

PIREPS

A bi-monthly newsletter for Nebraska pilots and Aviation Enthusiasts



Encourage and Facilitate the Development and Use of Aviation in Nebraska

PIREPS

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UAS at University of Nebraska

by Wayne Woldt

There is no question that unmanned aircraft systems (UAS) are gathering attention across the nation. It seems as though they are in the news every day. And while news stories tend to be quite interesting, and humorous, and others fairly serious, it is good to know that investigators at the University of Nebraska are actively working on a wide variety of UAS projects. These projects span the three primary missions of the University: research, teaching and extension, and demonstrating the capability of University of Nebraska faculty to pursue "state-of-the-art" research on emerging technologies. UAS activities span the three campuses of Omaha (UNO), Lincoln (UNL), and Kearney (UNK). This article highlights some of the unmanned aircraft projects that are currently underway or in the planning stage.

Flight of unmanned aircraft officially began at the University of Nebraska in September 2013, when the first FAA approved Certificate of Authorization (COA) was issued to Dept. of Biological Systems Engineering (UNL) Associate Professor Wayne Woldt. Wayne's research and extension programs are focused on UAS deployment for improved management of agricultural and natural resources. His research involves working with a team of faculty, in the Nebraska Unmanned Aircraft Innovation, Research and Education (NU-AIRE) Lab, on the development of a UAS-enabled methodology for early detection of moisture stress in agricultural crops. A single-engine fixed-wing UAS provides a highly mobile sensor platform that can be placed over fields in a dynamic manner, to gather real-time data on crop status, leading to enhanced insights and better management. Early stages of the research involve flight operations to characterize aircraft performance as a sensor platform. The safety component of Wayne's program seeks to develop a new beacon that can be used by UAS operators to provide an early warning to low-flying manned aircraft with directional information that UAS flight operations are being conducted in a given area.

Agricultural research involving UAS is also being pursued by Richard Ferguson, Professor, Department of Agronomy & Horticulture (UNL). Richard is a true pioneer in the use of small remote-controlled aircraft to observe agricultural systems, and was one of the first researchers to experiment in the use of cameras mounted on remote-controlled model aircraft. Richard uses UAS for research in crop stress. He and his team have used a variety of UAS platforms in research, including fixed-wing, single-rotor, and multi-rotor systems. Increasingly, there is interest from clientele in Nebraska Extension on the use of UAS in production agriculture. While Richard discusses his research with growers and their advisors, current regulations do not allow demonstration and training on UAS use for commercial agricultural purposes. Once regulations are in place allowing commercial UAS use in agriculture, he expects significant demand for Nebraska Extension to advise and train producers in UAS use.

Another area of emerging UAS research involves consideration of unmanned aircraft from a remote sensing perspective. Brian Wardlow, Associate Professor in the School of Natural Resources (UNL) and Director of the Center for Advanced Land Management Information Technologies (CALMIT) is preparing to pioneer UAS-based remote sensing approaches for monitoring plants, with application to crops and other vegetation types (e.g., grasslands). CALMIT does not currently fly a UAS, but anticipates the development of a major research and development track in agricultural and natural resource *cont. pg 6*



“Saving Time”

by Ronnie Mitchell, NDA Director

By now you've adjusted your body clock and adapted to daylight savings time again! The first weekday after setting my clock ahead one hour, I had to get up at (new time) 4:15 am for an early morning flight. That was difficult; but after getting showered and dressed, I was on my way and arrived early for my show time of 6:00am. Guess I saved some time, but I know where it went. One hour's less sleep the previous night.



What keeps you awake at night? I've been thinking about that, and it's mostly about the FAA reauthorization bill that has now been shelved in the House Transportation Committee due to 93 amendments, which would have made it completely different than intended by the committee. Now the Senate has their version of the bill, and it doesn't include the feared ATC modernization that most likely would have created user fees for all aviation.

By the time you read this, the FAA funding authorization that would have expired by the end of March most likely is on a Continuing Resolution (CR). That will fund the FAA at 2015 levels for 3-4 months, and then another CR will probably take place, followed by passage of the funding authorization in 2017 under a new administration.

It is difficult to accomplish long-term goals with short-term funding! Planning is limited and construction at your local airports may be delayed due to the uncertainty of the FAA Airport Improvement Program (AIP). I can't enough stress how important our system of airports is to the economic vitality of this state. Funding is something we all require, and you need to let your elected officials know that airports are important and need funding just like everything else.

Saving time? Yes, we can save time if we go about it properly and through the appropriate channels to get things done.

Lastly, one of our commissioners, Doug Vap, just completed 15 years on the Commission and will be missed. Doug has been instrumental in helping create and sustain our great system of public use airports in Nebraska. A native of McCook, Doug and his wife Mary recently sold their home and will be moving to Colorado where Doug has a brother and son whom they can now visit more frequently. We here at the Department wish Doug and Mary the best and hope they will stay in contact as this has been a long and fruitful relationship.

Be Certain!

by Jerry Tobias

I had the privilege of flying the E-4B, a highly modified Boeing 747-200, at the end of my twelve-year Air Force career. It was a fascinating, challenging and very rewarding assignment

Even our check rides were interesting and unique. On one check ride, for example; we took off from Offutt AFB and proceeded toward Indiana. About halfway there, the evaluator informed me that we were now to land at an Air Force base in Kansas.



The pilot in the right seat immediately began obtaining a new clearance, while I pulled out the approach charts and other data that we needed for our new destination. The weather was great that day, and everything went well as we headed toward Kansas. As we contacted Approach Control for the arrival area, the controller said, "The base is at your two o'clock position. Call when you have it in sight." The other pilot told me that he had the airport, and asked if I wanted to report it "in sight".

I was not familiar with the area, though, and I could not see the airport well from the left seat. Plus, a voice inside of me strongly urged, "IF YOU ARE NOT CERTAIN, DON'T DO IT!" So, I elected to stay with Approach Control for further vectors. That was a great decision, because the other pilot was looking at the local municipal airport, NOT the base. If we had cancelled with Approach Control, we would have turned toward the wrong airport. That is never good, and certainly not good on a check ride! Thankfully, we continued with radar vectors, made an uneventful low approach at the Air Force base, and quickly departed the area.

One aviation safety principle that must never be compromised is "DO NOT IGNORE, ASSUME OR WONDER; ALWAYS BE CERTAIN!" Just think how many incidents and accidents could have been avoided if pilots would have confirmed that their gust locks had been removed. Or that their CG was within limits. Or that they were on the correct taxiway. Or that they had sufficient runway length available. Or that they correctly understood the MEA or MDA. Or that they were stabilized and everything was "right" before continuing the approach. Or if maintenance technicians would have confirmed that every repair or inspection step was actually completed and/or accomplished exactly as specified.

Being certain is first an attitude. That attitude then leads to never taking shortcuts, to following SOPs, to clarifying ambiguities, to listening to your doubts, and to verifying and resolving every bit of uncertainty. And that all leads to better maintenance, to safer flights and even to better check rides. There's just no doubt about it!



Know Your Systems

by Dan Petersen

FAASTeam Program Manager

Several years ago in Nebraska, a pilot with a new multiengine certificate experienced the deafening silence when both engines quit. If both engines quit in a multiengine airplane it means one of two things. Either the pilot experienced extremely bad luck and both engines simultaneously failed; or, as in this case, both engines



were starved of fuel. This pilot's misfortune did not end there. He was able to get one engine restarted but not the other. He did not feather the propeller of the inoperative engine. The drag of a windmilling propeller and his desire to maintain altitude got him too slow, until he ran out of rudder travel. The operating engine, developing full power, rolled him inverted in a Vmc rollover. He was so low to the ground, that he caught a wingtip, cartwheeled and came to rest inverted. The pilot escaped the aircraft, which caught on fire. Unfortunately, his passenger perished in the accident.

Of the many things we as pilots need proficiency in, one is a thorough knowledge of our aircraft. We need to be very familiar with systems, limitations, and procedures. In this case the pilot was not familiar with any of these. The investigation revealed that the pilot tried to correct a fuel imbalance by crossfeeding the left engine on the right main tank. In this case both engines were feeding from the same right main tank. Two thirsty engines quickly depleted the right main fuel tank. When both engines quit, the pilot switched the left fuel selector to the left tank and the left engine restarted itself. He did nothing to the right fuel selector, leaving the right engine unpowered. The aircraft had fuel in both auxillary tanks and the left main fuel tank.

When we graduate to bigger and faster airplanes, the systems, limitations, and procedures get more complicated. Our responsibility is to be completely familiar with them. As instructors, it is our responsibility to make sure students understand them. The pilot involved in this accident did not understand how to get fuel from three other tanks to the failed engine. He also did not understand the fuel system limitations for the Baron. Takeoffs and landings are on the main tanks only. He could not land on the main tanks because he never switched to the auxiliary tanks after takeoff and depleted those tanks first. Crossfeed operations in the Baron are for emergency use only. Procedures go hand in hand with the limitations and systems knowledge. He clearly did not understand cross-country procedures with a twin-engine airplane.

The moral of the story: be the master of your airplane and know it well. Stay alert and be safe. Hope you have tailwinds, except for landing.

SPEED

by Scott Stuart

Not too many years ago, over breakfast with a group of flyers, one of the men was commenting on the TAS he got in his V35B Bonanza running lean of peak. So proud, 155KTAS seemed to make him happy. Across the table from me, a beaming Mooney M20 pilot smiled as he was also seeing 155KTAS, but on even fewer GPH, running rich of peak. His comment I shall never forget: "We have these things to go fast!" I have done the math a few times, and for about 2-3 gallons per 350NM trip, I can get there 7-11 minutes faster than my fellow Bonanza pilot. No big deal, unless you hear Nature calling!



Most of us flying today have a glorious thing in our planes—a moving map of some kind. Panel mounted, yoke mounted, or the iPad in your lap, they show us where we are in space. Nope, don't ever want to go back to holding over Panny intersection using two VOR's tuned to two different stations! How the heck did I ever do that? Loren Hansen, job well done sir! As a result of this marvelous technology we can fly safer than ever before, with increased situational awareness. Back to speed.....

Just this March, I flew out to York for their fly-in breakfast. The wx was perfect: cool, calm, sunny. I was one of 37 planes I counted on the ramp that morning, and there were ten on the TCAS all going there while I was enroute. It was busy. I heard homebuilts, RV's, Cessna 172's, a Saratoga, and everything in-between, plus my one-and-only Bonanza. Since we had no tower to sort us out, which we didn't need, it was important to know the speeds of the other planes enroute and landing in York. Why? To see how each of us would fit in for the sequence to land. I was overtaking at 155 KIAS, so I slowed to fit the swarm. Heads up, eyes out was the order of the day for sure; and knowing speeds of the other planes. A C152 might be seeing 90 kts, a C172 110 kts, and so forth. When a C152 reports 10 mile east, that means they will arrive in about 7 minutes. Once you know who is who, and where they are, in your mind you can figure out who is #1, #2, and so forth. The moving map will help you find the place, but the brain and understanding relative motion is the key to success whenever there is more than one plane heading to the same runway. To do that, it is imperative to have a good idea of what speeds your fellow pilots are flying. Ask if not sure. You can also "guesstimate" the landing speed, too: 1.3X stall is the "book". Add a knot or two and you can "see" what you need to do to allow proper spacing for the flyer ahead.

Go fast, have fun, live large. Works for me, but to minimize the belly knot when in traffic, know your speed, the other guys/gals speed, and create a 3D vision of who, what, and where. Once you do this, life is but a plate of pancakes!!!

Gear Down and Locked?



Night(mare) IMC Upset

by Dick Trail

Denver Center: "N11KT (Not actual tail number) are you OK?"
My former student: "Not really but I'm working on it!"

Denver Center: "N11KT you are cleared to one one thousand and cleared on course. Cloud tops reported one zero thousand."

It was a night IMC upset. The scenario that strikes fear in any flight instructor's heart. Did I prepare him adequately to overcome disorienting clues from the brain and fly the airplane strictly by instruments no matter what our wonderful brain's mental picture is feeding our senses? Bravo! My star pupil relayed to me how it worked for him during our last flight review together.

Any long-time flight instructor has had one. A type "A" personality 'go-go-go' student. Lets get 'er done now! A well-funded PhD, he purchased a very capable six-place 300-horse steed as soon as he'd earned his private. Then he earned his instrument license and was ready to take on the world single pilot no matter what came.

It had been a long day tending to business in the largest city along the front range of the Rockies. Arriving at the airport he found the lineboys had ignored his instructions to put his steed, now covered with a thin sheet of ice, in a hangar. They pulled it into a heated hangar to remove all contamination from the surface. By then it was dark and the ceiling was down to maybe 500 feet. Oh well, file and launch as the forecast for home, on the flat plains, an hour and a half to the east, was do-able.

It was going good hand-flying the climb as is his practice. Then Center called with rerouting instructions. He engaged the autopilot to write and read back his new routing. Oops! Why is the attitude indicator showing a right wing low turn, pitched down 30 degrees or so? It feels straight and climbing like when I last looked. The old instructor's command ringing in his ears, "Fly the instruments! Fly the instruments!". Wings level, back on the yoke, now the nose is too high and we are climbing, airspeed decreasing. Fly the instruments, forget what my mind is telling me and the autopilot is obviously not working.

We flight instructors prepare our students the best we know how. The license to fly is the license to learn, so says Rob. Sure, my former student could have made the decision not to go, but he did go, and he survived a dramatic upset. It makes my knees weak to think about it, but I'm proud he survived the tough situation and will judge better in the future. Lessons learned!



18 Acres

by David Moll

When I sent my first drone article for PIREPS, Rod sent me back a note that something wasn't right, noting discrepancies between my facts and an Air Traffic Organization Policy letter N JO 7210.891. This Air Traffic policy was dated November 25, 2015. I sent him a copy of a recently approved drone exemption from FAA Section 333 for his review. It was interesting to compare the differences between the two, plus how they have affected drone operations.

Page 1, paragraph 7 of the FAA Policy letter states that no person may operate a drone, including tethered drones, outside of active restricted, prohibited, or warning areas in the NAS without specific authority. However, as a hobbyist, you can fly a drone at or below 400 feet if you don't fly near people, stadiums, airplanes, or for commercial purposes. It stands to reason that many of these self-taught drone pilots don't know anything about airspace, the FAA, aviation safety or the policy letter, and may not care. The end result of this behavior is the evening news continuing to have story after story on violations of common sense, as well as the conditions outlined in the FAA's Policy Letter.

Conversely, FAA Section 333 is an avenue for licensed pilots to be approved for commercial operation of drones. The pilots are required to have current BFRs and therefore tested on airspace and knowledge of the FARs on a regular basis. If they violate these FARs, a loss of license could be the penalty. Approvals through Section 333 can take 6 months or more. The long term affect is that Section 333 has all the earmarks of over-regulation based on the poor behavior of the non-pilots. Here are two examples:

The title of this article is "18 Acres", for a good reason. One of the Section 333 requirements is to stay 500 feet from any house, vehicle or person unless there are barriers in place to protect persons from debris in the event of an accident (or prior permission is given). I used a Google search to figure out how big an area 500 feet in any direction is (a circle). The formula is $500 \times 500 = 250,000 \times 3.141592 = 785,488$ sq feet, or 18 acres. Therefore you must have protection or permission, from every person within this 18-acre circle before you start. This is an impossible restriction to comply with if you plan on doing any commercial work in subdivisions with a drone, much less anything within most city limits.

A new requirement listed for Section 333 approval is that the operator must write a manual with specific instructions on how to protect the same residents who hired you to photograph their house or acreage. Seems as though looking up isn't good enough anymore, and now you need a manual to tell you how, when and why.

From the Editor: New FAA clarification is due in June. Counterpoint will run next issue.





Crosswind Time

by Lee Svoboda

I am back. I left clear skies, light and variable winds, 85 to 90 deg temperatures, and spring preseason baseball. The flight from AZ through NM, TX, OK, and KS was smooth. Even over the mountains. However, as soon as I hit the Nebraska border, turbulence set in and I had to apply aggressive crosswind control when landing at Millard. The next morning I got up to low ceilings and visibility. But I am GLAD to be back.



My encounter with the winds reminded me that, if you are going to fly in NE, you better know how to handle winds. As an examiner, part of my responsibility is to evaluate an applicant's ability to handle winds during takeoffs and landings. Out of the Practical Test Standard (PTS), an applicant is to "calculate/determine if the crosswind component is above his/her ability or that of the aircraft's capability." It is easy to determine if the crosswind component exceeds the published limitation or demonstrated crosswind component of the aircraft. However, only the applicant knows their ability to handle a crosswind, and the examiner finds out during takeoff. If the examiner takes control of the aircraft or the aircraft ends up in the weeds, the applicant has attempted a takeoff in a crosswind which he/she could not handle. Exceeding the aircraft limitation or the applicant's ability is unsatisfactory, resulting in the issuance of a disapproval notice. Exceeding the demonstrated crosswind component of the aircraft may not be a disqualifying act if safely handled, but it does demonstrate poor risk management.

When evaluating landings many of the same objectives apply. Applicant and aircraft limitations apply, and other factors are evaluated as well. Airspeed control, WITH GUST FACTOR APPLIED, and touchdown criteria are evaluated. In my experience, I find many applicants do not understand gust factor. Normally, we consider gust factor applied to be one half of the gust. For example, a wind of 10kts gusting to 20kts, is a gust factor of 10 and common practice is to add one half of the gust factor (5kts in this case) to the approach speed. The thing that must be remembered is, just because additional speed is used on approach, the touch down criteria still applies. Touchdown criteria of 100, 200 and 400 feet within and beyond a selected spot on the runway still applies. It really makes things interesting.

For instructors and applicants, it is my opinion a private applicant should be able to comfortably handle at least 10 kts crosswind for takeoff and landings. Applicants for any other certificate should be able to comfortably handle the aircraft limitation or demonstrated capability. Remember the gust factor! However, in my estimate, good risk management would dictate that, on practical test day, the limitations not be pushed.

Technology in the Cockpit

By Taylor Young

Technology has become an essential part of our lives. I find it astonishing that affordable consumer electronics, like the iPad, can do nearly everything a panel mounted GPS can. Tablets connected to external devices, like a Stratus receiver, can pick up inflight weather, traffic, and even synthetic vision that produces a 3D view much like Garmin G1000 units do. I realize that tablets can't truly replace certified GPS units for things like IFR flight. However, for VFR flight it can be a very valuable tool.

While having these tools in the cockpit is generally helpful, it isn't without risk. The biggest problem with electronic flight bags (EFBs) is distraction. As pilots, we have to make sure that flying the airplane and collision avoidance are top priorities. One rule of thumb I follow is the 10-20-30 rule. Out of every minute, spend 10 seconds inside scanning the instruments, 20 seconds on outside ground references, and 30 seconds scanning for traffic. These intervals are averages and I don't spend more than a few seconds on each task.

I am currently working as a flight instructor. One issue I think about is whether or not to allow students to use EFBs. My initial thought is that it may be an unnecessary distraction. On the other hand, many pilots will be using these devices after earning their certificates anyway, so why not introduce it early in their training? They can be taught how to properly manage an EFB rather than try to figure it out themselves later. I didn't use an iPad until after I got an instrument rating. I wanted to make sure I learned using paper charts.

One of the first times I used my iPad to navigate, it failed on me. After I secured the airplane at my first stop, I sat the iPad on the dash and ran inside to use the restroom. Upon my return, I noticed it displayed an overheated warning. I can't believe I thought it was a good idea to place an iPad on a black dash during a hot summer day. Luckily I had paper charts and a proper preflight briefing. The key lesson I took away from this mild incident was never to rely on one particular item. I was taught this during training and knew it at the time; it was just reinforced that day.

From the Editor: NDA, in partnership with the University of Nebraska-Omaha Aviation Institute, selected the top three articles from students of the Fall 2015 Aviation Writing course. This is the third article chosen. Articles by future classes will periodically be selected for publication to provide an opportunity for them to participate as the next generation of aviation professionals.



UAS & UNL cont. from pg 1

monitoring. CALMIT views the development as a high priority because UAS are anticipated to fill a gap for acquiring spectral imagery over cropped fields and other landscapes (such as grasslands) that complement current spectral observations from the ground, aircraft, and satellite-based sensors. This research effort also involves Art Zygielbaum, Research Associate Professor in CALMIT, who observes how plants handle excess energy through their photosynthesis processes and how they react to lack of water, nutrients, or biotic/abiotic contamination. This research requires measurement several times per day, and UAS can allow him to obtain data more frequently and cover a larger area than is currently possible. CALMIT anticipates integrating a UAS-based remote sensing component into a field course being developed for students and professionals throughout the world.

One of the key enabling technologies for UAS involves complex computer algorithms and integrated autopilot systems that stem from advances in computing. Carrick Detweiler, Assistant Professor, and Sebastian Elbaum, Professor, both in the Department of Computer Science and Engineering (UNL), and founders of the Nebraska MoBile Unmanned Systems (NIMBUS) Lab, focus on development of software and systems for UAS to increase their robustness and reliability when operating close to the environment. This extremely challenging area of R&D is taking NIMBUS to the leading edge of UAS innovation. The next generation of UASs, however, will do more than simply observe. Carrick and his team are developing flight operations with UAS that are capable of a diverse array of missions, such as obtaining water samples, or precisely surveying crop systems by flying extremely close. Also wireless power transfer systems that enable UASs to charge sensors in remote locations, and developing software that can automatically detect and correct system errors to reduce risk and increase safety of UAS. In addition, Raj Dasgupta, Professor of Computer Science (UNO) is pursuing unmanned aircraft research from a computer science perspective. Raj leads the CMANTIC lab and is interested in multi-robot systems involving integrated UAS and ground robots for rapid response in critical missions including using UAS teams, or swarms, to perform complex operations (e.g., formation flight) in denied environments (CODE), agricultural applications (e.g., aerial vegetation survey) and civilian applications (e.g., crowd/traffic management via aerial surveillance).

Unmanned aircraft systems can be found at the nexus of technology and aviation. Terry Gibbs, Director of the Aviation Systems Management Program (UNK), is pursuing research into the structure of a statewide emergency management information-gathering network. It involves a per-county presence of UASs capable of gathering information in the form of images, infrared, chemical sensors, and radiation. This system would be rapidly deployable by local emergency management personnel with the capability of having the information uploaded in real time. In addition, the UNK Aviation Systems Management program envisions utilizing

UAS for operator training as well as establishing a center for the integration and management of UAS operations into the national airspace system.

Adam Houston, Associate Professor of Earth and Atmospheric Sciences (UNL), has been involved in atmospheric science-focused missions using UAS since 2007. Dr. Houston and his principal collaborators at the Research and Engineering Center for Unmanned Vehicles at the University of Colorado, Boulder have been responsible for a number of firsts in the application of unmanned aircraft to atmospheric science including the first ever sampling of a supercell rear flank downdraft in 2010 during the second Verification of the Origins of Rotation in Tornadoes Experiment (VORTEX-2). Adam is also the co-director of the UAS and Severe Storms Research Group, a consortium of public and private sector collaborators led by UNL and the University of Colorado that share an interest in using UAS to study severe storms.

A particularly interesting area of UAS research and teaching is being pioneered by Matt Waite, Professor of Practice in the College of Journalism (UNL). Matt is interested in teaching students how to use UAS to report news, and the potential legal, ethical, and safety issues in using UAS in journalism.

It is clear that faculty at the University of Nebraska are embracing UAS research and education, and that their passion is "taking off" with many new science and aviation frontiers to be explored. With current and emerging UAS research and development, combined with the University of Nebraska's potential to be a leader in agricultural and natural resources applications at the national level, administration at the University of Nebraska realizes that it is important to make sure all UAS activities are conducted in a legal and ethical manner. Toward this end, the President of the University of Nebraska has asked that a system-wide UAS policy be developed. This policy development process is currently underway, and the University can be applauded for reaching out to a diverse array of committee members, charged with establishing a reasonable policy that minimizes barriers, while assuring the safety of the national air space and people/property on the ground. The university looks forward to working with Nebraska aviators, as well as partners and innovators, to advance the safe and beneficial deployment of UAS across the beautiful skies of the Cornhusker state.



Matt Hedrick, Wayne Woldt, and George Meyer (l-r) look over a fixed-wing unmanned aircraft prior to flight.
Photo courtesy of NU-AIRE Laboratory, University of Nebraska-Lincoln



WAI Convention

by Madeline Sullivan

Women in Aviation, International (WAI) is a non-profit organization dedicated to the encouragement and advancement of women in all sectors of aviation. In 1990, Peggy Chabrian saw a need to gather like-minded women in aviation to facilitate relationship-building and networking in the aviation industry. Four years later, this gathering had grown into an annual conference and WAI was officially organized. This year, WAI celebrated their 27th consecutive conference at the Gaylord Opryland Resort and Convention Center in Nashville, TN. Attracting members from 16 countries, 170 organizations and corporations, and nearly 5,000 individuals representing students, professionals, and enthusiasts, this conference is now one of the largest networking and hiring events in the United States. As of March 12, 2016, WAI officially recognizes 102 globally registered chapters and over 13,000 active members, with participation from 63 countries.

I had the privilege of attending my second WAI conference as President of the University of Nebraska at Omaha's WAI Maverick Chapter, along with 12 other chapter members. One of



UNO Delegation at WAI National Conference

our members, Joel Montoya, received the American Airlines Veteran's Initiative Scholarship (est. value of \$7,000). Women in Aviation began awarding scholarships 20 years ago. Since then over \$10 million in scholarships were awarded to deserving men and women belonging to the organization.

This year alone, 126 scholarships were granted totaling \$661,234. These scholarships

are available to male and female members who have an expressed interest or background in military aviation, aerospace engineering, dispatching, flying, aviation management, aviation maintenance, and various other aviation sectors. Examples of contributions include monetary awards, all-expense-paid travel to the annual conference, and Boeing 737 type ratings. Scholarships are awarded at the annual conference, which typically is held in March, in honor of Women's History Month.

At the conference, one can expect to find over 150 exhibitors and an impressive lineup of keynote and educational speakers. Some of this year's guests included Robert "Hoot" Gibson (Astronaut/Pilot), Secretary of the Air Force the Honorable Deborah Lee James, and FAA Administrator Michael Huerta.

Becoming a member of WAI is a tremendous way to gain access to a wealth of funds, knowledge, and connections. For more information about how to become a member, or join a chapter near you, please contact Madeline Sullivan at madeline.sullivan@unomaha.edu, or visit WAI.org.

Private Pilot Training Fund Opportunity

Through the generosity of members of the Lincoln aviation community, this fund is a fantastic opportunity exists for a graduating Lincoln high school student to obtain their Private Pilot Certificate.

The fund is intended to cover tuition for at least one student attending flight school, with plans to become a pilot. Any accredited flight school in the US will be suitable for attendance. Funds will be awarded to the student or the flight school upon the student's admission to the program. The recipient will be selected by the Foundation for Lincoln Public Schools based on the recommendations of the Lincoln North East High School Principal.

- Graduating senior from any LPS school
- Preference given to female students
- The donor strongly recommends that the student train in flight school 6 days per week and complete the program within 60 days
- The donor is willing to meet with the student to help initiate relationships with the flight instructors. For more information contact Dr. Kurt Glathar, Principal of Lincoln NE High School at (402) 436-1303 or via email at glath@lps.org. You can also contact Karon Tarletsky of the Foundation for Lincoln Public Schools at (402) 436- 1612, or email at ktarlet@lps.org.

PILOT CERTIFICATIONS

The list of achievements from 19 Jan, 2016 to 14 Mar, 2016.

Alderson, Collin J.	Private Pilot	North Bend, NE
Broz, Bradley D.	Private Pilot	De Witt, NE
Burgess, Roy	ATP (2015)	Lincoln, NE
Busskohl, Alexander W.	Private Pilot	Norfolk, NE
Christoffersen, Thomas R.	Commercial Pilot	Omaha, NE
Dangberg, Dennis C.	Private Pilot	Wayne, NE
Lord, Justin T.	Private Pilot	Bellevue, NE
Oswald, Michael A.	Private Pilot	Shickley, NE
Preston, Nicholas	Private Pilot	Bellevue, NE
Ray, Tracy D.	Private Pilot	Kearney, NE
Rochier, James D.	Private Pilot	Bellevue, NE
Rohlfs, Spencer A.	Private Pilot	Omaha, NE
Turner II, Barry	Instrument Pilot	McCook, NE
Wunderlich, Mark R.	Commercial Pilot	Omaha, NE

Names are provided by the Lincoln FSDO. Not all certificates for Nebraska pilots are processed there. Pilots who work with DPE's in other states are processed in the home state of the DPE. For those instances, please submit your achievement to us at aero.pireps@nebraska.gov. We want to ensure you are recognized for your hard work!

Visitors to Nebraska

Do you have pictures of unusual visitors passing through the state? Send your pictures to aero.pireps@nebraska.gov and we may include them in future issues.

PIREPS

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Events Calendar

- York Airport (KJYR), EAA Chapter 1055 Fly-in breakfast (free-will donation) on the 1st Saturday of every month, 8:00-10:00.

-Crete Airport (KCEK), EAA Chapter 569 Fly-in breakfast on the 3rd Saturday of every month, 8:00-10:00.

- 9 April, International Aviation Art Contest ceremony, NE Air National Guard facility. For more information, contact David Morris at david.morris@nebraska.gov or 402-471-2371.

- 1 May, Arbor Day Fly-In Breakfast, Nebraska City (KAFK). 08:00-Noon. Contact Laura Liesemeyer, Nebraska City Jaycees, at 402-969-0211 or 402-874-1200.

-28 May, Memorial Service & Fly-over, Fremont Airport (KFET). Names in memory of Fremont pilots will be read beginning at 10:00am. Contact Kyler Nelson at 402-721-8924 for more information.

- 11 June, 24th Annual Nebraska State Fly-in & Airshow, Cozad NE (KCZD). For information on sponsorship, exhibitor, and vendor opportunities call 308-784-3868 or email info@mid-stateaviation.com.

-25 June, Hastings Airport Authority Fly-in Breakfast (KHSD). Pilots eat free. Contact Aaron Schardt at aschardt@outlook.com or 402-363-1526.

New KLNK Tower hours

Beginning May 15, Lincoln Air Traffic Control Tower will reduce hours of operation to 06:00am to 10:00pm. For questions contact John Hill, KLNK Air Traffic Manager at 402-474-3011.

Send us your comments!

PIREPS is undergoing changes to the content presented to the Nebraska Aviation Community. We want your feedback on what type of content best serves you, the aviation community. Make your aviation voice heard! Please send us your questions, comments and ideas to: aero.pireps@nebraska.gov or call 402-471-7951.

Thank you Commissioner Vap!

Nebraska Aeronautics Commissioner Doug Vap of McCook NE completed his appointment to the commission on March 1, 2016. First appointed a commissioner in 2001, he served as the Chairman of the commission in 2005 & 2012. His position is now filled by new Commissioner Dick Trail. Please join us in extending our thanks and best wishes on a job well done!



NE Aeronautics Commissioner Doug Vap