aviation.



To those who have not already heard, the winner of our 2014 Sweepstakes J-3 Cub was Ashley Rindel, Crosby. (pictured left)

We have had another great year at the Dakota Territory Air Museum. Since we are open to the public with regular hours seven days a week from mid-May

to mid-October, we will be closing for the season in another month.

We are always thankful to our many supporters, particularly the Texas Flying Legends Museum (TFLM), who have again provided numerous displays throughout the summer season. Whenever they are flying their aircraft, the traffic at the museum increases. Thanks to Warren Pietsch (below), Chief Pilot for the TFLM.





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Sean A. Davis,  
AEND Program Director  
sean.davis@discoveraend.org

## Aviation Education North Dakota



# Making Opportunity Happen

Greetings from Aviation Education North Dakota (AEND) and the students and teachers we represent!

This is our first year as a council organization, and we are excited to represent North Dakota's aviation education sector. For those of you who do not know what AEND does, our organization serves a variety of purposes, but our main goal is to expose everyone to the world of aviation and to develop and maintain North Dakota's adult pilot population. AEND is more commonly known across North Dakota for our flight simulation program. Through an aviation education grant request in 2011 from the North Dakota Aeronautics Commission, AEND was able to purchase ten flight simulators that are now brought to fly-ins, career fairs, and other aviation related events throughout North Dakota at no cost to the organization holding the events. Kids and adults alike love flying the simulators!

Since AEND's inception in 2011, we have seen about 6,000 individuals from all across North Dakota utilize our flight simulation program. We have also spoken with students throughout North

Dakota about why they should have a career in the Aviation industry. Our staff and volunteers have the ability to line prospective students, young and "seasoned," up with flight schools and FBOs around the country to further their involvement in our great industry. It is my philosophy that any career a student chooses can be related to aviation somehow or another; the trick is making the student realize he or she



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can be in the aviation industry without being a pilot. Whether an individual has never stepped foot in an aircraft or is an experienced pilot, AEND will always have opportunities for everyone.

Our program is also ever evolving. One new program and opportunity we recently unveiled last year is the North Dakota Future Aviators Delegation (NDFAD). NDFAD's mission is to provide exciting opportunities to students who want to further their involvement in the North Dakota aviation community. Simply put, North Dakota Future Aviators are our volunteer force. From running the flight simulators, to attending air shows, AEND gives these students the opportunity to not only continue their aviation education but to also get more involved with the North Dakota aviation community and beyond. We believe this is absolutely essential in grooming solid future aviators and retaining future pilots in North Dakota. This past summer we took a group of students to experience EAA Airventure in Oshkosh, Wisconsin. Students had the opportunity to see some of the best airshows in the world, speak to colleges from around the United States, and network with industry leaders from across the industry. I can confidently say that this five day experience changed some of our student's lives and future career aspirations. Every single one of the students we brought to EAA Airventure is now seriously considering pursuing a career in the aviation industry. From aerospace engineers to commercial pilots, these students have great future career aspirations. We plan to make this an annual trip and will be open to any high school student enrolled in a high school aviation program in North Dakota.



AEND also goes into classrooms of all grade levels to introduce kids to the world of aviation. There is nothing better than hearing a group of students recite the phonetic alphabet and use appropriate "pilot talk" while flying on the simulators. Our goal is to show students that a job in aviation is within their reach, and that in order for a pilot to do his or her job, many other people also need to do theirs.

AEND is currently expanding our scope of services across North Dakota. We are currently working on opening satellite chapters across the state, with our first target being Grand Forks. If you would like AEND at your next fly-in, career fair, or aviation related event, please feel free to email me at [sean.davis@discoveraend.org](mailto:sean.davis@discoveraend.org). If you know of a student that needs help with college placement in an aviation field anywhere in the United States, we can help, as well as aid in flight instruction and any other aviation opportunities

that a student may want to take advantage of. We are also always searching for new sponsors for our program and would appreciate your help in trying to accomplish our mission.

We want to share the world of aviation with every citizen in the State of North Dakota, and we would love your help. Together we can shape a better aviation system for the future by investing in our youth today. We need to ensure that our children, grandchildren, and great grandchildren can fly the same wide-open North Dakota skies that you and I enjoy today. I cannot tell you how important even the smallest gesture can make in a student's life. Bring a student flying with you, bring a student to the airport, and share an aviation story with a student, together we can shape the future of aviation in North Dakota.

*Happy Flying, Sean Davis*







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| • Approved for Class 4 Aircraft (typically piston or turbine aircraft between 6000 lbs. and 12,500 lbs.)                             | No       | Yes      |
| • Software design assurance level  | Level C  | Level B  |
| • Garmin SVT™ Synthetic Vision Technology  | Optional | Standard |
| • GAD 43 replaces select A/P gyro attitude with AHRS reference and provides bootstrap heading, yaw information, and baro corrections | Optional | Standard |
| • GWX 68 Radar interface (radar LRU sold separately)   | Optional | Standard |
| • Internal TAWS-B terrain alerting   | No       | Optional |



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**Online calendar:**  
[www.ndac.aero/events.htm](http://www.ndac.aero/events.htm)

**Saturday, October 25, 2014**  
Fargo Air Museum Raffle Drawing  
Contact: Helen O'Connor 701-293-8043

**March 1-3, 2015**  
Upper Midwest Aviation Symposium  
Holiday Inn, Fargo, ND  
Contact: 701-328-9650

**June 7, 2015**  
Mandan's Planes & Pancakes  
8-11:30 am  
Contact: Jim Lawler 701-663-0669.

## FLY-IN GALLERY

*Have you been to a fly-in recently? Send your pics to [ndaviation@yahoo.com](mailto:ndaviation@yahoo.com)*

### **Milnor**



*Photo 1: A few planes that are based at Milnor and one that flew in. Photo 2: Victor Gelking with his airplane.  
Photo 3: Stacey Urbach, an NDSU student from Lisbon, flew in with instructor Victor Gelking.*