

The official publication of the North Dakota Aviation Association

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#### From the Editor

Welcome to the summer edition of the *FLY-ND Quarterly*! The theme for this issue is one of silver linings and inspirational tales. We are living

in the midst of a summer we never could have imagined, and it has affected each and every one of us in some way.

I am in awe at the creativity and ingenuity that has blossomed across the globe, especially right here in North Dakota. Our aviation community remains strong. Within these pages you will find articles filled with helpful resources, changes in our communities, and an optimistic future for aviation in North Dakota. You will be inspired by stories of how this pandemic has created local heroes, brought adventurers from out-of-state, and fueled exciting new uses for UAS technology.

My hope is that you will be entertained, informed, and reassured as you enjoy this issue, and that you continue in good spirits and health.

Wishing you clear skies and unlimited visibility,

Nicolette

Statements of fact and opinion are the responsibility of authors alone and do not imply an opinion on the part of officers and members of NDAA, or FLY-ND Quarterly staff.

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





Daren Hall, Chairman North Dakota Aviation Associaton chairman@fly-nd.com

## CHAIRMAN'S COMMENTS

## Rediscover your Passion for Aviation

I moved to Fargo 30 years ago and have worked at the airport every day since. I grew up three blocks from the airport in Minot and would often drive to the far end just to look at the lights and watch airplanes. I can remember a few times I would spot a North Central Airlines DC-9.

Times have changed, and so have airplanes and airports. Some aircraft very much so, as they do not even have pilots anymore. As I write, I'm watching an MQ-9 in the pattern in

Fargo. However, one thing in aviation has not changed: the wonder of flight. It is the excitement one gets when you are up close; the smell, the sounds, the sights that trigger a small dose of adrenaline to run through your body.

Ironically, not once in the past 30 years of working at the airport, had I gone out just to watch airplanes. I realized this needed to change. A week ago, I saw a couple C-130's doing



some pattern work and thought, "Let's go check it out." After a quick bike ride to the airport with my son, Tommy, I soon re-experienced the excitement of aviation. It is a feeling like no other, when you are at the end of a runway and an aircraft flies directly overhead. I have lived and worked in the world of aviation my whole life and somehow along the way I missed something so simple, accessible, and inspiring.

With minimal travel and a slowerpaced life over the past few months, the

extra time has helped me find a better perspective in making the most of the time I do have. It has allowed me to rediscover the wonder of flight.

Here is my challenge for you: create time to be a kid again, rediscover your passion for aviation, and share it with other people. Visit your local airport. Go flying! And don't forget to bring a friend.



## FROM BISMARCK TO UND

"I am incredibly proud to be a part of the UND family. The opportunities are unmatched, I have been able to develop my skills while sharing my love of aviation with the community and participating with incredible student organizations."



Alexis is a member of the UND National Championship Flying Team and is a NASA ND Space Grant STEM Ambassador. She will be graduating in 2021 with a career goal to one day be a Captain for FedEx.

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



## **Every Cloud has a Silver Lining**

I am sure that all of us could give examples of times in life where roadblocks were hit or where things did not go the way we had originally planned. Ironically, looking back on those experiences later in life, many of us find ourselves in appreciation for those times that made us stronger, wiser, and at the very least provided us with a good story to tell.

COVID-19 is now one of those roadblocks that has created challenges and sacrifices for all of us, in both our professional and personal lives. Like many of you, I have been trying to do my best to stay optimistic and look at the good things that have come out of this situation. In my personal life, that has meant spending more time with family, teaching my children more about the meaning of gratitude, and completing a variety of different house projects to help stay productive and positive.

Something that I have tried to do on a daily basis at the Aeronautics Commission is to locate the many positive things that are still occurring throughout the North Dakota aviation community. Finding silver linings within aviation in today's environment may currently seem like a difficult task; but I still see and hear encouraging things every day. Most of all, I am impressed with the positive problem-solving attitude that most North Dakotans and industry leaders bring to the table. This is the secret sauce which will strengthen our resilience as we work through this temporary roadblock.

Our public-use airports throughout North Dakota continue to remain open and flight training, in many instances, has resumed. I have even spoken to multiple pilots that have decided that now is the time for them to dust off their wings and get back into flying. Recently, our office has also seen a growing number of pilots who have shown an interest in starting our Passport Program and work to collect stamps as they tour the state's 89 public airports. If you are someone who has also been looking for a reason to fly and take on a new adventure or are frustrated with the lack of fly-in events taking place this summer, I highly recommend that you take a look at this program. If you do not have a passport booklet and would like us to send you one, please contact our office.

I am also pleased to report that a majority of our airport construction projects this year have seen lower than expected bid prices. The weather has also allowed most of our contractors to progress on projects that were drastically delayed last construction season, due to the record wet season that our state experienced. Many airport operators are also taking advantage of the current slow-down by completing long overdue projects or tasks that are easier to complete during times of lower activity levels. Aircraft cargo and unmanned aircraft systems are also areas that continue to provide new opportunities and growth during this time.

Aviation has been an adapting industry for over a hundred years and will continue to do so successfully, no matter what challenge awaits. It is my hope that during this unpredictable time, all of us are able to rise up as needed for our co-workers and our family members so that we can help each other stay positive and productive throughout these times.

I also encourage you to plan an adventure, while enjoying the summer weather and the beautiful North Dakota skies, in your pursuit of finding those clouds with silver linings.

~Kyle















AIRPORTS: Airport planning & layout · Runways Taxiways Aprons · Part 77 airspace · Funding requests Environmental review · Pavement design & rehabilitation Lighting · Visual/navigation aids · Marking & signs Arrival & departure buildings/hangars · Fuel systems



# Aeronautics Commission Awards \$9.7 Million for Airport Infrastructure Grants

By Kyle Wanner, Executive Director

The North Dakota Aeronautics Commission (NDAC) recently finalized approximately \$9.7 million in infrastructure grant allocations to 141 individual projects at 55 different public-use airports throughout the state.

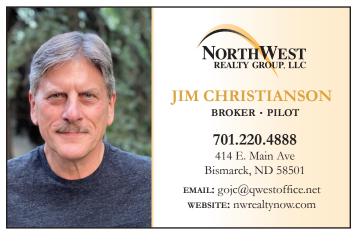
Seven million of the allocation is being made as a part of a \$20 million-dollar transfer that the state legislature approved in the last legislative session from the Strategic Investment and Improvement Fund (SIIF) to provide assistance with the large-scale projects that are ongoing at both the Watford City Airport and the Dickinson Theodore Roosevelt Regional Airport.

Another \$2.7 million of the allocation was made from the Aeronautics Commission Special Fund where the primary revenue source for these grants is derived from state tax collections on aviation fuel and aircraft sales. These state grants are critical in maintaining the needed infrastructure to support the aviation industry, which is a major contributor to the state's economy and standard of living.

These state airport grant allocations will help to leverage and supplement the federal funding being received for high priority airport projects within North Dakota, while at the same time ensuring that our statewide aviation system is being maintained. These grants will also help to create jobs within our communities and will greatly assist our airports in preparing them to be in a better position to help our economy rebound from the impacts caused by the COVID-19 virus.

Continue reading for a listing of each of the public airports that received a state grant, along with a description of at least one of their funded projects. A full listing of the airport grants and dollar amounts can also be found in the news section on the NDAC website.

Congratulations to all of the communities on their grant awards!



#### Commercial Airport Grant Awards:

Bismarck Pavement Marking Rehabilitation Devils Lake Purchase Snow Removal Equipment Dickinson Runway 14/32 NAVAID Equipment Fargo Pavement Marking Rehabilitation Grand Forks Pavement Maintenance **Jamestown** Windsock Rehabilitation Minot Pavement Maintenance Williston Drainage Improvements

#### General Aviation Grant Awards:

OCIT	ciai Aviation Grant Awaras.
Ashley	Purchase Mowing Equipment
Beach	Pavement Maintenance
Beulah	Pavement Maintenance
Bowman	Purchase Snow Removal Equipment
Cando	General Aviation Terminal Repairs
Carrington	Construct Public Hangar
Casselton	Airfield Lighting Repair
Cavalier	Pavement Maintenance
Crosby	Runway Safety Area Grading
Ellendale	Pavement Maintenance
Enderlin	Pavement Maintenance
Garrison	Pavement Maintenance
Grafton	Purchase Mowing Equipment
Gwinner	Purchase Snow Removal Equipment
Hazen	Pavement Maintenance
Hettinger	Purchase Snow Removal Equipment
Kenmare	Pavement Maintenance
Killdeer	Pavement Maintenance
Kindred	Watermain & Fire Hydrant Installation
Kulm	Purchase Land Roller
LaMoure	Pavement Maintenance
Langdon	Pavement Maintenance
Larimore	Pavement Maintenance
Linton	Purchase Mowing Equipment
Lisbon	Pavement Maintenance
Mandan	Reconstruct Taxiways
Mayville	Pavement Maintenance
Milnor	Primary Runway Extension
Mott	Update Airport Layout Plan
New Rockford	Pavement Maintenance
New Town	Pavement Maintenance
Northwood	Pavement Maintenance
Oakes	Pavement Maintenance
Park River	Obstruction Removal
Parshall	Pavement Maintenance
Pembina	General Aviation Terminal Repairs
Rolla	Pavement Maintenance
Rugby	Pavement Maintenance
St. Thomas Turtle Lake	Runway Safety Area Repairs Obstruction Removal
Valley City Wahpeton	Replace Jet A & 100LL Fuel Systems
Washburn	Replace AWOS Construct Security Fence
Watford City	Primary Runway and Taxiway Relocation
Westhope	RPZ Land Acquisition
Wishek	Pavement Maintenance
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### What's New with the North Dakota Passport Program

Since the inception of the Passport Program, created in 2010, 72 pilots have flown to all 89 North Dakota airports and submitted their stamp book to receive their prize: a coveted leather jacket. Each time I talk with a pilot who has completed the program, I ask them to share their journey: How long did it take? What kept you going? Where can we improve? To date, not one pilot has told me they regret picking up a book and collecting stamps. The most recent story I have found fascinating was that of Pat Fagan and his friends. It is definitely worth the read, and you can find it on page 10. Pat is one of approximately 15 out-of-state pilots who have collected airport stamps in North Dakota.

With a lack of typical activities this spring and summer, quite a few pilots have been using the extra time to work on the Passport Program. Given the recent interest in the program, I want to share some minor changes for pilots to be aware of in the upcoming months.

First, we now have an optional registration for the passport program available on our website. Prior to this registration, we have no information about participants until a completed book is turned in for an award. I would like to encourage those of you working on collecting stamps, regardless of how far along you are, to register on our website: aero.nd.gov/education-programs/passport-program. By completing this short form, we have more information to assist participants and the ability to communicate with them in the future when needed. Registration is optional but encouraged.

Secondly, I am excited to announce that we are working with

a national group to allow stamps to be received via check-in through a mobile app. The passport book isn't going away; this app simply gives us another way to collect stamps. Our plan is to expand this option to other states with Passport Programs for easier stamp collection.

And last but not least, we are planning to add a Platinum Level to the Passport Program. This would be available for pilots who have completed the Gold Level and are looking for another challenge. While details are being worked out, we hope to officially roll it out by the end of this year.

#### Please remember:

Check NOTAMS prior to heading out to collect stamps. With construction season, there may be some temporary runway closures.

If you are unable to land at an airport or cannot find the passport stamp, do not hesitate to contact the NDAC office and we will mail you a sticker to use in place of the stamp. A picture at the airport or logbook entry showing you were at that airport is always helpful.

As you are flying and notice any areas which are unsafe or could be improved, please reach out to the NDAC staff and we will relay the information to the airport manager.

Stay safe and I hope to see many of you on the stage at the Passport Awards presentation in Spring 2021!



## Do you have an interesting aviation story, event or photos to share?

Whether you've hosted a recent airport event, heard an inspiring aviation story, or have an exciting flying adventure to share...

We would like to bear them!

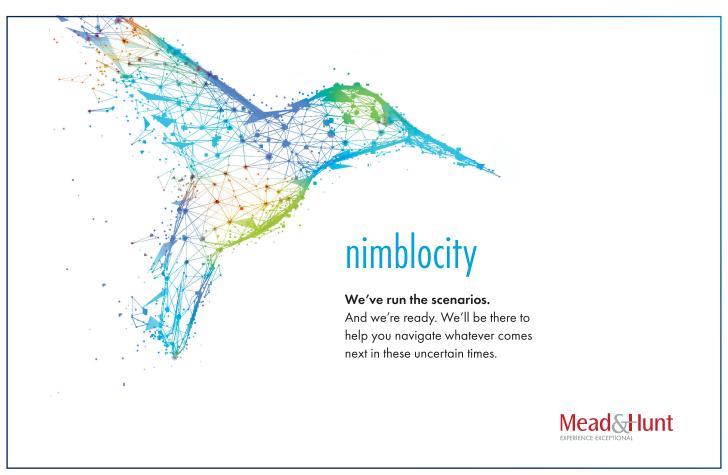
Submit your ideas or stories for consideration to: editor@fly-nd.com

#### NDAA Executive Director's Note

By The Staiger Consulting Group

The coronavirus pandemic has generated a myriad of effects across the globe in recent months, including the cancellation of many well-loved aviation events. However, with the health and safety of the aviation community as the focus, many new resources have been created and encouraging headlines made. Read on to discover a few of our favorites:

- **SiriusXM** teamed up with NYU Langone Health to launch a channel dedicated to news regarding the coronavirus pandemic. Channel 121 will broadcast information about the coronavirus 24/7 and is free. Pilots can also listen online.
- Used Aircraft Prices have not seen a measurable decline as the result of COVID-19. Despite being blindsided by the consequences surrounding the coronavirus pandemic, the aviation market was already in a unique situation as inventory was limited. Traditionally, when supply is constrained, market pricing will stay roughly the same. That holds true now for used aircraft prices, despite any drop in demand.
- The **FAA** and **CDC** recommend that air carriers and crewmembers take precautions to avoid exposure to COVID-19. A full list of these precautions can be found in the SAFO 20003, under COVID-19: Interim Health Guidance for Air Carriers Crews.
- The CDC has also provided recommendations for aircraft operators to clean and disinfect their aircraft. The **National Business Aviation Association (NBAA)** and committee volunteers have summarized this information in an easy-to-use resource that will help you make aircraft cleaning decisions. You can read it here: nbaa.org/wp-content/uploads/aircraft-operations/safety/coronavirus/nbaa-aircraft-disinfection-and-cleaning-procedures.pdf
- The Civil Air Patrol logged "10,000 volunteer days of support," the equivalent of more than \$2 million of donated services during operations in the first 70 days of response to the coronavirus pandemic, the organization announced. Cadets and volunteer adults delivered personal protective equipment and COVID-19 test kits, prepared meals, staffed emergency operation centers, and more during ongoing relief efforts.
- The **FAA** has updated its Frequently Asked Questions (FAQs) about the Coronavirus Aid, Relief, and Economic Security (CARES) Act. You can find the FAQs here: faa.gov/airports/cares\_act/media/cares-act-airport-grants-faqs.pdf



#### The Best & Worst of Times

By Matthew Remynse, A.A.E., AAND President

"It was the best of times, it was the worst of times." This quote by Charles Dickens truly defines how March 2020 was for airports in North Dakota. At our commercial airports, March had some of the highest days on record for boardings, with the potential to result in another record month on the way to possibly another record year. Unfortunately, after a pandemic was declared, COVID-19 stole the spotlight. A significant, devastating decline in travel followed, leading to some of the lowest days on record for our airports. According to the monthly statistics, the boardings at North Dakota commercial service airports were down 43 percent in March, 94 percent in April, and 86 percent in May. Additionally, our General Aviation (GA) airports began to see a significant loss in operations.

The drastic decline in boardings has left terminals hollow and parking lots empty, but the airports in the state looked for and have found a silver lining during this temporary down. With the support of our congressional delegation, the Coronavirus Aid Relief and Economic Security Act (CARES Act) was passed, which included funding for airports. As part of the CARES Act, airports that had a federal project were granted 100 percent of the cost versus the normal 90 percent, allowing the local share to be used for other purposes such as operational cost. Additionally, the CARES Act provided eligible airports with a grant that could be used for project or operational costs. Calculated by the FAA, using a congressional formula, the grant distribution amounts varied by airport. The downtime and additional funding has allowed our airports to move forward with parking lot maintenance, crack sealing, airfield markings, resealing terminal flooring, and conducting deep cleaning of the terminals.

An unanticipated benefit from the 100 percent grant funding was that it freed up a portion of the 5 percent the North Dakota Aeronautics Commission (NDAC) provides for federal projects. This allowed these funds to be used to jumpstart several projects that were not eligible to receive federal funding. Some of these great projects include a runway extension at Milnor, a fuel system at Washburn, SRE equipment purchases, and obstruction removal at several airports.

While there were some unanticipated benefits stemming from COVID-19, airports would like to be back to normal. To do this, airports must instill confidence in the traveler and assure them that it is safe to fly. This concept is not unique to our industry, as this process also happened following Sept. 11, 2001. In today's world, commercial airports are cleaning well beyond pre-COVID levels, using more effective chemicals, placing social distancing stickers, installing plexi-glass shields, and offering hand sanitizer and Personal Protective Equipment (PPE) to travellers. At our GA airports, the volunteers are cleaning the pilot lounge often, placing social distancing signage, and offering hand sanitizer.

As we move into summer, airports are seeing more traffic and more traveling passengers. All across the state, airports will continue to adapt to meet the needs of passengers, pilots, and friends of aviation. The best of times will return, and the aviation community must work now to be prepared for when that time arrives. Travel will return, traffic will increase in lobbies, lounges, and parking lots. We need to be ready and ensure that we've planned the best ways for when the public wants and needs to travel again. In the meantime, there are a lot of projects going on at airfields and still plenty of GA activity, so as always, check the NOTAMS.

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It's interesting how one's attitude can change over time. I suppose we shouldn't fault politicians for flipflopping, provided their change is sincere. But this isn't about politics. This is about my change in attitude on what at first seemed to be a silly idea.

A couple of years ago, I was involved in a Utah Back Country Pilots work party at Mexican Mountain, UT. After the work was done, we were all sitting in the shade doing what pilots do, telling stories. There was a gal flying a short-wing Piper that had to be the most manic pilot I have ever encountered. She regaled us with tales of all the places she had been with her plane and shared all the places she intended to fly in the upcoming year. She practically lived in that airplane.

She told about how she had landed at every airport in several states, and how some of those states actually had programs that rewarded people for doing so. At the time, I felt like she must have some kind of OCD, but I enjoyed the hangar flying nonetheless.

Fast forward to early this year, I was reading an issue of Sport Aviation and there was an article profiling a gal named Wendy who flies the heck out of a short-wing Piper. As I read, I remembered that hangar flying session and realized the article was about the very same person. In the article she mentioned that one of the states where she landed at every airport was North Dakota. She also said that for doing so she received "the nicest leather jacket I've ever bought".

After reading this article, my change of attitude occurred. My wife, Carol, and I moved from crazy

California to saner Arizona almost four years ago. In that time, I have been constantly busy developing the property and putting up buildings. It just so happened that my reading the Sport Aviation article coincided with me completing my last building project and feeling the deep-seated need for an adventure. Suddenly, flying to North Dakota and landing at every airport just to get a leather jacket seemed like the sanest thing in the world to do.

I mentioned this idea to Carol, who has tolerated many of my past crazy aviation ideas and she had the expected response, "Why not just buy a jacket?" But she humored me and agreed to let me go. Then one day I was flying with fellow Bearhawker Scott Williamson and told him about what I was going to do and he went from "that's crazy" to "I'd like to go too" faster than I expected. Scott then mentioned it to Kevin Deutscher, another Bearhawk builder, who was suddenly teleworking from home due to COVID-19, and he eagerly agreed to go as well.

North Dakota's program involves filling in a passport book with airport identifier stamps located at all 89 public use airports in the state. You are also required to visit their two aviation museums and take three courses through the FAA's FAAST/Wings program. We requested and received in the mail our passports and I figured out a course on a North Dakota-only sectional they provided. So we were all set, just needing two things before we could depart. One was for the museums to reopen from Coronavirus, and another was for winter

to loosen its grip. The museums finally reopened the second week of May, but there was an endless stream of bad weather blocking our path across South Dakota.

We finally had a weather window that allowed us to depart on May 16th. That day, we flew all the way to Custer, SD, where we caught up to the bad weather. The next morning we were up at dawn, looking at beautiful blue skies, excited to get our first stamp. But then we had to wait two hours for the sun to melt the frost off our wings.

We camped out in airport pilot lounges almost every night. Some were nothing more than an office and bathroom, while others had freezers, microwaves and showers. The most luxurious one we visited was at Williston, with a sleeping room, recliner sofas, showers, and the works. Unfortunately, Williston is a real airport so we weren't allowed to overnight there, but the staff was tremendously helpful and helped us bide our time until the rain moved on.

The coolest airport we went to had to be Wahpeton. Kevin was taking a nap on the grass at Milnor Airport, as we landed at multiple grass strips, when he noticed a crack forming in the tail post spring perch on Scott's plane. The FBO operator at Milnor suggested Wahpeton as a place to get it fixed. Boy was he right. In Wahpeton, they build fuselages for P-51 Mustangs. The whole fuselage. They can fabricate every part on a Mustang.

Scott uses a massive shock absorber tail wheel and not only did they fix the crack, they reengineered how it attaches to the tail post. While they did that, they gave us free range to explore the machine shop and the boneyard of projects.

Everywhere we went in North Dakota, the people we met were so helpful and sincerely happy to see us, especially upon learning that we had come all the way from Arizona just to do this. We got local pilot knowledge about the conditions at certain airports and warnings about conditions at others. Gackle Airport was the most pleasant surprise. We were warned by the gentleman who maintains the airport that he couldn't vouch for its current condition, as it is surrounded by water and the entrance road was currently under water. He hadn't been able to get to it to mow it or otherwise check on its condition, but we found it to be in wonderful shape and an absolutely beautiful spot.

I had no idea how much fun it would be doing this trip, but it far exceeded all my expectations. The sheer joy of airport hopping, sightseeing, never having to climb above pattern altitude, and all those grass strips made the trip memorable. All the wonderful people we met, so enthusiastic to see us, offering us cars and hangars and whatever else they could provide, made the trip memorable. We even air toured the Enchanted Highway, another special treat. I look forward to proudly wearing my jacket, but the simple passport book with all its stamps is an equally valuable souvenir.

Our last airport was Bowman and we took the courtesy car to town for a wonderful breakfast. Were it not for lingering Covid-19 concerns, I believe Scott would have hugged every person in the restaurant, he was so happy. We chose to fly to Mexican Mountain in southern Utah to spend our last night. It didn't occur to me until late that night that adding that to our trip was the perfect topper; it was there that I first learned about North Dakota's passport program from Wendy. The next morning we split up to head for our separate homes. Kevin made a statement that brought tears to my eyes: "Thanks for letting me come along and fulfill a dream I never knew I had."

#### About the Author

Pat Fagan has been flying since he was 16 years old, paying for his flight instruction with money he earned working at Tastee Freeze. Over the years, he gained a wide range of piloting experience, from towing gliders and hauling skydivers to fire bombing. Pat found a career as an air traffic controller and spent 28 years working airplanes at Los Angeles Air Route Traffic Control Center. He built his Bearhawk aircraft from plans, before any kits were started. Completed in 2003, it was the eighth Bearhawk to fly. To honor Pat's history flying tankers, it was painted like an air tanker and christened "Smokey Bearhawk".





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### Should I File a NOTAM for This?

Notices to Airmen, usually shortened to NOTAMs, are public notifications issued by airports, the FAA, and the U.S. military to inform pilots of safety or operational issues that may affect them while at airports or in flight. This topic has been exhaustively detailed in regulations and flight training publications; however, let's discuss a comprehensive list of situations that would prompt North Dakota airport operators to ask, "Should I file a NOTAM for this?"

Closures (CLSD): Perhaps your runway needs to be closed for repainting, the frost heave has left hazardous breaks in a taxiway, or the airfield was buried in a blizzard. In these cases, a prompt closure NOTAM is crucial to keep aircraft from trying to use surfaces that may be unsafe. If a closure is preplanned, NOTAMs can be issued up to seven days in advance. Managers may find the use of Prior Permission Requests (PPRs) helpful, which allow the airfield to close for a length of time (for example, during multi-day snowstorms) but reopen temporarily for pilots who specially coordinate their arrival or departure.

**Field Conditions (FICON):** Many General Aviation (GA) airports print comments in FAA publications instructing pilots to call ahead during winter months to confirm field conditions. Issuing FICON NOTAMs to report the presence of snow, ice, or snowbanks can be valuable to ensure pilots know what to expect on arrival, especially if they have trouble reaching an airport representative.

**Fuel Unavailable:** Public fuel may become unavailable due to delayed deliveries or hardware problems. This can put an aircraft in a tough spot if they arrive only to then learn that they can't refuel.

**Obstructions (OBST):** FAR Part 77 defines volumes of airspace around airports that must be kept free of obstacles to protect aircraft. If a crane is deployed near the airfield or a radio tower's blinking lights burn out, an obstruction NOTAM is likely needed. On a related note, any tall structures proposed to be built within several miles of the airport should be officially evaluated by the FAA prior to construction to prevent impacts to air traffic.

**Lighting Failures (U/S):** If the airport's beacon is jammed, the runway lighting disconnected for repairs, or the Precision Approach Path Indicators have failed, an Unserviceable NOTAM is required.

**Unmanned Aerial Systems (UAS):** The use of drones has grown rapidly in recent years, with some airports seeing the use of UAS for testing, surveying, and other activities. A UAS NOTAM should be filed alerting pilots of volumes of airspace on or near the airport where drone activity is taking place.

**Wildlife Hazards:** It's common to see surges in wildlife activity around airports during seasonal migrations. The issuance of a NOTAM can help prevent aircraft-wildlife strikes.

To file NOTAMs for your facility, airport staff can register with the FAA websites of eNOTAM II or NOTAM Manager. These sites can be used to easily draft and electronically submit NOTAMs for distribution. If you're unsure about a particular issue or prefer to talk with a live operator over the phone, the sites also provide customer service lines to assist you 24/7. NOTAMs are typically distributed to pilots within minutes of being filed by the airport.

For further details and extensive examples, visit www.faa. gov and search for *Advisory Circular 150/5200-28F Notices to Airmen (NOTAMs) for Airport Operators* and *Order 7930.2S Notices to Airmen (NOTAM)*. These documents are updated periodically, so make sure to check for the most recent versions.



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## Congratulations on your Retirement

The North Dakota Aeronautics Commission would like to congratulate **Sheila Doll**, our licensing specialist, on her retirement after a nearly 30 year career. We greatly appreciate Sheila and the countless licenses and registrations she has processed over the years. Please join us in wishing her a happy retirement.

For any licensing or registration questions, please email ndaero@nd.gov or call 701-328-9650. The commission plans to hire a new licensing specialist in the near future.

#### **NDBAA News!**

**SCHOLARSHIPS AWARDED:** The North Dakota Business Aviation Association would like to congratulate Ayden Olsen and Jilian Quale on each receiving a \$200 scholarship. Ironically, both students are currently attending Wachter Middle School in Bismarck, ND where Ayden is in the 8th grade and Jilian is in the 6th grade. Ayden has expressed an interest in becoming an aerospace engineer specializing in landing gear systems at Boeing, while Jilian is still exploring all military aviation career opportunities.

Jilian and Adyen are each raising funds to attend the NASA Space Camp held in Huntsville, Alabama.

**MERGER:** NDBAA was founded in 1947 with the purpose to promote the interests of those that benefit from the use of aviation in North Dakota. NDBAA accomplishes this through safety, advocacy, and educational initiatives. *As of May 2020, NDBAA has merged with the North Dakota Aviation Association.* 



### How drones could help the fight against pandemics



By Connor Murphy

## Research involving UND is testing three ways drones can help reduce viral spread

The University of North Dakota's Center for Innovation and Research Institute for Autonomous Systems (RIAS) are partnering in a coalition of unmanned aerial system (UAS) industry leaders to develop new mission sets against future pandemics.

Flight tests operated by Grand Forks-based drone service provider SkySkopes are underway in Grand Forks County to test the abilities of drones to spray disinfectants, deliver priority supplies, and sense body temperatures remotely.

North Dakota State University is also on-board with the project, providing an aircraft originally developed for agricultural spraying applications.

"I have not seen a partnership like this before, and we have a mission set like I've never seen before," said Matt Dunlevy, President and CEO of SkySkopes.

#### **Coordinated Response**

Amy Whitney, director of the Center for Innovation at UND, said the purpose of the mission is to test each application – spray, deliver and sense – individually, as well as measure the aggregate impact of all three as a coordinated emergency response to a pandemic. The project has been made possible through the Center for Innovation's Dahl, Melroe and Nash faculty entrepreneur research fund.



Amy Whitney

"We're in a crisis where we're having to make behavioral changes," Whitney said. "Autonomous systems can help us accomplish daily life tasks in a way that helps protect public and individual health, while also bringing resources to locations where movement is restricted.

"In addition, the technology can help us identify hazards in the environment that we may not be able to see with our own eyes, much like the spread of COVID-19."



#### **Good News**

In the "Good News" portion of his daily COVID-19 response briefing on April 21, North Dakota Gov. Doug Burgum gave a high-profile shout-out to UND, SkySkopes and their collaborators for the high-tech approach.

"They have got some ideas about how UAVs might help spray water and disinfectant to stop and kill the virus and understand how drones might deliver medical supplies or they could also be used in trying to detect health issues," Burgum said. "Those are some great examples and some great innovations of how UAS can be used in a health component."

The governor lauded the private-public innovation as a big reason why North Dakota is a leader in the UAS industry.

#### **Benefitting** Communities

Executive Director of RIAS, Mark Askelson, drew attention to the fact that, while flights for upcoming tests will be taking place within line of sight in accordance with Federal Aviation Administration (FAA) regulations, the use of HUBNet's detect-and-avoid technology can enhance the



Mark Askelson

safety of operating multiple aircraft in the same airspace. The continual construction of a safety case for drones' use on a broad scale is crucial for the UAS industry.

Askelson remarked that if spraying is proven to be effective against viral outbreaks, and drones can also be used to retrieve and deliver crucial medical supplies, autonomous systems could "completely change the game" for public health by lowering the risk of spreading infections.

During testing, a drone equipped with a sprayer will test dispensing non-toxic substances such as soapy water and other generic disinfectants at low altitudes.

"We're learning how we can do these things to benefit a community in a pandemic like this, but also we're learning more about how to create safer airspace for these advanced systems," Askelson said. "This would help us understand how we might use these technologies to really make a difference.

"We are very fortunate to be in a place where we have the ecosystem, leadership and partnerships that we need to work problems like this."

#### Coordinated **Mission Set**

Whitney said the endeavor allows UND and the Grand Forks region to continue its leadership in the UAS industry sector. As the business incubator that helped SkySkopes grow into a global drone service provider, the Center for Innovation is also interested in business opportunities that can positively impact public health in



Matt Dunlevy

the long term, including establishing a statewide network for drone flight.

"This demonstration enables us to explore coordination of UAS missions in response to a crisis," said Askelson. "Such coordination could prove extremely valuable in future pandemics."

"We hope we are able to show that UAS are another tool in the toolbox for the country," Dunlevy said. "And I think that if we do find something, it's fitting that it comes out of the state of North Dakota."

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### New Name + New look = Same Mission

You probably noticed the new heading on the *FLY-ND Quarterly* and the new name for the North Dakota Aviation Council is now NDAA. We are proud to showcase our new logo and programs to better serve our members.









Local pilots from Bowman Regional Airport (BWW) flew a tribute on May 29, 2020, to show support and say thank you to local area doctors, nurses, EMT'S, police, firemen, teachers, business owners, farmers, ranchers, military, and others who have kept their communities going and safe during the COVID-19 pandemic.

Brent Kline, BWW Airport Manager, organized the event with the route overflying Bowman, Scranton, Gascoyne, Bucyrus,

and Hettinger. Taking place in conjunction with BWW's five-year anniversary, pilots tested their skill with flag drops on targets for discounted fuel price prizes. A pizza party followed for pilots and families. Rodney



Schaaf, Airport Chairman, said after two months of virus "hibernation," it was a great way to get airborne again!



## Non-Profit Organizations Join to Turn Chaos into Care

By Brendan Sneegas, Director of Operations & Development, Angel Flight Central

Following 25 years of service and over 28,000 free flights for people in need of long-distance travel to medical care and treatment, the COVID-19 outbreak shook the mission of Angel Flight Central (AFC), a non-profit charitable aviation organization serving those in the Midwest, including North Dakota. The ability to safely fly people to and from medical care became too dangerous for pilots, as well as their passengers. Angel Flight Central was quickly forced to suspend passenger flights and re-evaluate its mission.

"We realized that the safest way forward in the short-term was to concentrate on cargo flights," said Don Sumple, AFC's CEO and Executive Director. Utilizing a partnership with a rural hospital organization, AFC was able to arrange flights carrying Personal Protective Equipment (PPE) to underserved rural hospitals across several states. However, as in every natural or national crisis, volunteer pilots have a great desire to assist. The PPE flights were not enough to satisfy the willingness of the AFC pilots.

It was around this time when Vitalant, one of the nation's





oldest and largest nonprofit community blood service providers, started facing struggles getting blood products to their intended destination. With three donation locations in North Dakota, Vitalant's ability to transport donated blood and blood products to processing centers was being affected with all the changes in commercial aviation routes. Vitalant's Community Outreach Ambassador Jennifer Bredahl, reached



out to North Dakota Senator Tom Campbell to ask for help. He connected Vitalant with Mike Kempel of Dakota Refrigeration, who offered to use his private plane to help. However, with the continuous transportation needs, the North Dakota Civil Air Patrol recommended connecting with Angel Flight Central.

Vitalant is internationally recognized for their expertise in blood collection testing, logistics, distribution, special services and research. In other words, Vitalant had a life-saving product supply of plasma needing delivery multiple days of the week to a processing center 570 nautical miles away in St. Louis, while AFC had compassionate volunteer pilots calling to ask to help. A perfect match.

Rachel Nelson, Vitalant's Senior Hospital Services Manager, summarized the experience. "During these uncertain times of COVID-19, our products for our patients were greatly impacted. We had logistical struggles on a daily basis, until we partnered with Angel Flight Central. Their organized diligence to support the needs of the community was impeccable. Because of their support, we were able to get our blood and blood products where they needed to go, so we could continue our life-saving mission. We truly cannot thank them enough!"

partnership is now in its fourteenth week. Twenty-seven pilots have flown 37 flight legs a total of 10,500 nautical miles. Over 5,000 miles of trips are planned for the weeks

The



ahead, and if more pilots could join in, additional locations could be added.

With new screening and safety protocols, AFC resumed flying passengers to medical care in June, but the passion and inspiration that has evolved from two non-profits combining efforts to change and save



lives has only gained momentum, thanks to the great people at Fargo Jet Center.

If you are a pilot and wish to learn more about AFC's minimum requirements, please visit AngelFlightCentral.org. To learn more about Vitalant, visit their website at Vitalant.org. Both organizations would also greatly appreciate any charitable contribution to continue their work into the future.



## A Fly-In During the Pandemic







Oh, the anticipation of enjoying a fly-in while having to take precautions to keep the pilots and other guests safe. Where does one begin to plan for an event like this during a pandemic? That was something that had to be figured out in order to have a successful Kulm Fly-In this summer.

Originally, the fly-in was to be a breakfast as part of the Kulm City Band 125th festivities. That celebration, along with so many others in North Dakota, was postponed until next year as a result of COVID-19. The Kulm Airport Board made the decision to continue with their plans, however. The only change was planning it as a supper, instead of a breakfast. Local advertising was kept at a minimum, with one sign being hung in town and others providing fly-in information for pilots. In order to host a safe event, a lot of time was put into

reading safety protocols and regulations. It was decided that gloves, hand sanitizer, and individual serving containers would be purchased. The tables and chairs had to be spaced apart, in order to social distance. Also, more people would be needed to serve the meal, as the guests could not serve themselves.

On the day of the fly-in, the weather was hot, humid, and windy. However, this didn't stop the pilots. About 13 planes from Linton, Buffalo, West Fargo, Fargo, Hillsboro, Milnor, and Desmet, SD, arrived. Everyone had a great time visiting and enjoyed getting back up in the air and going somewhere! Plans are being made for another fly-in this August. While everyone hopes that things will be more normal by then, we know what it takes to host a fly-in during a pandemic and look forward to doing it again.













WASP Viola Thompson of North Dakota flew tow target planes at Camp Davis, North Carolina, in support of the World War II effort to train Army gunners. (photo wikicommons)

## North Dakota's WASP: Viola Thompson

By Penny Rafferty Hamilton, Ph.D.

Viola Thompson was born in 1914, near Fingal, ND. In her early years, her family moved to Fargo. Viola tagged along behind her older brother, Marnel, to watch airplanes at busy Hector Airfield. In 1939, Viola took her first one dollar plane ride. It was just a dollar more for flying lessons, and so her journey began. She attended business school and landed a good job, which supported her new aviation addiction.

By 1942, Viola was North Dakota's first woman to earn a commercial flying ticket. Then, legendary female pilot Jackie Cochran and the newly formed Women Airforce Service Pilots (WASP) invited Viola to join them at Sweetwater, TX. In 1943, WASP Thompson graduated in the fourth class, earning her coveted Air Corps Gold Wings. She became North Dakota's first woman to do so.

Soon, Viola and other "Avenger Girls" WASP reported to duty at Camp Davis, NC, to form the new Target Tow Squadron. The gals had ill-fitting hand-me-down male mechanic uniforms called "zoot suits". The women had to roll up the sleeves and pant legs to make them wearable.

The U.S. Army still considered these brave and patriotic women "civilians". They were paid only \$150 a month in training and \$250 a month in service. Out of that, they had to pay the government \$50 a month for room and board. When uniforms finally became available, the WASP paid \$12.50 each for the "General's Tan" trousers and about \$10 each for the white shirts. Soon, the iconic Santiago Blue WASP uniform Jackie Cochran designed became available to purchase for dress with berets.



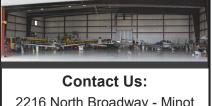


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In 1942, Viola Thompson, on the left became North Dakota's first woman to earn a commercial rating. By 1943, she had volunteered for the WASP and became North Dakota's first woman to earn US Army Air Corps gold wings. WASP Mary Clifford was in Viola's squadron.

Viola's day started at 6:45 a.m. with calisthenics. By 7:15 a.m., it was back to the barracks to change to flying clothes and march to breakfast. Once at the airfield, they entered the "WASP Nest" briefing room for the review on the flying course and assignments. They had to fly back and forth hour after hour, making precise turns while being shot at from the ground.

Viola flew Curtiss Helldivers and Curtiss A-25 Shrike as her tow planes to train new male gunnery students on the ground shooting live ammo. She hoped the guys shooting were a quick study and had a steady aim to actually hit the canvas target she was towing and not her plane! These planes were known to be challenging and unpopular with carrier pilots. In late 1944, the U.S. military shut down the WASP program. Because they were not considered "service members," they paid for their own transportation home. For years, their heroic and patriotic service was overlooked and forgotten.

After World War II, Viola married Robert Mason. They moved to Alaska where Viola earned her seaplane rating and joined the Civil Air Patrol. As we

approach the September 2020 75th anniversary of the end of World War II, let us honor all those North Dakotans of our Greatest Generation.

Dr. Hamilton is writing a new book, Inspiring Words For Sky and Space Women: Advice from Historic and Contemporary Trailblazers, which is filled with unique "her" stories.



## Become a member today! www.FLY-ND.com



NDAA Mission:

## TO PROMOTE AND GROW AVIATION IN NORTH DAKOTA

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The purpose of the NDAA is to exercise leadership in the aviation industry and among individuals active in aviation professions in North Dakota by:

- 1. Improving relations among aviation professionals and those interested in or concerned with the aviation industry in ND.
- 2. Promoting and extending aviation services in all appropriate ways.
- Improving the standing, qualifications, and abilities of aviation professionals in the state by all means in compliance with state and federal guidelines.
  - Providing for the general organization of an annual aviation conference.
  - Conducting, or arranging to have conducted, discussions, studies, research, surveys, articles, and similar inquiries into the field of aviation, and disseminating the results of such activities in an appropriate aviation publication.

#### MEMBER BENEFITS



#### **MEMBERSHIP LEVELS**

Any individual, corporation, or organization in the State of North Dakota that is active in, or promotes and supports the Aviation industry, is eligible for membership in the NDAA.

There are four categories of membership:

See all the member details and apply today at www.FLY-ND.com

#### ORGANIZATION MEMBER

Organization Member category is intended for agencies and non-profit groups whose mission serves the aviation professions, industries, and supports the purpose of the NDAA. Organization Members are registered non-profit corporate entities. Organization Members are not entitled to vote or hold board positions.

Dues are \$250/year.

#### **ALLIED MEMBER**

Allied Member category is intended for firms, companies, and consultants who are actively engaged in providing products and/ or services to aviation professions, and companies who support the purpose of the NDAA. Allied Members are not entitled to vote or hold a board position.

Dues are \$250/year with 20 employees or less, and \$500/year with over 20 employees.

#### INDIVIDUAL MEMBER

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

Dues are \$25 per year for Individual Members.

#### STUDENT MEMBER

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

There are no dues to be a Student Member.

## Staying Safe While Flying

Itching to fly off on a new adventure soon? Whether you plan to fly private or commercial this summer, it is beneficial to practice basic safety precautions. Here are some tips to protect yourself and others:

- Wash your hands frequently, especially after touching surfaces in terminals, FBO's, and on aircraft. Don't forget to wash or sanitize your hands before eating or drinking.
- Wear a cloth face covering in public. This includes commercial airline and FBO terminals. It can be a good idea to bring multiple masks in case one is lost or damaged.
- Bring hand sanitizer and antibacterial wipes. If travelling commercially, TSA is currently allowing one liquid hand sanitizer container (up to 12 ounces) in carry-on bags. You can also bring anti-bacterial wipes.
- Prepare food and water for your trip. Pack non-perishable food in case restaurants and stores are closed.
- Wear travel clothes. Choose a comfortable pair of long pants and long sleeve shirts as your in-flight clothing for extra protection. As soon as you arrive at your destination, immediately remove and wash the clothes prior to next use.
- Check for restrictions. Travel and other restrictions can vary from state to state. Save yourself unpleasant surprises and delays by checking for restrictions at your destination and anywhere you might stop along the way.
- Use credible resources. State and local health department websites are your best resource. Keep in mind that restrictions can change rapidly depending on local conditions. Check back for updates as your trip gets closer.

And as always, follow these basic guidelines to the best of your ability:

- Maintain a distance of 6 feet between you and others as much as possible.
- Avoid crowds.
- Wear a cloth face covering.
- Avoid touching your eyes, nose and mouth.
- Cover coughs and sneezes.
- Clean your hands often.

Sources: CDC.gov, MayoClinic.org, TSA.gov, NFCR.org



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**Joel Todd Pfliger** March 3, 1963 - June 13, 2020

Joel Todd Pfliger, 57, of Stanton, ND, born on March 3, 1963 to Clem and Betty Pfliger, joining his sister, Kari, to complete the family. His life came to an abrupt end on Saturday, June 13, 2020, when

his plane crashed during routine take off. He died instantly. A celebration of Joel's life was held at the family farm near Stanton, ND, on June 20, 2020.

Joel always loved farming and spent many hours with his farm toys, making fields in the front yard. When he went off to college at UND, his most cherished picture was of Dad, the dog and the Versatile tractor. He was a member of the Phi Delta fraternity. Joel graduated as a mechanical engineer and worked at Dakota Gasification Company north of Beulah for 24 years until he retired in 2012. Besides his engineering career, Joel was a full time farmer and took the reins at the family farm in the 90's.



With all that work, Joel did not have a lot of time for socializing, but he followed his passion for planes and flying, getting his pilot's license shortly after he started working at the gas plant. He was part owner of a couple different planes during that time. His first mission was to get recertified after retirement and buy his Citabria . He flew constantly, taking great delight in giving rides and exploring the area from the sky. Through flying, Joel made many new friends, attending fly-ins around the area and having coffee nearly every Saturday with his pilot friends at what he lovingly referred to as OGC – Old Guy Coffee.

Joel left behind those who loved him best, his sister, Kari and her husband, Steve Huber; nephews, Scott, Ross and Trevor Huber; as well as, his Uncle Jim (Lee) Pfliger, Aunt Dorothy Lang; and numerous cousins and friends.







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North Dakota Aviation Council is now North Dakota Aviation Association! See page 16 for more details!

## CALENDAR of EVENTS

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

#### August 2020

JT Rice-ND Chapter - Pilots for Christ - 8th Annual Celebration – Aug O2 6D3 Maddock, ND

CANCELLED Survival Clinic Fly-In Aug 15 to Aug 16 3VO Custer State Park Airport Custer, SD Kulm Windfest – Aug 15 DO3 Kulm, ND

CANCELLED Williston Fly-In and Airshow – Aug 15 XWA

Milnor Fly-In BBQ – Aug 23 4R6 Milnor, ND

#### September 2020

CANCELLED International Peace Gardens Fly-In – Sep 07 Dunseith, ND S28 - Dunseith

Hettinger Fly-in Breakfast 9-12-2020 – Sep 12 KHEI Hettinger, ND

Bismarck Fly-In Breakfast – Sep 13 KBIS

This summer and fall, it is recommended to confirm the upcoming events with local airports or organizers.



Save the Date!

UMAS has been renamed to FLY-ND Conference

March 7-9, 2021