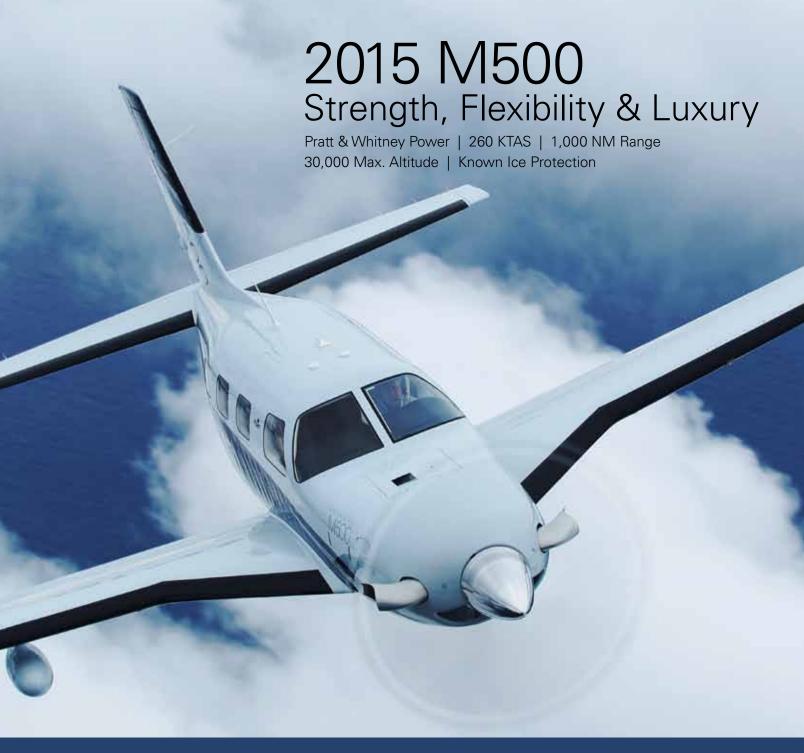


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More meaningful tests

For years, passing FAA knowledge tests has been a hurdle that pilots must jump—almost unrelated to the rest of the training process and full of questions about equipment and procedures today's pilots were unlikely to encounter. But new airman certification standards developed by industry and the FAA are making the tests part of a more integrated and systematic approach to pilot certification. And while the new approach may not make passing the knowledge tests easier, it will make the whole experience more meaningful.

Gone are questions about outdated topics including automatic direction finder/ nondirectional beacon (ADF/NDB); radar



summary charts; the En Route Flight Advisory Service (EFAS); medevac; and transcribed weather broadcasts (TWEB). The FAA has also deleted questions that required the use of non-standard scales for measurements or calculations, and questions that required pilots to interpolate across multiple charts to determine weather or aircraft performance.

AOPA has played a leading role in bringing about these changes, and we think they're good news for pilots. We even chaired the FAA's Airman Certification System working group that drafted the new airman certification standards for private, commercial, and instructor certificates, as well for the instrument rating.

We believe that the knowledge test for any certificate or rating should be relevant to the way we really fly. It should also be an opportunity to deepen a pilot's understanding of important topics, not a memorization game.

To that end, the FAA has added new codes for each question topic area. Those codes will appear on test reports for missed questions so pilots can easily review those subjects. Eventually the new coding system will apply to all testing topics, covering both the knowledge test and the practical test tasks, linking the two tests and giving pilots another way to spot weaknesses in their understanding.

We want pilots to get relevant training and useful knowledge, skills, and tools, and these new tests are a big step in the right direction.

Mark R. Baker President & CEO, AOPA

APRIL/MAY 2015

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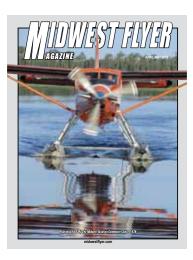
ON THE COVER: Pilot Doug Burton of Wilderness North, Thunder Bay, Ontario, taxis Wilderness North's 1954 de Havilland DHC-3T Otter to the dock at Miminiska Lodge in northern Ontario, Canada. The aircraft's original radial engine was replaced with a turbine engine in 1998. Miminiska Lodge is located 196 nm north of Thunder Bay, Ontario, and is the site of the "Canadian Fishing Fly-Out" held each year in August. The first two trips for 2015 have sold out, so the lodge is now booking two additional trips, August 13-16, and August 13-18, 2015. For trip details and special group rates, email **info@MidwestFlyer.com.** For reservations, contact Wilderness North at **1-888-465-3474**

(www.wildernessnorth.com). "Whether on wheels or floats, this Canadian fishing trip is for you!" See article beginning on page 36.

Dave Weiman Photo

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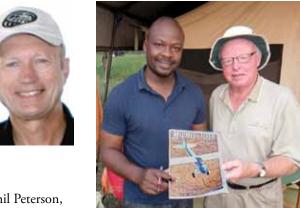
Midwest Flyer Magazine Readership Expands To Africa

by Dave Weiman

he publishers of Midwest Flyer Magazine are always proud to hear when someone enjoys reading the magazine, no matter where they might live.

Recently, subscriber, Phil Peterson, of Oregon, Wisconsin, took a copy of the magazine with him on a trip to eastern Africa to read on his long airline flight, and to share it with pilots he might come across on the trip. Phil has been known to promote Midwest Flyer Magazine any chance he gets, and we appreciate his efforts.

One aspiring pilot Phil met was Cosmas Anthony Minangi of Arusha, Tanzania. Upon Phil's return, he received the following email from



(L/R) Cosmas Anthony Minangi and Phil Petérson.

Cosmas:

Hi Philip. How are you? How is the family? On my side, all is fine and (I am) thinking about (our visit) during your tour.

I was trying to show my pilot friend (the copy of) Midwest Flyer

Magazine (you gave me, and) he liked (it) so much. It is very nice, (and I am) still reading (it) every day before I go (to) bed.

Thank you so much, again, for

How is flying? I really want to do it if God wishes. (I am) still saving for it. I know (it) is difficult, but I believe God will (help).

How is flying over there? I hope you keep in touch. Your friend, Cosmas, the driver guide.

EDITOR'S NOTE: As a guide, Cosmas Anthony Minangi has climbed Mount Kilimanjaro 142 times, Mount Meru seven times, and OI Doinyo Lengai, "Mountain of God," 13 times. Anyone willing to help Cosmas realize his dream of becoming a professional pilot is urged to contact him at Cosmasminangitz@yahoo.com, or call +255757298123. Thank you!

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From Our Readers

Hello Harold: (To: Harold Green, Contributing Editor)

I read your very good article at my local FBO today (LVN), while I was waiting for my student to arrive. At the end of your article, you reviewed the options for Certified Flight Instructors (CFIs) to renew or maintain their certificates.

There is another option that you may not be aware of. According to AC61-91J paragraph 6e 3, if a CFI flies with, and approves, 15 hours of flight activities with at least five (5) different pilots who are enrolled in the FAA Safety Wings program within the previous 24 calendar months, the CFI can be renewed at the local Flight Standards District Office (FSDO).

It's almost too easy to be true, and strangely quite unknown.

Best regards,

Allen Alwin, CFI Lakeville, Minnesota FAA Safety Team Representative Minneapolis Flight Standards District Office

Allen:

Thanks for the information. Good point! I was not aware of that option. Now all of our readers know about it.

Harold Green, CFII Morey Airplane Company Middleton Municipal Airport – Morey Field (C29) Middleton, Wisconsin

Wisconsin Pilots Fly By Grand Teton National Park



A 1953 Cessna 180 Skywagon owned, restored and being flown by Archie Henkelmann of Janesville, Wisconsin at Grand Teton National Park near Jackson Hole, Wyoming. Henkelmann bought the aircraft in 1969 and has flown it extensively throughout the United States and Canada. Cessna introduced the Skywagon in 1953 as "The Businessman's Airplane," but the aircraft quickly gained a reputation for solid dependability and utility in the backcountry, and became known instead as the "Jack of All Trades." The restoration paint scheme on the Cessna 180 Skywagon pays homage to the original 1953 Cessna livery and was done by Randy Effinger of Central Aviation, Inc., Watertown, Wisconsin. Jim Freeman of Helicopter Specialties, Inc., located at Southern Wisconsin Regional Airport, Janesville, Wisconsin, updated the radios. Both Effinger and Freeman are former students of Henkelmann, who was an instructor of the aircraft airframe and powerplant program at Blackhawk Technical College in Janesville, Wisc

Jim Densmore Photo

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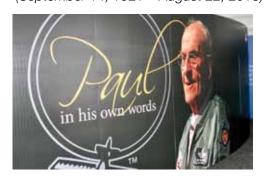
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Paulisms by Paul Poberezny

(September 14, 1921 – August 22, 2013)



aul H. Poberezny founded the Experimental Aircraft Association (EAA) in 1953 and spent a significant part of his life promoting aviation and fighting for the freedom to fly. Paul was an aviator and an aircraft designer. But, more than that, he was a leader.

With the permission of EAA and the Poberezny family, we are happy to present to you one of many "Paulisms" – actual quotations from Paul that embody his beliefs, his legacy, and his impact on EAA and its members. We hope you enjoy them in remembrance of this great man, and take his comments to heart.

WISDOM: "Through EAA, I've learned much more about people than I ever have about airplanes."

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Autopilot Glitches, Failures & Anomalies

by Michael "Mick" Kaufman



Michael Kaufman

n my previous column, I again addressed the issue of "icing," as did Greg Gorak in his excellent article. It was unfortunate that Wisconsin got to see another fatal GA icing accident since

that publication.

In this issue, I will cover "autopilot glitches, failures and anomalies"-- what to do in each case and why some of those things happen. Also in this issue, I will touch on the new Avidyne IFD-540 GPS navigator based on some recent flights, and do a full review in a future issue of *Midwest Flyer Magazine*.

Without repeating myself like a defective vinyl record, I need to say that if you should get into icing conditions of any magnitude, report it to air traffic control (ATC) without delay, and have a plan to get out of it ASAP. That plan may be a climb to VFR conditions on top or a descent to a lower altitude, if the air is warmer below as per Greg's article. I have been in similar conditions myself, and my lack of being assertive with ATC almost ended in disaster. I would like to mention that Greg Gorak was one of my instructors and mentors in the late 1960s, and I consider him one of the top aviation educators of our time.

Over the years, which I have been giving instrument and proficiency training, about one out of four pilots complain or have a comment on their autopilot. The manufacturers of autopilots have the responsibility to provide as many fail-safe features as they can in order to avoid crashing the airplane. One way to do that would be to make a heading and altitude hold autopilot only, but pilots and aircraft owners ask for much more. The autopilot in my Bonanza is an S-Tec 50, 10 APRIL/MAY 2015 MIDWEST FLYER MAGAZINE

and it does just that and does it well. It will not descend or climb with altitude preselect or intercept and fly a radial or glideslope or create a top of descent profile (TOD). Once I have established my aircraft on a VOR radial or GPS course, the autopilot will track it but nothing more.

I hand fly all of my transitions and approaches. When I made the decision to install a new autopilot in my aircraft more than 10 years ago, I had the option of going with a more sophisticated autopilot, but declined because it would cause me to become lazy and lose my proficiency in hand flying approaches.

Ask yourself this question: If I lost my autopilot in hard instrument meteorological conditions (IMC), could I safely fly an approach to minimums? If you answer "No" to that question, go and see your local certified instrument flight instructor (CFII), or come and see me and get proficient again.

Why am I so insistent that we be able to hand-fly approaches as these sophisticated autopilots rarely fail? The answer is, there are safety features built into autopilots to intentionally keep them from flying an improperly established approach or capturing a false glideslope. I will cover this later in this article.

If I were to try to list the issues in order of occurrence of mis-coupled approaches, they would be as follows:

Number one would be "pilot error. " Number two, "a bad vector. "

Number three, a true "autopilot problem" or "bad installation" or "set up" by the avionics shop.

The first issue of pilot error, and the most common problem, is not switching from GPSS mode to approach mode soon enough (call it buttonology). It is my recommendation when flying an approach, especially a full approach with a course reversal, to let the GPSS feature get you established inbound and then manually make

the switch to NAV or APP mode, depending on the autopilot.

There is a feature on the world's most popular navigator, the Garmin 430/530, to switch automatically from GPS to VOR/Localizer (VLOC) mode once established inbound on a non-GPS approach. The pilot can go to "preferences" and change this feature, but most units I see have this feature enabled.

Many pilots are not aware that when there is a change from GPS course guidance to VLOC, the autopilot will continue to fly the digital output signal coming from the navigator. If the pilot fails to switch to the NAV or APP mode on the autopilot, the system appears to work well until the final approach fix.

In the early days of GPSS, many pilots elected to fly the GPSS course, especially on Localizer-only approaches, which was not legal or the intent of the system. Garmin made a firmware update to stop the digital output on their navigators at the final approach fix on non-GPS approaches. The digital output will resume at the missed approach point to enable GPSS again while flying the missed approach procedures. When we wait too long to switch our autopilots to the NAV or APP mode or we get a bad vector, we have other issues to deal with.

If my memory is on track from previous research, the Air Traffic Controllers' Handbook states that a pilot must be vectored to intercept the final approach course a minimum of 2 miles outside the Final Approach Fix (FAF), or the pilot optionally may decline the approach. This is due to the fact that certain autopilots may not have adequate time to respond properly and couple.

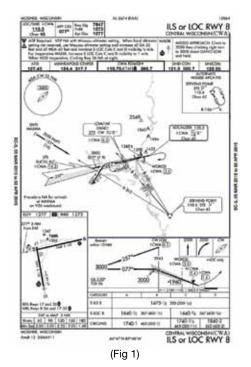
To explain some of these conditions, we need to remember that most of the autopilots were designed before we were flying in the precise GPS environment that we fly in today. If you refer to the Aeronautical Information Manual

(AIM), there is a mention of false localizer and glideslopes, which few people are aware of today because GPS navigation routes you to get established on the approach.

One of my favorite demonstrations of yesteryear was flying the VOR transition from the Stevens Point, Wisconsin VOR (STE) to the ILS 08 approach to Central Wisconsin Airport in Mosinee, Wis. (KCWA) (Fig 1). Once established on the 321-degree radial of the STE VOR (NAV-2), we begin to look for the localizer needle on (NAV-1) to come alive. When we see the navigation needle come off the peg, we know we need to turn to the outbound localizer heading of approximately 251 degrees to do the procedure turn. By not confirming our position with the outer marker or NDB, chances are we have intercepted a false localizer, which will take us outbound for a short distance and then finally disappear into infinity.

Each autopilot and navigator has different safety circuits to prevent autopilot missed coupling on approaches, and I will highlight these later. There are so many different autopilots in use in General Aviation that it would be difficult to cover every one in the scope of this article. If you have any questions on a specific model of autopilot, I would be happy to answer these via email or telephone.

To generalize, King autopilots must see a centered localizer or GPS indicator before the glideslope centers for capture. Century and S-Tec autopilots must see an active needle, and it takes time (usually between 15 and 40 seconds depending on model) before the glideslope will couple. A pilot should check the autopilot manual for specific requirements for doing an approach. I have seen some very unusual requirements on some autopilots for proper approach coupling. I found a very unusual autopilot while trying to do coupled approaches in an Epic. The autopilot would not capture the glideslope if the button pushing to do the approach and altitude hold were pushed in the wrong



sequence.

When you are on an approach and the weather is bad and you have some ice on the airplane, it is no time to learn how to use your autopilot or experiment. Rather than try to fix or adjust the autopilot, it is my recommendation to disconnect it and hand fly the approach, but only if the approach is salvageable.

Remember that the required procedure is to make a missed approach any time that either the localizer/GPS indicator or glideslope indicator should peg. On some autopilots, pressing the ALT or GS button multiple times will cause the autopilot to capture a glideslope that is already below the center. I cannot recommend this procedure as I have seen some rather steep descents to catch the glideslope, which result in an unstabilized approach.

The third cause of autopilot glitches deals with failure or improper installation, set up, or repair.

The most common autopilot problem usually involves brushes in the servomotors. The symptom for this



is overcorrection while making minor corrections in heading or altitude. The cure is to have the servo cleaned and new brushes installed. This is a minor fix if your avionics technician is willing to do it, but if he insists on sending it into the factory, the bill will frighten you.

Avionics technicians have a tough job trying to get all of the devices in an aircraft to talk to each other. This combination may have never been done before in your aircraft. There are so many different navigators and autopilots, and most of the technicians are not pilots who can test fly the aircraft upon completion of a complicated install and may not have any idea of what to expect in performance.

Many technicians will not get in an aircraft with a pilot aircraft owner, and I can understand that as well. Because of this, I find many avionics installs that are not done right, and the aircraft

owner does not know the difference. It may be a year or more before some knowledgeable pilot detects the problem.

One case I remember was having two GPSS units installed in the aircraft that were fighting each other to see which one would win. After disabling one of the units, the autopilot flew fine.

My recommended solution would be to include an in-flight checkout of the pilot/owner and equipment with the price of every major avionics installation by a flight instructor who is familiar with the expected performance.

Avidyne IFD-540 Navigator

Last month, I had the privilege of using an Avidyne IFD-540 navigator in an F33 Bonanza on a flight from Tucson, Ariz. to Edwards AFB in Calif. I plan on doing a complete review of this unit in my column in a future issue of *Midwest Flyer Magazine*, but I can tell you I have a very favorable first impression of the equipment.

The Avidyne IFD540 (and IFD440) FMS/GPS/NAV/COMs combine the best flight management system available, with a multi-channel digital VHF radio, in an easy-to-use plug and play design. Each provides VHF communication and SBAS/LPV precision navigation and are designed to meet the accuracy and integrity requirements for ADS-B as part of the NextGen airspace initiative.

The installation of the IFD540 in an aircraft that had a Garmin 530 previously takes about 2 hours. This saves thousands of dollars in labor. It is a slide-in replacement, and all of the devices that were connected to the 530 will work once the installer programs the box to recognize that equipment.

I find that the IFD540 is easy to learn to operate, especially for someone with Garmin GNS 480 experience. Victor Airways are included making flights on airways easy to program. You do not need to enter every waypoint along the airway. Every programming function can be accomplished by two methods, touch screen or a knob and button combination. This way the pilot can program a route on the ground using the touch screen, and use the knob and buttons while in flight when turbulence makes the touch screen method too difficult to use. Rumor has it that you will be able to communicate with the navigator and upload flight plans from Foreflight on your tablet via Bluetooth or WiFi. Look for a full review coming soon!!

I am looking forward to spring and better flying weather; I will gladly trade in-flight-icing for dodging thunderstorms. At least I know where the thunderstorms are and how to avoid them.

EDITOR'S NOTE: Michael J. "Mick" Kaufman is a Certified Instrument Flight Instructor (CFII) and the program manager of flight operations with "Bonanza/Baron Pilot Training," operating out of Lone Rock (LNR) and Eagle River (EGV), Wisconsin. Kaufman was named "FAA's Safety Team Representative of the Year for Wisconsin" in 2008. Email questions to captmick@me.com or call 817-988-0174.







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Ask Pete!

by Pete Schoeninger

Email your questions to Pete@Flvmilwaukee.com

Q: My mechanic told me that my airplane engine (Lycoming 160 hp in a 1979 Piper Warrior) is past recommended overhaul time at only 800 hours since



Pete Schoeninger

overhaul in year 1998. Isn't he nuts? Everybody knows those engines have a recommended Time Between Overhaul (TBO) of 2000 hours?

A: Your mechanic might be nuts,

but he is correct! Both Lycoming and Continental have calendar year recommendations of 12 years between overhauls, in addition to specific hours of service. Do a Google search for Lycoming (or Continental) recommended overhaul periods. This 12-calendar-year recommendation is not mandatory, unless you are operating an air taxi, or airline service. But an old engine with the same amount of hours as an engine with a recent overhaul, is not as desirable, thus worth less!

Q: I recently put \$20,000 in avionics into my 182, but I failed to raise hull coverage to reflect this increase in value. I had my airplane insured for a stated value of \$50,000. Now, I am sure it would bring at least \$60,000. A couple of weeks ago the airplane sustained light hail damage. My mechanic has inspected the airplane and suggests that

its airworthiness or safety is not affected at all. I then called my insurance company and an adjuster looked at the airplane. He offered me the stated value hull coverage (\$50,000 - \$1,000 deductible) = \$49,000 to buy the airplane from me. Or, he said he would write me a check for \$3,000 for the slight loss in value from the hail pings and I would keep the 182. What would you do?

A: A no-brainer to me, take the \$3 grand. Why lose \$10 grand on a sale to your adjuster? For your purposes, the airplane will be the same as it was before! Possibly it will be a hair faster. Ask any golf ball!

EDITOR'S NOTE: Pete Schoeninger is the aircraft sales manager and appraiser at Gran-Aire, Inc., Milwaukee, Wis. (414-461-3222).

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A New Pilot's Bill of Rights

by Mark R. Baker, President & CEO Aircraft Owners & Pilots Association

egislators in both the House and Senate recently introduced bills known as the Pilot's Bill of Rights 2 (PBR2) that could finally bring long awaited third-class medical reform and other protections. Within a couple of weeks of introduction, that legislation had earned 15 cosponsors in the House and 16 in the Senate—and more than 31,000 AOPA members had written to their elected officials asking them to



Mark Baker

show their support by becoming cosponsors themselves.

Whether or not you're an AOPA member, I hope you'll get in touch with your members of Congress and ask them to support the legislation. It's easy, quick, and important.

The GA community has waited too long for third-class medical reform, and this legislation could finally get it done.

Under PBR2, pilots flying recreationally in a wide range of aircraft would no longer need to obtain a third-class medical certificate. The bill would allow private pilots to make noncommercial VFR and IFR flights in aircraft weighing up to 6,000 pounds with up to six seats. Pilots also would be allowed to carry up to five passengers, fly at altitudes below 14,000 feet msl, and fly no faster than 250 knots. PBR2 also includes a provision to ensure that pilots can fly under the new rules even if the FAA fails to comply with the bill's

provisions 180 days after enactment. And while that's a top priority, it's not the only benefit the legislation offers.

PBR2 also would improve the notice to airmen (notam) program by establishing a rating system to prioritize notams, including TFRs in the program, and creating a repository to maintain the information in a way that makes it accessible to the public. That system would be considered the sole source location for pilots to check for notams. The legislation would also protect pilots from enforcement action if a notam is not included in the repository and prohibit enforcement of notam violations if the FAA hasn't finished the system within six months of PBR2 being enacted while providing an exception for national security.

To help pilots facing enforcement actions, PBR2 would ensure that data collected by contract towers and other outsourced FAA programs is subject to the same Freedom of Information Act requirements as data from the FAA itself. The exception would be aviation safety action reports, which are designed to prevent accidents by encouraging voluntary reporting of safety concerns by employees of FAA contractors.

The measure also would protect pilot certificates by preventing the FAA from requiring a re-examination of a covered certificate holder without clear evidence of wrongdoing or unsafe behavior.

I'm optimistic that we can get medical reform this year with your help. So, if you haven't taken action already, please contact your legislators and ask them to cosponsor H.R. 1062 in the House and S.571 in the Senate. The form to send is online at www.aopa.org/take-action.

When voters get involved, lawmakers listen.

Pilot & Former FAA Executive Named NTSB Chairman

WASHINGTON, DC – The U.S. Senate has unanimously confirmed Christopher Hart, a pilot and former Federal Aviation Administration (FAA) executive, as the 13th chairman of the National Transportation Safety Board (NTSB). Confirmation of Hart's appointment took place on March 12, 2015. Hart has served as acting NTSB chairman since April 2014.

Hart holds a commercial pilot certificate with instrument and multi-engine ratings. He has also served on the NTSB previously from 1990 to 1993 and since 2009. At the as FAA Hart served as deputy director for Air Traffic Safety Oversight and, before that, as FAA assistant administrator for System Safety.

During a recent talk at a meeting of the AeroClub of Washington in Washington, DC, Hart related that a great uncle, James Herman Banning, became the first African-American to receive a government-issued pilot's license in 1926.

At the same event Hart described how he has already instituted changes at NTSB, including an initiative to expand international safety cooperation during accident investigations involving several countries.

Hart holds a law degree from Harvard University and Master and Bachelor degrees in Aerospace Engineering from Princeton University. He is a member of the District of Columbia Bar and the Lawyer-Pilots Bar Association.



Airport Funding Front & Center At Statehouses Across The Region

News & Information You'll Want To Know In Ohio, Michigan, Indiana, Illinois, Wisconsin, Minnesota, North Dakota & South Dakota

> by Bryan Budds Manager, AOPA Great Lakes Region

think it's no coincidence that at the height of aviation conference season, six of the region's legislative bodies are considering changes to the way airports receive state funding and the way states provide matching funds for Federal Aviation Administration Airport Improvement Program (AIP) grants. Starting in the northwest, North Dakota's



Bryan Budds

legislature continues to move legislation increasing airport funds by augmenting existing aircraft registration fees. A bill to allow revenue from invested airport funds to be deposited in the airport fund has already cleared the North Dakota Senate. Together, these are common sense solutions to address the very significant airport infrastructure need in North Dakota and AOPA continues to work with the North Dakota Aviation Council and North Dakota Aeronautics Commission to achieve passage of a fair and equitable solution.

In neighboring Minnesota, two pieces of legislation addressing the taxation of "mogas" used in aircraft continues to progress. These bills, or 'files' as they are known in Minnesota, would ensure that mogas used in an aircraft is taxed at the appropriate aviation fuel rate of \$0.05 per gallon, rather than the \$0.285 per gallon that road fuel is taxed. Additionally, the legislation would require the revenue collected from mogas be deposited in the state airport fund, rather than the highway fund as is currently happening. AOPA is pleased to support the Minnesota Business Aviation Association on this legislation.

In Illinois, a bill to eliminate the State sales tax on aviation fuels and replace it with a flat \$0.10 per gallon excise tax, in addition to expanding an existing sales tax exemption for aircraft maintenance, has been introduced at the urging of the Illinois Aviation Trades Association with support from AOPA. This proposal is very similar to an aviation fuel tax reform achieved just two years ago in Indiana with one small

caveat... In Illinois, the revenue would be used to support airports. In Indiana, it is not. However, AOPA, working in conjunction with the Aviation Association of Indiana, is supporting a fix that would require all revenue collected from an aviation user to be used to support the aviation system.

Moving again eastward, Ohio's legislature continues to debate the most beneficial and equitable way to increase airport funding. Two pending bills would eliminate the State's existing 5.75% sales tax and put in place a reduced aviation fuel excise tax with the entirety of this new revenue being deposited in the state airport fund – providing a significant increase in funds available for airport projects in the state. The Ohio Aviation Association, AOPA, and several local aviation and community economic development organizations have signed on to support the bill as the Ohio legislative session kicks off.

Finally, Michigan again is preparing for a heated infrastructure debate across all modes of transportation as the legislature will have a vote to raise the statewide sales tax on all goods to 7% to provide funds for "transportation infrastructure." Sadly, to Michigan's legislators, transportation infrastructure means "roads," as the ballot proposal would not address any aviation needs, despite having several pieces of widely supported legislation before them in the previous session. But, AOPA, the Michigan Business Aviation Association, and the Michigan Association of Airport Executives are looking forward to a fruitful year where the issue of insufficient airport funding can be put to rest.

On the conference front, I've had the pleasure to attend the Michigan Airports Conference, the Upper Midwest Aviation Symposium, the Great Minnesota Aviation Gathering, the South Dakota Airport Conference and several others, including the Wisconsin Aviation Conference, to discuss these issues and all of AOPA's efforts to strengthen general aviation. If you are near one of these conferences, please stop by and say hello and support all the great organizations I have mentioned in this update. And, of course, plan to stop by the AOPA Regional Fly-In at Anoka County-Blaine Airport on August 23, 2015 to let me know your thoughts on this and any other issue impacting you and your flying!



PA CENTRAL REGIONAL REPORT

2015 Starts Strong...

News & Information You'll Want To Know In Kansas, Missouri, Nebraska & Iowa

by Yasmina Platt
Manager, AOPA Central Southwest Region

his year has started pretty strong for us in the Central Southwest Region. We are seeing a lot of good initiatives, legislation and events.

At AOPA's request, Missouri's Representative Keith Frederick introduced HB 263 to amend the state's existing Recreational Use Statute (RUS) to include aviation



Yasmina Platt

activities. HB 375 was later introduced by Rep. Joe Don McGaugh to further modify the existing RUS. A provision was also included regarding aviation as a recreational activity. We are currently asking for that provision to match the same wording included in HB 263 – simply "aviation activities." MO Senator Dave Schatz also introduced SB 377 this session to create a fly-away exemption and exempt out-of-state residents from paying the state's sales tax when purchasing an aircraft in Missouri, thus keeping more aircraft sales (and possibly aircraft maintenance and upgrades) in MO rather than seeing them go to neighboring states.

In Nebraska, we fully support LB 205 which would modify the existing Meteorological Evaluation Tower (MET tower) legislation to mirror the marking recommendations published by the Federal Aviation Administration (FAA) and include an enforcement provision to ensure that wind power companies comply with the law.

At the end of January, I traveled to Kearney and Lincoln,



Nebraska to attend the Nebraska Aviation Symposium where I made presentations on airspace at the pilot's safety seminar and about light sport aircraft (LSA) and the sport pilot certificate during the airport conference. While there, I also had dinner with Mark Musick, who wrote a book about Howard Hughes' secret life after meeting his late wife Eva McLelland. Very interesting!

Then, in early February, I spent a couple of days in Topeka, Kansas, meeting with legislators and participating in the Kansas Aviation Day at the Capitol. AOPA had a booth at the event and visited with several legislators and Governor Brownback about topics important to our membership.

On February 24, I also participated in Iowa's Transportation Day at the Capitol and met with several legislators regarding: 1) an exemption for flight schools and independent CFIs from provisions of an anti-fraud law that requires educational entities to obtain a \$50,000 bond and submit documentation to the Iowa College Student Aid Commission and 2) our objections to HSB 167 that would delete existing provisions of the Iowa Airport Zoning Act, create flight-safety hazards around airports, and threaten Iowa airport's ability to obtain FAA funding. While in Iowa, I also had the opportunity to visit the wonderful Red Oak Municipal Airport (KRDK) where I met with our Airport Support Network (ASN) volunteer, Duane Harris; attended their FAA Master Pilot Award presentations; and spoke at their pilot safety seminar.

Remember to mark April 21 on your (and your favorite co-pilot's) calendar: As part of the Iowa Aviation Conference, a pilot safety seminar and a Pinch Hitter course for flying companions, will be taught at 7 pm at the West Des Moines Sheraton.

And here is something else you can mark down on your calendar... the 2015 AOPA Regional Fly-ins. The closest fly-ins to the Central Region will be Minneapolis (KANE/MN) on August 22 and Colorado Springs (KCOS/CO) on September 26. FMI, visit

www.aopa.org/fly-in.

You can read more about the trips and legislation mentioned in this article by visiting

www.aopa.org/central-southwest-rm.

And, of course, you can always reach me at yasmina.platt@aopa.org.

Stay up-to-date with Yasmina
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Emergency or Just A Nail Biter?

by Harold Green

s aircraft performance and avionics technology forge ahead, we are confronted with training challenges to ensure that both



Harold Green

new and experienced pilots can keep up with both airplanes and avionics as they change. As an added concern, today there is a mix of old and new technologies, which can lead to confusion on the part of the pilot when the two do not agree. The result is that we need to upgrade emergency training to keep up with the demands of today's reality. This discussion presents some background and some suggested means of achieving this change. Later, articles will deal with other common training issues in advanced aircraft. By no

means are the suggestions herein the whole story. Without a doubt many instructors and students are already using these and other techniques.

For purposes of our discussion, a "nail biter" is considered to be any situation which causes a great deal of concern on the part of the pilot, but which the pilot eventually corrects. Nail biters can be the basis for a good hangar-flying story.

During initial training, we practice emergencies until we are totally sick of them. There are old standbys like engine out, cockpit fire, electrical fire, loss of electrical power, loss of control functions, loss of flight gauges, loss of vacuum, and just about anything else an imaginative, and perhaps, in the student's mind, sadistic instructor can dream up. Besides being required by the FAA, these are good to do because among other things, practicing them results in rote memorization, both

intellectual and muscle. Corrective actions become instinctive requiring no thought or analysis to accomplish.

Have you ever lost an engine in cruise because you forgot to switch fuel tanks? From experience, when this happens, most pilots will automatically switch fuel tanks, and the engine is running again before they even have time to think about what happened. Only afterward is the pilot aware of why the engine(s) quit.

The results of this type of training are obviously good and, where appropriate, maintain a place in the overall scenario of training. These early training emergencies are usually assumed to be sudden, catastrophic and

For example, the engine quits totally, rather than just losing power either partially or gradually. In actuality, sudden failures are the exception, not the rule.

By far the more frequent occurrence is a gradual change in condition,







FLIGHT TRAINING

which goes unnoticed until drastic action is encountered. If recognized early, corrective action could be taken and, at most, there would be a nail biter, but if allowed to progress, a genuine emergency can result.

One of the critical problems is *pilot overload* when working in this advanced environment.

As pilots move up the airplane and rating food chain, emergency training takes on different and more complex forms. Systems, including aircraft, avionics, and automation, all offer potential emergencies. In short, the more goodies we have, the more likely and the more complex the failures will be.

These failures require a deeper understanding of cause and more levels of activity, both mental and tactile, involving multiple steps of recovery. Most importantly, at this stage intellectual analysis becomes critical. No longer will a simple set of steps activated in a rote manner suffice. It becomes necessary to analyze several possible causes and choose reactions accordingly. In addition, some failures can be subtle.

The advent of technically advanced avionics systems has brought the complex world to what used to be non-complex aircraft.

In order to cope with these situations, significant training is required than in less equipped/simpler aircraft.

The airlines and military have long recognized the need for extensive additional training and have invested significantly in simulators, staff, and training time. Alas, such facilities are generally not available to most of us. Therefore, we need to find ways to compensate.

This discussion suggests some possible ways to increase effectiveness of emergency training in technically advanced aircraft. Due to the high quality of avionics and the level of redundancy involved, one of the biggest issues a pilot faces today is simply overload. Initially this is a nail biter, but due to potential errors, it can become an emergency of the first order.

One of the greatest issues confronting pilots today is the need to accomplish multiple avionics entry steps rapidly and without error. A simple thing like changing an instrument approach used to be a matter of selecting a new chart from the approach book and setting two or three frequencies in a set of knobs whose function never changes. With advanced avionics, that's no longer the case.

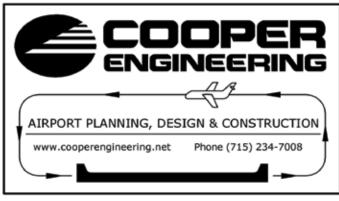
Now, with GPS, it is necessary to locate the approach, select the transition to the approach and/or select vectors for navigation. In order to do this, a multiplicity of entries must be made using buttons, which change purpose depending on what function is being accomplished. Further, the buttons to accomplish this are placed close enough together so that in turbulence there is a good chance of an input error. Even when done without error, it is necessary to check the autopilot to make sure it is still in the proper mode after any change. When all of this takes place in instrument meteorological conditions (IMC) with approach control providing headings, altitudes, traffic advisories, and clearances, pilot workload goes up exponentially. This situation is a nail biter and, if anything goes wrong under these circumstances, the pilot could easily fail to recognize the situation until it becomes a full-blown emergency. So, what is the answer? This article presents one of many possible approaches to achieve this goal.

First, and most obviously, the student must be *thoroughly* trained in the use of the equipment before using it solo in IMC. The student should be able to enter a flight plan, select an approach, load it, choose the transition appropriate to the location of the aircraft and the approach, and activate it when required – all while maintaining aircraft control, situational awareness, and communicating with air traffic control as necessary.

Part of the key to this is observation of the old adage: Aviate, Navigate, Communicate. When this can be done reasonably well while flying VFR, it is time to go under the hood or preferably in IMC. Once the student is comfortable in IMC with the same sequence as before, it is time to add some spice to life.

The purpose of the training scenario presented here is to create what could be a highly stressful situation, but with the advantage of an instructor at hand as a safety measure. Having an instructor in the right seat is far less stressful than when flying solo under the same circumstances. Therefore, the student experiences a higher workload than would be expected in reality.

Before beginning the flight, a sequence of approaches is provided to the student and this should include a second airport as well, if there is one close by...the closer the better! If a second airport within close distance is not available, then





choose a sequence of approaches, which require extensive modification of avionics to transition from one to the other. After one or more approaches of the pre-defined sequence and with no advance warning, change the approach sequence and the airport as well.

Where I fly we are fortunate in that Middleton Municipal-Morey Field (C29) is only 9 miles from Dane County Regional Airport (KMSN) and, of course, we use Madison Approach Control. As a result, we can fly an approach, typically an ILS, to KMSN and then during the missed approach, transition immediately into a GPS approach to C29, producing a reasonably heavy workload on the student. This is particularly true since it usually involves changing from one approach frequency to another in addition to the need to change the destination airport, select and load an approach, then define and select a transition, while climbing to a new altitude, turning to an assigned heading and communicating with departure control. Further, things are close enough together that there is not a great deal of time until being cleared direct to an initial approach fix.

To add to the complexity, the initial altitude for the GPS approach is at a higher altitude than other types of approaches to either KMSN or C29, so invariably there is a concern about reaching approach altitude before the initial approach fix (IAF).

If the airplane is equipped with a coupled autopilot that was used for the preceding approach, it will usually drop out about this time and the student needs to be aware of this. All of this forces the student to react rapidly and accurately.

In the event the situation becomes more than the student can handle, the accepted procedure is to simply inform departure that more time is needed to get set up and request vectors away from the approach area. This is a classic case of Aviate, Navigate, Communicate.

Early in training, most students cannot handle the complexity of this situation. As training progresses, students become successful in coping with this scenario and it is a very good way to determine if a student is ready for the instrument checkride.

This also makes a good task during an Instrument Proficiency Check (IPC). Interestingly, the experienced pilot occasionally objects on the basis: "I never get in that situation, so I don't need that kind of training." It is amazing how often those with this attitude become chastened by reality. "The next time you schedule an emergency, please let me know."

It is not unreasonable to ask what the proper sequence is for handling this situation. In general terms, it is necessary to do as much preflight set up as possible. Further, exact details depend on the equipment installed in the aircraft.

It is necessary for the student to access information in the



FLIGHT TRAINING

most efficient manner possible as they are presented with a changing set of demands.

First, before leaving the ground for the training exercise, if there is more than one airport involved, use the flight plan, rather than the direct function. Then when changing airports, it is only necessary to access the flight plan menu and activate the "reverse flight plan" function or, depending on the situation, simply change to another destination already in the flight plan. This is far less work than entering a new destination character by character when it is time to move on.

Second, when changing approaches, particularly unanticipated changes, there is a preferred sequence of actions which will reduce pilot workload. The details are dependent on the type of equipment available. The purpose of this sequence is to provide the most information to the pilot with the least effort.

To do this, simply load the desired approach from the GPS. This will provide the outline of the approach and may load the frequency of the navigational aids if it is not a GPS

approach. Then, as time permits, select the paper approach plates, unless the approach is displayed as part of the panel display. Third, wait for approach control to provide headings and/or clearances. Fourth, when cleared to a fix, select the fix and activate the approach. At each step the pilot should make sure the autopilot remains in the desired state.

Specific steps will vary depending on the equipment installed in the aircraft. In this scenario the full glass cockpit has a distinct advantage over the GPS-only system because the multi functional display and primary flight display (MFD/PFD) combination provides the maximum information to the pilot with the least amount of effort and attention distraction.

If students can handle this situation with aplomb, then they are pretty much armed for most situations. Note: When a student is REALLY good, the instructor can begin failing flight instruments. That's easy if flying an aircraft with steam gauge flight instruments. You can always fail a directional gyro or an attitude indicator while all this is going on. The full glass

cockpits have sufficient redundancy that require other techniques, but it still can be done. In any event, this type of training helps to prevent nail biters from becoming full-blown emergencies. Further, should a genuine old style emergency occur, the pilot would be able to react effectively while Aviating and Navigating. Future articles will examine other nail biter issues, which can arise with advanced systems.

While the emphasis in this discussion has been on the challenges technological advances present us, it is important not to lose sight of the benefits these advances offer. As time goes on and technological advances include more human factors, these advantages will be even more pronounced. The future, in so far as aircraft and avionics design, is indeed bright for general aviation.

EDITOR'S NOTE: Harold Green is a Certified Instrument Flight Instructor (CFII) at Morey Airplane Company in Middleton, Wisconsin (C29). Email questions or comments to: harlgren@aol.com of call 608-836-1711 (www.MoreyAirport.com).

FLY-IN BARBECUES

Washington Island Hosts 4th Annual Death's Door Bar-B-Q

WASHINGTON ISLAND, WIS. – Who doesn't like barbecue? Come to beautiful Washington Island on

Saturday, August 29, 2015 for the fourth annual "Death's Door Bar-B-Q" at the Washington Island Airport.



Presented by the Washington Island Ferry Line and the Washington Island Chamber of Commerce, the B-Q is a KCBS-sanctioned competition with 100 percent certified judges and \$7,500 in prize money.

Death's Door Bar-B-Q opens to the public at 10:00 am with free admission, arts and crafts, kids' activities, live music, food vendors, and of course, barbecue chicken, pork, pork ribs, and beef brisket as sold by the event competitors.

For information about lodging and other attractions, visit washingtonisland-wi.com.

For ferry line schedules and other island transportation, visit wisferry.com.

Swiss Explorers Launch Solar-Powered Aircraft For Flight Around The World

ABU DHABI – Aviation adventurers, Bertrand Piccard and André
Borschberg, began their attempt to fly the solar-powered aircraft, Solar Impulse 2 (Si2), around the world, March 9, 2015, from Abu Dhabi, United Arab Emirates. Capable of flying over oceans for several days and nights in a row, Si2 will travel 35,000 kilometers around the world in 25 days over the course of roughly 5 months. Piccard and Borschberg are taking turns flying the single-seat aircraft.

Si2 took off from Abu Dhabi for Muscat (Oman), and then across the Arabian Sea to Ahmedabad (India). During its flight, the aircraft will pass over the Arabian Sea, India, Myanmar, China and the Pacific Ocean. After crossing the Atlantic Ocean, the final legs include a stopover in Southern Europe or North Africa before



Solar Impulse 2 before take-off, March 9, 2015, on its attempt of the first round-the-world solar flight (www.solarimpulse.com). Solar Impulse Photo

completing the round-the-world flight at its final destination in Abu Dhabi, Si2's official host city. During the 12 scheduled stops, the Solar Impulse team and its partners will organize public events for governments, schools and universities.

It took 12 years for Bertrand Piccard (initiator and chairman), and André Borschberg (founder and CEO), to be

able to finally attempt to make their dream a reality - demonstrating the importance of renewable energy.

With a wingspan larger than a Boeing 747, covered by more than 17,000 solar cells, the aircraft can fly up to an altitude of 8,500 meters (27,887 feet MSL) at speeds ranging from 50 to 100 km/h (31-62 mph/27-54 kts).

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60th Annual Wisconsin Aviation Conference To Be Held In La Crosse

LA CROSSE, WIS. – The Wisconsin Aviation Conference will celebrate its 60th anniversary at the La Crosse Center in La Crosse, Wis., May 11-13, 2015, along the beautiful Mississippi River. The conference is geared to airport managers, airport commission members, aviation business owners and operators, and corporate flight department managers and professional pilots. The Wisconsin Airport Management Association, Wisconsin Aviation Trades Association, Wisconsin Business Aviation Association, and vendors and consultants, sponsor the conference.

Topics will include updates from the FAA and Wisconsin DOT Bureau of Aeronautics; the non-aeronautical use of hangars; maintaining airports of every size; executive over-flight – issues and resources for airport operators and commissioners; air service – develop or face decline and defeat; pilot retention and the Third Class Medical; mechanic liens – concerns and a way forward; airport revenues and relationships – limited or unlimited opportunities for small

airports; managing the lifeblood of aviation – access to, storage of and pricing of aviation fuel; and the looming pilot shortage and potential loss of local air service.

A welcome reception will be held Monday night, followed by a cookout and riverboat cruise.

To register, go to: http://fs9.formsite.com/WIAMA/ConferenceRegistration/index.html.

For exhibitor information, go to: http://fs9.formsite.com/WIAMA/ExhibitRegistration/index.html.

For sponsorships, go to: http://wiama.org/conference-sponsor.html

For hotel reservations, contact the Radisson Hotel La Crosse at 608-784-6680 or 800-333-3333, or register online at www.Radisson.com/lacrossewi. Promotional Code WAC15. Group rates begin at \$89.00 plus tax.

For additional conference information, contact Bob O'Brien at 815-757-2869 or bob@thewisconsinriver.com.

La Crosse Regional Airport To Host 60th Annual Wisconsin Aviation Conference

LA CROSSE, WISCONSIN is the site for the 60th annual Wisconsin Aviation Conference, May 11-13, 2015 at the La Crosse Radisson Hotel, located along the mighty Mississippi River. Nestled in the river valley between Wisconsin and Minnesota, La Crosse Regional Airport will host the event, which is cosponsored by the Wisconsin Airport Management Association (WAMA), Wisconsin Aviation Trades Association (WATA), and the Wisconsin Business Aviation Association (WBAA).

La Crosse and its residents have long had an association

with aviation that started only eight years after the Wright brothers' first took flight in December 1903 when area residents took their first airplane flight. In October 1911, Hugh Robinson, a regional daredevil, gave a flying demonstration to people who had gathered at the fairgrounds. Robinson returned several days later and landed a hydroplane on the Mississippi River to deliver airmail to the city.

The city's first airport, Salzer Field, was established in 1919. The airport was located on the city's south side on

CONTINUED ON PAGE 24

60th Annual Wisconsin Aviation Conference May 11-13, 2015 – Radisson Hotel, La Crosse, Wis.



Special Luncheon Speaker, Tuesday, May 12th: Ben De Leon, FAA's Deputy Administrator for Airports, who has said that *airports of all sizes are the backbone of the economy... and that it is necessary to focus on small airports.*

Topics: Non-Aeronautical Use of Hangars - What it really means for airports and aircraft users.

Maintaining Airports of Every Size; Air Service - Develop or Face Decline and Defeat; Flying made easier? Pilot Retention - Rusty pilot program & 3rd Class Medical Exemptions. Creative solutions to General Aviation's more common problems. Mechanic Liens - Concerns & a way forward. Airport Revenues & Relationships - Small airports have limited opportunities? Managing the Life Blood of Aviation - Access to, storage of and pricing of aviation fuel is potentially the life blood of your airport. Executive Overflight - Issues and Resources for Airport Operators and Commissioners.

Special Events: Welcome River Boat Cruise Reception, Awards Luncheon, Banquet.

Hotel: Radisson Hotel Reservations - 608-784-6680 (Promo Code WAC15)

\$85.00 Registration Fee Includes All Meals & Receptions (before April 15) - \$130 (after April 15) "Complimentary Registration for Airport Commissioner/Board Member with Paid Staff Registration" For registration information, please visit the Wisconsin Airport Management Assn. at **wiama.org**, or Contact Bob O'Brien • 815-757-2869 • bob@thewisconsinriver.com

Wisconsin Airport Management Association
Wisconsin Aviation Trades Association
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May 11-13, 2015 Radisson Hotel, La Crosse, Wis.





Conference Registration Information: Wisconsin Airport Management Association • wiama.org

Wisconsin Aviation Conference







The terminal building at La Crosse Regional Airport

LA CROSSE REGIONAL AIRPORT FROM P. 22 approximately 80 acres of land owned by the Salzer Seed Company. A group of local aviation enthusiasts formed the La Crosse Aero Club.

The city and the chamber of commerce had the foresight to believe that aviation would catch on and would help bring economic growth to the area.

In 1926, the city purchased the land known as Salzer Field, thus becoming the first airport in La Crosse. Shortly thereafter, Northwest Airlines began the first commercial service to La Crosse.

In 1932, the La Crosse County Board leased a field on French Island to serve as a new airport. The new two-runway field, known as Pfafflin Field, was dedicated as the new county airport on August 18, 1935. The City of La Crosse purchased Pfafflin Field in February 1946. The airport was dedicated as La Crosse Municipal Airport on March 1, 1947. Northwest Airlines began scheduled air service the same day with five daily flights.

By 1990, the airport had grown to approximately 1,380 acres including a new terminal building.

In August of 2013, the airport was renamed La Crosse Regional Airport.

Today, the airport supports approximately 19,000 operations each year. The original runway layout is still in use, but many improvements have taken place over time. Two of the runways have seen expansion to 8,742 feet and 6,050 feet. At 8,742 feet, the La Crosse airport has the third longest runway in the state of Wisconsin with Milwaukee having the longest and Madison the second longest.

The airlines process nearly 90,000 enplanements and 180,000 total

passengers annually.

Colgan Air is the full-service fixed base operator located on the east side of the airport. The airport has nine commercial hangars and 64 T-hangar units, and a contract air traffic control tower. For those fly and diners, there's a special general aviation parking area on the west side of the airport north of the airline terminal building. An airport restaurant and car rental agencies are located in the terminal building.

Clinton Torp, Airport Manager

Clinton Torp is the airport manager at La Crosse. He has over 10 years of experience in airport management, eight of which have been at La Crosse Regional



Clinton Torp

Airport. Torp received his B.B.A. in Aviation Management from the University of North Dakota and his M.B.A. from the University of Wisconsin-La Crosse. Torp holds a commercial pilot certificate with single and multi-engine instrument ratings and has 250 hours of flight experience. Torp is currently president of the Wisconsin Airport Management Association, treasurer for the 7 Rivers Alliance, and a certified member of the American Association of Airport Executives.



2015 Minnesota Airports Conference To Be Held In St. Cloud

he Minnesota Airports Conference will be held April 15-17, 2015 at the River's Edge Convention Center in St. Cloud, Minn. The conference is sponsored by the Minnesota Council of Airports (MCOA) and the Minnesota Department of Transportation Office of Aeronautics, and facilitated by the Airport Technical Assistance Program (AirTAP) at the University of Minnesota.

The annual conference, held in conjunction with the Minnesota Council of Airports annual meeting, will include a tour of the Army Aviation Support Facility at St. Cloud Regional Airport (KSTC), updates from the Minnesota DOT Office of Aeronautics and Federal Aviation Administration.

and topics ranging from the impact of General Aviation on state and local economies, to how unmanned aircraft systems will affect airport operations.

Among the featured speakers will be Cassandra Isackson of the Minnesota DOT Office of Aeronautics, Jeff Hamiel of the Metropolitan Airports Commission, and Barry Cooper of the FAA Great Lakes Regional Office. To register for the conference, contact Teresa Washington at 612-624-3745 or washi002@umn.edu.

Hotel rooms are available at the Kelly Inn and Le St. Germaine Hotel. A block of rooms is reserved for conference attendees who identify themselves with the conference and MCOA. Contact the Kelly Inn at 320253-0606 or Le St. Germaine Hotel at 320-654-1661.

The Minnesota Council of Airports provides an opportunity for airport officials to address mutual concerns that affect Minnesota air transportation through meetings, conferences and correspondence. MCOA provides information to all Minnesota airports, with special consideration for smaller airports. The organization works closely with the Minnesota Department of Transportation Office of Aeronautics to identify and solve problems and fulfill needs. In addition, MCOA provides a unified voice on critical aviation legislation in both the state and national arena. MCOA's executive director is Mark Knoff (www.mnairports.org).

St. Cloud Regional Airport, Waiting In The Wings

ach year, the Minnesota Council of Airports and the Minnesota Department of Transportation Office of Aeronautics sponsors the Minnesota Airports Conference in a different city in the state and the local airport is the host for the event. This year the conference will be held April 15-17, 2015 at the River's Edge Convention Center in St. Cloud, Minnesota, and St. Cloud Regional Airport (KSTC) is the host airport.

St. Cloud Regional Airport is owned and operated by the City of St. Cloud. The airport consists of 1,400 acres. The predominant features of the airport include two intersecting runways, associated parallel taxiways, the airline terminal building and support area, an airport rescue and firefighting facility, a general aviation area that is home to a full-service fixed base operator, an air traffic control tower, and an Army Aviation Support Facility (AASF).

St. Cloud Regional Airport has two runways: 13-31, and 5-23. Runway 13-31 is 7,000 feet long and 150 feet



MINNESOTA AIRPORTS CONFERENCE



St. Cloud Regional Airport

wide, and Runway 5-23 is 3,000 feet long and 75 feet wide. Runway 5-23 has bituminous pavement and Runway 13-31 is composed of 12-inch thick, steel reinforced concrete. The runways and taxiways were originally constructed in 1969, but have since been reconstructed and Runway 13-31 has



been lengthened.

Both runways have full-length parallel taxiways. Taxiway A provides direct access from both the passenger terminal area and the general aviation area. Runway 5-23 is served by taxiway D, a 40-foot wide full-length parallel taxiway located on the north side of the runway.

Navigation aids include nonprecision and precision landing aids, and lighting systems. There is an Instrument Landing System (ILS) with Medium Intensity Approach Lighting and Runway Alignment Indicator Lights (MALSR) for both Runway 13 and 31. Non-precision landing aids on Runway 13-31 include a VHF

omni-directional radio range (VOR), distance measuring equipment (DME), and non-directional beacon (NDB). The airport also has localizer performance with vertical guidance (LPV) approaches to Runways 13 and 31, and lateral navigation (LNAV) approaches to Runways 5 and 23.

Runways 13-31 have high intensity runway lights (HIRLs) and Precision Approach Path Indicator (PAPI) lights. Runways 5-23 have medium intensity runway lights (MIRL). Other airport features include an airport beacon, a compass rose and a lighted windsock with a segmented circle.

The airport's field maintenance facilities are located in the T-hangar area. There are 74 city-owned and maintained T-hangar bays located on the west side of the general aviation area. The City of St. Cloud owns and leases all of the storage T-hangars, with the exception of one hangar, which is owned by St. Cloud State University, which until recently had a thriving aviation campus on the airport for decades.

There are two fixed base operators: Wright Aero and St. Cloud Aviation. General aviation services include based and transient aircraft storage, fuel sales, aircraft rental, air charter, aircraft and avionics maintenance, and flight instruction. These businesses have approximately 40,000 square feet of combined aircraft storage and maintenance hangar space, and a cumulative tie-down apron area of approximately 7,700 square yards. St. Cloud Aviation operates out of the general aviation terminal arrival/departure building that is owned by the city. Other operators on the airport include the Army National Guard, Civil Air Patrol, and an agricultural aero application business. The Army Aviation Support Facility operates 12 helicopters: six Chinooks and six Blackhawks. The facility was completed in March 2009.

St. Cloud Regional Airport completed construction of its air traffic control contract tower in the fall of 2004.

The Aircraft Rescue and Fire Fighting (ARFF) facility is manned 24/7. The airport meets the required FAA Index A

minimums for ARFF equipment and agents.

The airline terminal building was expanded in 2009 from 10,000 to 19,000 sq. feet. There are two airline ticket counters and associated office and support areas, a sandwich shop, car rental area that can accommodate up to three car rental companies, airport administrative offices, and a conference room.

St. Cloud Regional Airport is classified as a "transport category airport" by the Federal Aviation Administration (FAA), and is certified under Part 139 of the Federal Aviation Regulations (FARs). The airport, therefore, qualifies as a primary air carrier airport in Minnesota, and its role as a reliever to Minneapolis-St. Paul International Airport (KMSP) is expected to expand in the future. One

might say that St. Cloud Regional Airport is waiting in the wings! High-speed rail service between the two airports is a distinct possibility considering they are only 53 nm apart, and the number of people commuting between St. Cloud and the Twin Cities via Interstate 94 continues to increase.

St. Cloud Regional Airport had approximately 30,000 operations in 2014, and served 60,000 passengers on Allegiant Air and United Airlines, and charters operated by Sun Country Airlines. Allegiant Air has been operating at St. Cloud Regional Airport since December 2012, flying the MD-80 and Airbus A319. Allegiant Air generally flies twice weekly to Phoenix Mesa Gateway Airport.

St. Cloud Regional Airport is vital to the ongoing development and economic growth of St. Cloud and surrounding

communities. According to the latest economic impact study completed in 2012, St. Cloud Regional Airport has a \$20 million annual economic impact on the community. There are approximately 95 employees working for various tenants at the airport.

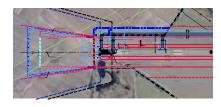
At the helm of St. Cloud Regional Airport is Bill Towle, who has been airport manager since 2002. Towle received his bachelor's of science degree in aviation from the University



of North Dakota in 1993. Prior to accepting his current position, Towle was manager at Dickinson, N.D. from 1998-2002 (www.stcloudairport.com). □









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Visit our booth at the Minnesota Airports Conference. April 15-17, 2015



Illinois Aviation Conference To Be Held In Rockford

ROCKFORD, ILL. - The Illinois Aviation Conference (IAC) – a collaborative effort of the Illinois Aviation Trades Association (IATA), Illinois Public Airports Association (IPAA), and the Illinois Division of Aeronautics – will be held May 13-14, 2015 at the Clock Tower Resort in Rockford, Illinois.

A "hangar party" will be held at Poplar Grove Airport the evening of Wednesday, May 13.

Conference topics will include a panel presentation about the difficult situation most general aviation airports find themselves when it comes to funding day-to-day and longer term costs, increased regulation, and reduced government aid. Panelists will include Jamie Abbott, Chicago Executive Airport; David Bird, DuPage Airport Authority; Mark Hanna from the Springfield Airport Authority; and Ron Hudson from Hansen Professional Services. In addition, Nel Stubs, vice president of Conklin & de Decker, will speak on evaluating objectives and options of aircraft ownership, aviation fleet planning, and operations. Other speakers will include Barry Cooper, FAA Great Lakes Regional Administrator, a representative of the National Air Transportation Association (NATA), and the new director of the Illinois Division of Aeronautics. The conference will conclude with the Illinois Aviation Hall of Fame banquet on Thursday, May 14. For additional information call 217-528-5230.

Chicago Rockford International Airport To Host Illinois Aviation Conference

ROCKFORD, ILL. – A major player in northern Illinois air transportation, Chicago Rockford International Airport (KRFD), is one of the host airports for the annual Illinois Aviation Conference to be held May 13-14, 2015 at the

Started by the founder of the EAA's Young Eagles' program, Sam Johnson, we understand the aviation industry and its unique insurance needs.

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Clock Tower Resort in Rockford.

The airport traces its history back to 1917, when Camp Grant was established during World War I as a U.S. Army Cavalry Camp. During the events of World War II, Camp Grant was made into a military training base and prisoner of war confinement center.

Following the war, the state of Illinois adopted the Airport Authority Act. The Greater Rockford Airport Authority was created in 1946. For more than 40 years, the facility was referred to as the Greater Rockford Airport, serving the area as a regional airport. In 1987, the current passenger terminal was constructed in an effort to attract more passenger service. Six years later, United Parcel Service opened its first of two cargo facilities at the airport.

In an effort to capitalize on the airport's location (less than 90 miles from downtown Chicago and about 30 miles from the outermost Chicago suburbs, its name was changed to Northwest Chicagoland Regional Airport at Rockford in the early 2000s. In 2004, the airport became an official U.S. port of entry and achieved international status; that year, it



was renamed the Chicago/Rockford International Airport (the slash was removed in 2007). The name was not only shorter, but the change also brought it in line with the other two Chicago airports - O'Hare International Airport and Chicago Midway International Airport.

Today, Chicago Rockford International Airport is marketed to residents of Rockford and surrounding areas as an alternative to Midway and O'Hare in Chicago, Milwaukee Mitchell International Airport in Milwaukee, Wis., and Dane County Regional Airport in Madison, Wis., as well as limited service airports such as Dubuque Regional Airport in Iowa.

Rockford offers passengers eight non-stop jet flights to world destinations including Cancun, Ft. Myers, Las Vegas, Orlando, Phoenix, Puerto Vallarta, Punta Cana, and Tampa Bay. Rockford



Chicago Rockford International Airport



ILLINOIS AVIATION CONFERENCE

also one of 25 top cargo airports in the United States. In addition, it was recently announced that AAR Corps, an aviation company which supplies aerospace and government/ defense industries, will build a new \$40 million maintenance and repair facility on the airport.

Chicago Rockford International Airport covers 2,900 acres and has two runways, both with Instrument Landing Systems (ILS): 1/19 is 8,199 x 150 ft., and 7/25 is 10,004 x 150 ft. In 2006, the airport had 77,558 aircraft operations, or an average of 212 per day: 72% general aviation, 18% scheduled commercial, 6% air taxi and 3% military.

Rockford AirFest

Rockford holds one of the largest annual airshows in the country. This year Rockford AirFest will feature the U.S. Navy Blue Angels jet team, and the U.S. Army Golden Knights Parachute Team, June 6-7, 2015 (www.RockfordAirFest.com).

Air shows have played an integral role in the history of the Rockford airport. From 1959 to 1969, the annual convention and fly-in of the Experimental Aircraft Association (EAA) was held there.

Michael P. Dunn, Director

Heading up Chicago Rockford International Airport is its director, Michael P. Dunn.

From 2001 to 2011, Dunn served as a commissioner on the Greater Rockford Airport Authority Board, and as chairman from 2003-2011. He was appointed regional director of government affairs in 2010, and in January 2012, he was

appointed airport director.

Dunn is a former assistant to Illinois Governor James R. Thompson and remains extremely involved in governmental and political issues at the local, regional, state and national levels. From 1990 to 2008, Dunn served as vice president and general manager of Dickerson & Nieman Realtors. With sales at \$20 million in 1990 and over \$550 million in 2008, Dickerson & Nieman became one of the largest residential real estate companies in the country.

Since 2001, Dunn has served as a member of the board of directors for Rockford Mutual Insurance Company, and from 2009, as a member of the OSF St. Anthony Hospital Board of

Advisors. Since May of 2010, he has served as chairman of the Rockford Area Venues and Entertainment (RAVE) Authority. RAVE is the governmental authority that now operates and manages the downtown Rockford sports and concert arena (BMO Harris Bank Arena), Davis Park festival grounds, Coronado Performing Arts Theatre, and the Rockford Ice Hogs, an American Hockey League team that is the AAA affiliate of the Chicago Blackhawks.

For additional information on Chicago Rockford International Airport, go to www.FlyRFD.com.

Poplar Grove Airport

Poplar Grove Airport in Poplar Grove, Illinois (C77) is the other host airport for the Illinois Aviation Conference. Poplar Grove is one of the most "popular" residential airparks in the Midwest. The airport is home to Bel Air Estates, Poplar Grove Airmotive, and Vintage Wings & Wheels Museum.



(L/R) Chicago Rockford International Airport Manager Michael P. Dunn with four star General Ray Johns of the U.S. Air Force Air Mobility Command during Rockford AirFest.





lowa Aviation Conference Goes Supersonic

WEST DES MOINES, IOWA - The Iowa Aviation Conference will be held April 21-22, 2015 at the Sheraton West Des Moines Hotel.

Topics will include the annual meeting of the Iowa Public Airports Association, a networking reception, an FAA pilot safety meeting, a presentation by supersonic ejection survivor Captain Brian Udell, an AOPA Pinch Hitters Course, a session on leadership through change and innovation, presentations

by the directors of the Iowa Department of Transportation and Iowa DOT Office of Aviation, an update from the Federal Aviation Administration Airports Division, an overview of commercial air service in Iowa, and sessions on unmanned aircraft systems, and airport and FBO development.

To register, contact Sue Heath of the Iowa Public Airports Association at 515-727-0667 or email sheath@iowaairports.

Professional Services

Arthur J. Gallagher & Co. Acquires NationAir Insurance

ITASCA, ILL. – Arthur J. Gallagher & Co. announced March 3, 2015, the acquisition of NationAir Aviation Insurance based in West Chicago, Illinois. NationAir's aviation expertise and international reach is expected to expand Gallagher's global client capabilities.

Founded in 1978, NationAir provides insurance for the entire spectrum of aircraft owners and operations worldwide and specializes in corporate, commercial, private and public entity coverages. Jeffrey Bauer, and his associates at NationAir, will continue to operate in West Chicago under the direction of Michael Pesch, head of Gallagher's Midwest region retail property/casualty brokerage operation.

Arthur J. Gallagher & Co., an international insurance brokerage and risk management services firm, is headquartered in Itasca, Illinois, has operations in 30 countries, and offers client-service capabilities in more than 140 countries around the world through a network of correspondent brokers and consultants.







Architecture. Mead & Hunt has built a long-standing reputation for designing cost-effective, visually pleasing and energyefficient airport facilities that exceed our clients' expectations.



At Mead & Hunt, we're proud of our 70 years of aviation experience, yet our team looks to the future to provide the industry with innovative solutions for tomorrow's challenges.

State Deputy Aviation Director To Fly In Air Race Classic



(L/R) Tiffany Brown and Taylor Humphrey of Team TNT. Mauricio Sanchez Photo

WICHITA, KAN. – The deputy aviation director with the Kansas Department of Transportation, Tiffany Brown, will fly in the 2015 Air Race Classic, June 22-25. The 2,199 nautical mile air race will involve more than 50 competitors from throughout the United States.

Brown will be flying a 2008 Cessna 172 Skyhawk from Hetrick Air Services of Lawrence, Kansas with high school senior, Taylor Humphrey. The race starts in Fredericksburg, Virginia, and continues on to Morganton, N.C.; Hickory, N.C.; Connellsville, Pa.; Jeffersonville, Ind.; Three Rivers, Mich.; Kalamazoo, Mich.; Lawrenceville, Ill.; Kirksville, Mo.; Union City, Tenn.; Gadsden, Ala.; and concludes in Fairhope, Ala.

Brown received her private pilot certificate two years ago, has an instrument rating, and is working on her commercial pilot certificate.

For additional race information, go to http://airraceclassic.org.

Women In Aviation International Awards Scholarships Totaling \$606,730 At Annual Conference



AOPA Student Pilot Scholarship: Kristen Seaman (left) and Meghan McCutcheon (right) of AOPA congratulate scholarship recipient, Samantha G. Reed (center) of Valparaiso, Indiana.

DALLAS, TEXAS – The 26th Annual Women in Aviation, International Conference (WAI) fulfilled its promise to connect, engage and inspire as 4,572

members, including 183 international attendees representing 16 countries, packed the Hilton Anatole in Dallas, March 5-7, 2015.

Some of the highlights of the conference included inducting a group of women into the WAI Pioneer Hall of Fame, interviews with the airlines, and a community outreach program, "Girls in Aviation Day," that brought 192 girls, ages 10 to 17, from the Dallas area to the metroplex to be introduced to aviation and to get some hands-on experience.

The exhibit hall displayed 151 separate companies and organizations, 125 attendees took part in AOPA's Rusty Pilot Seminar, and 70 attendees

received their Inspection Authorization (IA) renewal.

In all, 102 scholarships, totaling \$606,730, were awarded to WAI members. Among the scholarships, the Aircraft Owners & Pilots Association awarded a \$3,000 scholarship to Samantha G. Reed of Valparaiso, Indiana. Reed is attending Liberty School of Aeronautics in Lynchburg, Va., and aspires to become a humanitarian or missionary pilot.

The 27th Annual International Women in Aviation Conference will be held at the Gaylord Opryland Resort in Nashville, Tennessee, March 10-12, 2016. Dr. Peggy Chabrian is president of WAI (www.wai.org).

Crowell Named President & CEO Of National Championship Air Races



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RENO, NEV. – The Reno Air Racing Association (RARA) has named former Coca-Cola executive, Michael Crowell, president and chief executive officer of the National



Championship Air Races. The 52nd Annual National Championship Air Races will be held September 16-20, 2015 at Reno Stead Airport (http://airrace.org).

Terrence G. Slaybaugh, Airport Director

Milwaukee County's General Mitchell International & Timmerman Airports

errence (Terry) G. Slaybaugh leads the Airport Division of the Milwaukee County Department of Public Works as Airport Director of General Mitchell International and Lawrence J. Timmerman Airports. Mitchell International, located five miles south of downtown Milwaukee, is the largest commercial airport in the state and serves greater Milwaukee, southeastern Wisconsin and the northern Illinois / northern Chicago region. Timmerman is a General Aviation airport located in northwest Milwaukee County.

Slaybaugh recently was the Director of Aviation for the City of Dayton. He led the Department of Aviation, which operates Dayton International Airport and Dayton Wright Brothers Airport, a General Aviation airport. Slaybaugh held this position from 2011 until his



Terrence Slaybaugh

arrival in Milwaukee in February 2015. From 1996 to 2006, Slaybaugh served as Director of Aviation at

the Greater Rochester International
Airport, Rochester, New York, where he
led the expansion of low-fare air service,

business development and expansion of post 9/11 airport security. Prior to that, Slaybaugh was the Director of Economic Development for Monroe County, the fourth largest county in New York State.

His experience also includes Economic and Community Development management, real estate development, lobbying, and private aviation business development for both public and private sector organizations.

Slaybaugh started his career with the Grand Rapids Urban League, where he directed a housing advocacy and counseling project for the City of Grand Rapids and western Michigan.

Slaybaugh has a Bachelor of Science degree in Urban and Environmental Science.

He and his wife, Donna, have eight children.

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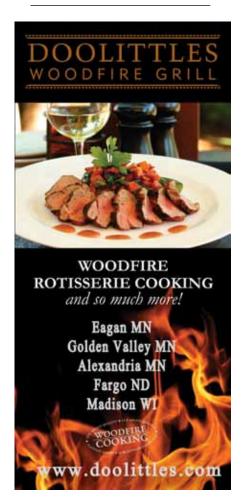
Doolittles Woodfire Grill... A Midwest Restaurant About Pilots, Owned By A Pilot

by Dave Weiman

n recent years, I have dined at Doolittles Woodfire Grill in Alexandria, Minnesota – a restaurant that uses the excitement of aviation as its theme. I have always wondered if the restaurant chain was owned by the family of World War II icon, Jimmy Doolittle, or at least owned by pilots. Upon investigation, I learned that one pilot and one non-pilot owned the chain, but not the Doolittle family.

Lynn Reimer and Reimer's sister, Barbara Olson, established Doolittles in 1989, but in 2001, dissolved the partnership.

Reimer is a lifelong resident of Minneapolis and chief financial officer for the company.





Lynn Reimer with his 1987 RV4.

He started as a dishwasher when he was 15 years old and has experienced every position in the restaurant business. Reimer is a private pilot, and has a true love for aviation. He owns a 1987 RV4 and a 2014 Aerotrek A220, which he hangars at Fleming Field in South St. Paul, Minn. He is also a member of the Experimental Aircraft Association (EAA).



John Sheehan

John Sheehan, who started as the general and regional manager for the company, is now chief operating officer and co-owner. Sheehan received a Bachelor of Science Degree in Business Management at St. Cloud State University in 1988.

The company opened its first

location in Eagan, Minnesota, called "Doolittles Air Café." The restaurant was a popular neighborhood sports bar, complete with airplane paraphernalia. Based on its success, Doolittles opened several more Air Cafés and rode out the "sports bar" era. But over the years, it became clear a change was in order in the menu to include more quality entrees, such as fresh fish, wood fired meats and rotisserie cooking, and a much-expanded wine list.

In November 2003, Doolittles unveiled the "Woodfire Grill" in Fargo, North Dakota. Like the Air Café, the Woodfire Grill also celebrates the romantic era of nostalgic aviation, but includes many amenities found in more upscale casual markets, including larger booths, leather seating, and ambient lighting – all which makes for a cozy atmosphere. The restaurant is clean, too, from the silverware, to the restrooms and carpets.

It wasn't long until all Doolittle restaurants were transformed from sports bars to more upscale restaurants.

In addition to its Fargo location, Doolittles has restaurants in Eagan, Golden Valley, and Alexandria, Minnesota; and more recently, Madison, Wisconsin with plans to expand in additional cities throughout the Midwest. But there are no plans to establish restaurants at airports (www.doolittles.com).

Boeing 747 That Made The Longest Commercial Flight In History Makes Its Shortest & Final Flight



747-400 "City Boeing Canberra" touches down for the last time at Illawarra Regional Airport in New South Wales. Qantas Photo

SYDNEY, AUSTRALIA – Qantas airlines' first Boeing 747-400, celebrated for having flown the longest commercial flight in history from London to Sydney, made its shortest and final journey on March 8, 2015, when it flew from Sydney to Illawarra Regional Airport in New South Wales.

After less than 15 minutes in flight, Qantas B747 (VH-OJA) touched down at 7:47 am and was delivered to its new home with the Historical Aircraft Restoration Society (HARS) where it will become the only B747-400 in the world to be put on public display.

Qantas Chief Executive Officer Alan Joyce said donating the aircraft to the HARS museum will provide not only a great tourist attraction, but also an opportunity to preserve an important piece of Qantas and aviation history.

"Our B747-400 'City of Canberra' is very deserving of a graceful retirement as the star attraction at one of Australia's most prestigious aviation museums," said Joyce.

Over the past few years, Qantas has been gradually retiring its older B747s. Nine of its newest jumbos, the last of which was delivered in 2003, have been refurbished and will continue flying into the future. Since 2008, the Qantas Group has taken delivery of almost 150 new aircraft, lowering its fleet age to an average of just over seven years.

The Qantas B747 will join an impressive lineup of famed aircraft located at the HARS museum, including a Lockheed Super

Constellation, Catalina, Douglas DC3 and DC4, and a Desert Storm U.S. Army Cobra helicopter. At press time, the official handover was to take place on March 15, 2015 to coincide with the museum's monthly open day weekend.



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Canadian Fishing Fly-Outs... Fast-Paced For Some – Relaxing For Others



Phil Peterson of Oregon, Wisconsin with one of many Lake Trout he caught on Gods Lake in northern Manitoba.

Mark Peterson Photo



You cannot tell from this picture of a trophy Northern Pike, but Dave Weiman of *Midwest Flyer Magazine*, enjoys flying to Canada for the adventure of the trip and pilot camaraderie, more than he does actually fishing.

by Dave Weiman

ast year, participants in the "Canadian Fishing Fly-Outs" promoted by *Midwest Flyer Magazine*, had their choice of two fishing lodges, or they could opt to visit



both lodges. The trips resulted in good fishing, wonderful pilot camaraderie, and great flying adventures across the Canadian wilderness.

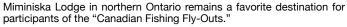
Trips to Miminiska Lodge, Ontario, and Elk Island Lodge, Manitoba, were staggered, so those who wanted to stay at both lodges, could do that. Both lodges have private airstrips, which make them attractive to owners of aircraft on wheels or floats.

A number of us going to Miminiska Lodge chose to stay over at the beautiful Valhalla Inn in Thunder Bay, the night before our arrival to Miminiska to get an earlier start and beat incoming weather. The weather turned ugly by 3:00 pm after we arrived at Miminiska. Those not yet out on the lake, stayed in the lodge. Those on the lake, returned to the docks.

Many of us flew as a group from Thunder Bay to Miminiska, spacing ourselves with the fastest planes in the lead, and stayed in radio contact with one another on 122.75 Mhz. All pilots flying 25 nm beyond their departure point are required to file a flight plan, unless someone at their destination airport is expecting them, and can contact authorities to initiate search and rescue if they do not show up within 1 hour of their ETA. This procedure is referred to as "Flight Notification." Due to poor radio communications with Winnipeg Flight Service when flying in remote regions of Canada, and no access to a telephone at Miminiska, we have found Flight Notification a valuable tool. Further enhancing safety is flying as a group, staying in radio contact with one another, and giving position reports every 50 miles or so.

For those of us who flew to Miminiska Lodge (CPS5), we cleared Canada Customs in Thunder Bay (CYQT). Miminiska is located 196 nm northeast of Thunder Bay. Lake Nipigon served as a prominent landmark along much of our route. The last airport we flew over was Armstrong







Aircraft parked at Elk Island Airport in northern Manitoba. Dave Weiman Photo

(CJF6), located 83 nm south of Miminiska Lodge. There is a road between Thunder Bay and Armstrong, then short mining roads here and there between Armstrong and Miminiska, but it is pretty desolate country. While everyone on the trip has at least a portable GPS, we also keep track of our positions with aeronautical charts.

Those who flew direct to Elk Island Lodge (CKZ3), cleared Canada Customs in Kenora, Ontario. Elk Island Lodge is located 293 nm north of Kenora.

Those of us who staved at Miminiska one-night, then flew on to Elk Island Lodge the next day, were on a fast track, and fortunately the weather cooperated. We arrived at Miminiska on the 10th in time for lunch and fishing that afternoon, enjoyed both a reception and dinner that evening, fished until shore lunch the following day, then launched at 1:30 pm EDT for Elk Island Lodge, 272 nm northwest of Miminiska with a fuel stop at Pickle Lake, Ontario (CYPL), 62 nm from Miminiska. We arrived at Elk Island Lodge by 5:30 pm CDT.

At the same time we were approaching Elk Island Lodge from the southeast, members of our group that were flying from Kenora to Elk Island Lodge were approaching from the south.

When I made a position announcement on 122.75 Mhz, fellow pilot, Phil Peterson of Oregon, Wisconsin, who was flying with his son, Mark, replied that they had departed Kenora about an hour earlier and were northbound. We were both merging towards Elk Island Lodge.

Miminiska Lodge, Ontario

Miminiska is Wilderness North's premier American plan lodge and one of Ontario, Canada's most respected full-service fishing destinations.

Located on the Albany River in northwest Ontario, and miles away from the nearest road, Miminiska Lodge offers guests the opportunity to experience the raw beauty of pristine boreal wilderness. Northern Pike and Walleye were caught in abundance. Flyouts on a turbo Otter with floats were

available to anyone who wanted to fish for Brook Trout.

The all-inclusive package at Miminiska Lodge included our choice of six clean, spacious cabins with room for four to 12 guests; or private accommodations located adjacent to the main lodge - perfect for a couple or a group of two.

Miminiska Lodge has 16 ft. Lund boats with 25 hp Yamaha 4-stroke, electric start motors and fish finders. The main lodge has television and free WI-FI internet service.

Meals were professionally prepared and were superb! Daily shore lunches or box lunches were provided, although we opted to have the staff prepare shore lunches for the group on none other than "Shore Lunch Island." Evening





A bit of conversation before dinner at Elk Island Lodge.



Perfect weather and great fishing on Gods Lake, made shore lunch for this hearty group of pilots, all the more enjoyable.

Dave Weiman Photo

Dave Weiman Photo**

receptions were complimentary!

Elk Island Lodge, Manitoba

A number of us caught trophy fish at Elk Island Lodge on Gods Lake. Northern Pike, Walleye, and Lake Trout



were quite abundant. We caught the Lake Trout at a depth of 120 feet, and our guides smoked some of them for a midnight snack. Reeling in a Lake Trout from those depths is like reeling in a cinder block! Unlike the Albany River Watershed at Miminiska Lodge where you do not need a guide, guides are mandatory on Gods Lake, due to the size and complexity of the lake.

Miminiska Lodge features a 2400 X 50 ft. grass runway with a clear approach over the lake towards the east (CPS5). Elk Island Lodge has a 3800 X 100 ft. gravel runway (CKZ3).

Participants in the 2014 fly-outs included pilots and their friends or spouses from as far as California, but as close to home as Wisconsin, Iowa, Illinois and Indiana. In past years, we have had pilots from Minnesota, Michigan, Florida and Arizona.

2015 Canadian Fishing Fly-Out

The first two fishing trips to Miminiska Lodge for 2015 are sold out, so the lodge is now booking two additional trips, August 14-17, and August 14-19, 2015.

For trip details and special group rates, email **info@MidwestFlyer.com**.

For reservations, contact Wilderness North at **1-888-465-3474** (www. wildernessnorth.com).

"Whether on wheels or floats, this Canadian fishing trip is for you!"

Waiver of Liability/Responsibility: The Canadian Fishing Fly-Outs described herein or elsewhere by the editors of Midwest Flyer Magazine are a service of the hosting lodge and their parent companies, if any. Dave Weiman is acting only as a fellow participant on the trips, and neither he nor Midwest Flyer Magazine, Flyer Publications, Inc., or their staffs and owners assume any liability for the participation of others on the trips or for the trips themselves, and do not assume any responsibility for the reliance upon the information provided on accommodations, or in regards to trip planning. Any information provided by either Dave Weiman, Midwest Flyer Magazine or Flyer Publications, Inc., may be based solely on the experience and information of one pilot, and information available at the time provided. For trip planning, pilots are encouraged to refer to the Canada Flight Supplement published by Nav Canada, navigational charts, and information available from the Federal Aviation Administration, Nav Canada, U.S. and Canada Customs & Border Protection. Aircraft Owners & Pilots Association, Experimental Aircraft Association, and other sources.

Niagara Falls & Hudson River Flyovers

by Woody Minar

aul Durand and I were wheels up at 7 am, August 26, 2014, from Osceola, Wisconsin (KOEO) to Mansfield, Massachusetts (1B9) in Paul's Cirrus SR22 - the plane we flew to Anaheim, Calif. and over the Grand Canyon in April. With a 40-knot tailwind, we were refueling in St. Claire County, Mich. (KPHN), northeast of Detroit in 3.5 hours.

After refueling, we filed IFR and flew east through Canadian airspace direct to ISTON intersection north of Niagara Falls. About 20 miles west of Niagara Falls, we advised Buffalo Approach we wanted to circle "the falls." They were very accommodating, only saying we needed to maintain 4,000 feet (because we were still on an IFR flight plan), and to let them know when we were done sightseeing.

Niagara Falls is restricted airspace below 3,500 feet. Our research suggested that we should head for the easy-to-spot "railroad yard" southwest of the falls, turn to 050 degrees, then circle the falls clockwise. There were some wide radius restrictions, but if one made good "turns around a point," the restrictions weren't a factor. We got there just in time because two other planes arrived after us and ATC had them stacked at 5,000 and 6,000 feet. The view was better at 4,000!

Two hours after Niagara Falls, we touched down at Mansfield Airport where Paul's plane was going to have an avionics upgrade. It's a petite airport, but they have more than 50 aircraft based there and I think most of them were tied down on the ramp! The MetLife blimp was tethered midfield to provide aerial camera footage for the PGA Tour golf tournament 3 miles north.

After getting our rental car, we drove



Woody Minar



Niagara Falls

to Boston. If you've never driven in Boston, it's a test of one's driving skills and patience! A local TV station had a segment that night reporting Boston drivers being the second worst drivers in the country. While Paul was at a business meeting for the next day and a half, I drove to Bucksport, Maine to see a friend I hadn't seen since I left the Navy there three-plus decades ago. I had forgotten how beautiful "the pine tree state" was.

The following day, Paul and I reunited at the hotel and returned to Mansfield Airport. Needless to say, it took us 1.5 hours and frayed nerves to get out of Boston at noon. Paul's avionics upgrade was delayed until noon the next day, so that night we planned a sortie we would take the next day for a shakedown avionics flight.

> We awoke to a beautiful day and later flew around Block Island (KBID), south of Rhode Island, before circling and landing in Martha's Vineyard (KMVY) where we had lunch at "The Plane View" restaurant. We reflected how fortunate we were to be able to fly in general aviation, alongside commercial aviation without the hassles of TSA (Transportation Security Administration) lines and restrictions.

After lunch, we circumnavigated Nantucket Island where Nantucket Tower

(KACK) was very accommodating of our requests. We counted more than 700 boats of all kinds in a picture I took of one bay.

Saturday morning was equally delightful. Our 6:00 am departure got us to New York City, and to the "Hudson River Exclusion Area"



around 6:30.

We had done research on the Internet and with AOPA about flying in this area. At first it seemed complicated, but when broken down into small pieces, it was quite simple. You need to have the New York Terminal Aeronautical Chart (we had our iPads) because of the tight airspaces of Newark, Teterboro, La Guardia, and JFK. You must fly less than 140 knots, stay between 1000 and 1299 feet MSL, and maintain altitude to avoid other aircraft when it's busy. "Don't make

altitude to avoid other aircraft
when it's busy. "Don't make
sudden lateral moves and be careful if you pass an aircraft."
The width of the Exclusion Area is only the width of the river.

As we approached the Exclusion Area from the north, we were amazed at the beautiful country scenery, hills and bluffs along the river. While the Exclusion Area starts at "Alpine Tower," we started north of it at the Tappan Zee Bridge, flying south along the western shore. Everyone self-announces on 123.05 Mhz their aircraft type, location, direction of flight, and altitude (Cirrus, GWB, Southbound, 1100 feet). The reporting points are very obvious: Alpine Tower (big fat tower), GWB (George Washington Bridge), Clock (clock tower), Intrepid (Sea Air Museum), Statue of Liberty, and VZ (Verrazano-Narrows Bridge). After passing "VZ," we continued south turning around in Lower Bay before heading north along the eastern shore and reporting checkpoints in the opposite order.

It is suggested that when touring the Statue of Liberty and



Statue of Liberty

Ellis Island, one approaches them from the south at less than 1000 feet and circle "the lady" counterclockwise at less than 500 feet. A quarter mile to the west and above 500 feet, vou are in Newark's airspace! There were no other planes in the area when we were there, so we circled "the lady" at least four times with spectacular early morning views. A 360-degree video can be seen at https://www. youtube.com/watch?v=rUeX 2l5wvZQ&feature=youtu.be

Returning up river,

we were in awe at how close we were to the skyscrapers of Manhattan and the Freedom Tower. We could even read the LED signs of Wall Street. Central Park looked peaceful compared to the concrete jungle around it, and Sing Sing prison was uninviting. We departed for home after passing over the George Washington Bridge. The total time of the river excursion, including circling "the lady," was about 35-40 minutes.

With a little headwind and some minor diversions for weather, we were back in Osceola mid-afternoon with a couple hundred photos, videos, and unforgettable memories. In general aviation, opportunities exist. With good pre-flight planning, the opportunities can easily become effortless realities.

EDITOR'S NOTE: Woody Minar is a Designated Pilot Examiner and Master CFI, CFII, MEI, and CFI-G for Osceola AeroSport in Osceola, Wis., and Adventure Seaplanes (8Y4) in Lino Lakes, Minn. and Lake Wales, Fla.

FLY-Ins & Air Shows

Price County Airport & Harbor View Annual Fly-In & Airshow

PHILLIPS, WIS. – Price County Airport and Harbor View Pub & Eatery will host a fly-in and airshow, Friday, July 3, 2015, beginning at 7:00 p.m., and Saturday, July 4, 2015, beginning at 8:00 a.m.

Harbor View is located across the highway from the airport on Long Lake. Floatplanes are encouraged to fly in. The airshow will be held Friday evening at 7:00 p.m., and Saturday beginning at 11:00 a.m. A breakfast buffet will be held on Saturday morning at Harbor View from 8:30 to 11:30 a.m. Lake, Rattle & Roll featuring a live band will be held from 8:00 p.m. until midnight on Saturday. Price County Airport activities are free to the public.







WATA Difference

WISCONSIN AVIATION TRADES ASSOCIATION

Pilot To Host Breakfast On His Farm

MONROE, WIS. - On Saturday, May 30, 2015, pilot/farmer, Dan Wegmueller, will host the 2015 "Green County Breakfast On The Farm" on his dairy farm, 3 miles southeast of Monroe Municipal Airport (KEFT), Monroe, Wis. Wegmueller will add a special focus on "grassroots flying" at the event.

In 2011, Wegmueller took on the full restoration of a 1940 Fairchild 24R, which had sat neglected for 20 years. Despite initial setbacks, including an engine-out incident, "the aircraft has performed marvelously," says Wegmueller, who credits members of EAA Chapter 431 in Brodhead, Wis., for coming to his aid.

In 2014, Wegmueller fulfilled another lifelong dream and established a grass airstrip on his 500-acre farm. Although his airstrip will not be open to the general public during the Green County Breakfast On The Farm, Wegmueller will have a number of rare and unique aircraft on display to promote aviation. EAA's Young Eagles Program will be highlighted.

Wegmueller and his wife, Ashley, operate a grass-based Registered Brown Swiss dairy farm with 60 cows. During the summer, the cows are rotated to a different pasture each day, much like the grazing operations of New Zealand and



1940 Fairchild 24R

Australia. The culmination of the breakfast will include the act of turning the cows out to pasture, a delightful performance for even seasoned dairy herdsmen.

In addition to cows and airplanes, the breakfast will feature classic cars and antique farm machinery, and educational booths highlighting the diversity and importance of agriculture.

Wegmueller extends a special invitation to fellow pilots to attend the breakfast on his farm, and will provide free shuttle service from Monroe Municipal Airport. Call Dan Wegmueller at (608) 293-2340 or email dwegs@tds.net with your ETA. Breakfast will be served from 6:00 to 10:00 a.m.

To read about Wegmueller's 1940 Fairchild 24R restoration project, go to: http://www.midwestflyer.com/?p=6068.

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Pilot Report: Chicago Skyline Tour

by Ryan Dembroski

he alarm sounded. It was 5:00 am. Still in bed, I groggily opened up ForeFlight on my iPhone and pulled up the weather for Milwaukee Timmerman Field (MWC). The forecast was generally favorable for VFR flight, but I kept zeroing in on one number – it was -6° Fahrenheit. That's cold. Stupid cold.

Soon, I was bundled up and off to the airport. Today I would be flying from Timmerman down the Lake Michigan



Ryan Dembroski

lakeshore, past the Chicago skyline (under O'Hare's Class Bravo airspace), inland over Midway International Airport (MDW), and landing at the world famous Clow International Airport (1C5) in Bolingbrook, Illinois for breakfast. I'm not too pilot enough to say that I was a little nervous about the whole thing. I'm a relatively new private pilot who "grew up" happily buzzing around the cornfields of Wisconsin in a J-3 Cub. I would never climb into a Cub at -6°F and I had never flown below Class Bravo airspace before. For me, this was a whole new ball game.

Luckily, I wasn't going to be doing it alone. As I pulled

up to the airport, a few other sleepy pilots were wandering into Gran-Aire, Inc., the fixed base operator at Timmerman that hosted the first meeting of what was to become the Experimental Aircraft Association (EAA) on January 26, 1953. Eight months later, EAA held its first annual fly-in convention, also at Timmerman.

I would join seven other aircraft on this adventure. The local flight school was hosting a fly-out for MWC pilots and had put together a sample flight plan for us to follow. Luckier still, I had invited a fellow pilot friend, Brad, to sit right seat. A second set of eyes in the cockpit can never hurt in complicated airspace.

We gathered for a briefing and walked through the weather and procedures. Departure out of MWC wouldn't be an issue, but there would be a moderately stiff and nearly direct crosswind at Clow. There would also be excellent pancakes. Briefing over, we all scrambled to preflight our birds.

I am now a partner in a Cessna 172 Skyhawk. She is of mid-90s vintage, but she's got tons of gizmos and glass. She even has an upgraded engine. She goes considerably faster than 80 mph (that's Piper Cub cruising speed in a dive). Some of my 13 partners call her "Michelle," but to me she's just "7MA." She is honestly more airplane than I need, but the price is right and my partners are pretty cool dudes.

As pilot-in-command, I handed a shovel to Brad as we entered the hangar and directed him to clear the few inches



A COLD WEATHER TIP FROM TANIS

Inspect and replenish your pilot survival kit. Some parts of the country can be pretty inhospitable, especially in the winter. If you fly a single-engine aircraft, make sure you file a flight plan and carry a few survival items in case of a forced landing, e.g. warm clothing, silvered survival bag, torch/mirror and whistle for signaling, sleeping bag, space blanket, waterproof matches, water, energy bars, first aid kit, and even a portable tent. A hand held aviation transceiver and spare batteries are good additions to have as well, particularly if you will be flying a significant distance from civilization.

"Preheat your airplane, and thaw out your cold weather flying skills!" Sign Up For Cold Weather Email Tips From Tanis At

www.aircraftpreheat.com

We thank our customers and AOPA, EAA, FAA and NTSB for providing cold weather tips for reader consideration.

of snow that were outside the door. How's that for crew resource management? Brad made short work of it though, and soon my preflight was complete. We stowed our bright red engine cover in the baggage compartment and opened the hangar door. Lastly, but certainly not least, we unplugged the engine preheater. I was concerned about 7MA not being able to start. Yes, the engine was toasty due to the preheat, but... stupid cold, remember? As we pulled her out of the hangar, it seemed

to me that time was critical; every second that passed without the engine running would mean tendrils of bitter cold were seeping into 7MA's engine block.

"Man... I really hope she starts," I thought to myself aloud.

"Me too," Brad said. He, too, was anxious to get going and to get some cabin heat started. I couldn't really blame him.

I turned the key and 7MA didn't disappoint; she started right up like she always does. I kept the RPMs low so she could finish warming up gently. Minutes later, as we taxied to 22R over some patchy snow, the last of our fly-out wingmen took to the sky. Checklist complete, we barreled down the runway and chased after them, the cold thick air bolstering 7MA's performance. "Safe flight," our controller called out. "We'll see you guys this afternoon."

Flying south to Chicago from Milwaukee is actually pretty simple from a navigational point of view. You just keep the blue stuff on your left and the green stuff (or in this case, the white stuff) on your right. The challenge comes in managing all of the airspace transitions and the ever-decreasing Class Bravo shelves.

Heading east from MWC, the smooth air and now warming cabin helped build my confidence. Milwaukee Approach sent us up to 4,500 feet and



7MA over the lakefront in Chicago with the epic skyline in the distance. Ryan Dembroski Photo

gave us a squawk code. Brad punched it in while I turned us south towards Chicago. Flying past Milwaukee's downtown was a real treat by itself. It was nearly 8:30 am now, but the city was still waking up - as if the cold had forced everyone to stay under their Saturday morning covers. Now, up above the smoke stacks and the iconic Hoan Bridge, I was glad that I didn't make the same decision.

Staying out over the shoreline would keep us out of Kenosha's (ENW) airspace, but once we were abeam

that field, we contacted Waukegan (UGN) whose airspace sticks out over the lake. We also began the first of our series of descents. Just south of Waukegan is where O'Hare's upsidedown wedding cake begins. It's also the beginning of a VFR flyway. You can download FAA VFR flyway planning charts in most flight planning apps, or find them on the back of certain printed Terminal Area Charts. They provide recommended VFR routes for many complex or busy areas of airspace.

We followed the chart as we proceeded south, careful to match the well-marked navigational landmarks with the recommended altitudes along the way. The most critical time was near the Bahai Temple; wander much more than a mile inland, and you're busting airspace. We kept ourselves out over the water, but only a little bit, as I didn't want an ice bath if I lost the engine.

Approaching Navy Pier at 2,000 feet, the true privilege of flight was apparent. Chicago didn't seem awake quite yet

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Aeronautics Report

Wisconsin Bureau of Aeronautics

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Preventing Vehicle and Pedestrian Incidents at Airports

Hal Davis
WisDOT Bureau of Aeronautics

ou would think everyone has enough common sense not to sunbathe on a runway, and yet, I've heard it's happened. There's also no denying that a quiet runway also makes for a very tempting makeshift drag strip.

If you've hung around airports long enough, you too have probably heard of, or seen firsthand, people tempting



Hal Davis

First, it's probably illegal, as it should be. In Wisconsin, there are 86 airports that have a local ordinance controlling vehicular and pedestrian traffic at the airport. Most have standard language prohibiting both vehicular and pedestrian traffic on any airport runway, taxiway, ramp, tie down area, or outlying areas of the airport. These ordinances apply to all types of pedestrian or vehicular traffic, such as bikes, golf carts, motorcycles, ATVs, etc.

It's one thing to have a law in place; it's another to enforce it. Signs will educate some people, and fences and gates might deter others, but ultimately, reporting vehicles and pedestrians on the runway to airport personnel or law enforcement is the



The driver of this snow plow must maintain vigilance on airport property, but so do pilots.

Photo Courtesy of Outagamie County Regional Airport



A vehicle on an airport taxiway.

fate and endangering the lives of others by driving or walking on taxiways and runways, otherwise known as the movement area. Sure, some people, like the sunbathers, might not understand how airports work and are not aware of the danger they are in. However, it seems that more often than not, the cause of incidents involving vehicles or pedestrians at airports is (gasp) a local pilot or airport personnel.

As pilots, we like to think we know our local airport like the back of our hand. So you ask, what's the big deal if I take a shortcut across the runway to get to my buddy's hangar on the opposite side of the field or if I walk out to the hold short line to watch a plane take off or land? most effective method of preventing an incident. That's where you come in! Very few airports are staffed 24/7, so remaining vigilant is important any time you are at the airport.

Secondly, the incorrect or unauthorized presence of a vehicle or pedestrian on a runway meets the Federal Aviation Administration's definition of a runway incursion. Reducing the number of runway incursions remains a top priority for FAA and is a critical step toward further improving aviation safety. In the Great Lakes Region alone, vehicles and pedestrians caused 23 reported runway incursions in 2014. I'd venture to guess some incidents went unreported as well. Fortunately, the majority of runway incursions are not so

severe that an actual collision takes place. However, the sheer number of incursions means the risk of a collision is very real.

It's not just local pilots and people looking for a tan that are the problem...airport personnel can find themselves in the wrong place at the wrong time as well. In general, access to the movement area should be limited to only those activities necessary to support the operational activity of the airport. In addition, service roads should be used as much as possible to minimize time spent on the runways and taxiways.

Whether plowing snow, cutting grass, or inspecting the airfield, extended time on the movement area may be unavoidable. In this case, having the necessary equipment, proper training and situational awareness are all crucial to staying safe and avoiding trouble.

At a minimum, all vehicles entering the movement area should have a working radio capable of communicating with air traffic control or monitoring and transmitting on the common traffic advisory frequency (CTAF). If a particular vehicle does not have a radio, it should be escorted by a vehicle that does.

Next, the vehicle should be highly visible. Especially if accessing the movement area at night or during inclement weather, high beams, flashers and a yellow beacon should all be installed and operational.

Finally, any vehicle entering the movement area should be in good working condition. The runway is not a good place to find out that strange noise the vehicle had been making was more serious than you thought.

FAA recommends that anyone driving on the airport go through training. The curriculum will vary greatly on the characteristics of the airport and where the individual will be driving. For example, someone just driving to their hangar should understand where they are authorized to drive, speed limits and the location of acceptable parking areas. Conversely, someone driving on the movement area should additionally have a very strong understanding of the airfield layout, the meaning of airfield signs and markings, and proper radio communication procedures.

The final critical element for staying out of trouble is good "situational awareness." Maintaining good situational awareness can be significantly more challenging while simultaneously performing other tasks, like snow plowing; operating in degraded conditions, like a blizzard; or when coping with other factors such as fatigue, stress, or running behind schedule. Sound familiar? Undoubtedly, airport employees regularly face these types of conditions over the winter months.

Good situational awareness starts with closely monitoring the Common Traffic Advisory Frequency (CTAF) or air traffic control frequencies to know where aircraft are at all times and their intentions. By doing so, the vehicle operator is afforded plenty of time to anticipate any conflicts and get out of the way. At an uncontrolled airport, vehicles should also regularly announce their position and intentions, especially when operating on movement areas for an extended amount of time. Approaching aircraft may not have been previously tuned in to hear the vehicle's initial radio transmission.

In summary, no matter why you are driving or even walking around an airport, remember aircraft always have the right-of-way, except when air traffic control has specifically instructed otherwise; make sure you know where you are legally allowed to be and report questionable activity to airport management or law enforcement; avoid entering the movement area unless it's absolutely necessary; and if you need to enter the movement area, make sure you have the proper equipment, training and maintain good situational awareness at all times.

Meet Matt Messina...

Airport Development Engineer WisDOT Bureau of Aeronautics

MADISON, WIS. – Matt Messina joined the Wisconsin Department of Transportation's Bureau of Aeronautics in January 2015. As an airport development engineer, Matt is responsible for managing projects at eight airports around Wisconsin. His duties include helping the airports develop a realistic and achievable capital improvement plan; contracting with



Matt Messina

consultants for planning, design and construction engineering services; conducting plan reviews; and working as a liaison between local sponsors and state and federal agencies.

Matt earned a Bachelor's of Civil Engineering degree in 2014 from Michigan Technological University, with an emphasis in transportation engineering. Before attending Michigan Tech, Matt joined the Minnesota Air National Guard in Duluth, Minnesota. There he troubleshoots and repairs the avionics systems on their F-16s. These avionics systems include communications, navigation, air data, flight controls, weapon delivery, and electronic warfare.

Matt is an Engineer in Training, working toward his Professional Engineer title. He is originally from Duluth, Minnesota, and enjoys playing hockey, golf and fishing.

Aeronautics Bulletin

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THE STATE OF MINNESOTA PROVIDES THIS TECHNICAL BULLETIN IN THE INTEREST OF AVIATION SAFETY AND TO PROMOTE AERONAUTICAL PROGRESS IN THE STATE AND THE NATION

Cassandra Isackson, Director

Dan McDowell, Editor

Minnesota DOT Office of Aeronautics

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Together, We Can Grow Aviation In Minnesota!

by Cassandra Isackson
Director, Minnesota DOT Office of Aeronautics

n my column in the Feb/March
2015 issue of the Midwest
Flyer Magazine,
I stated: "Please invite me to come to your airport meeting, whether with the airport



Cassandra Isackson

commission or board, the EAA, a fly-in or another important aviation event. I look forward to the opportunity to answer questions about what we are doing to get money out there to benefit your airport.

It also gives me a chance to meet you face to face, and you have an additional opportunity to share valuable update information that will help us do an even better job for YOU!"

I am still hoping to hear from many of you before the summer season ends. But in the meantime, I wanted to let you know that your Minnesota Office of Aeronautics will have a booth at the Minnesota Maintenance Conference in March, Minnesota Pilots Association gathering and Minnesota Council of Airports Conference in April, Discover Aviation Days in May, and the Mankato Air Show in June! So you can see that we are making a concerted effort to meet you at a variety of aviation venues around the state.

We look forward to meeting you and hearing from you. We, you and I, have lots of information to share with each other, all for the improvement and betterment of aviation throughout Minnesota.

One of the best-kept secrets about aviation is that it is more than just a team of like-minded individuals...it is a family! We all have a tremendous love and appreciation for essentially all-things aviation. So please, come visit our booth at these events, or contact me at the Office of Aeronautics and we will set a date and time that I can come to your airport commission or board meeting, your fly-in, or to another important aviation event in your community.

Together, we can grow aviation in Minnesota!

Aircraft Servicing, Maintenance and Repair

by Rick Braunig

AvRep, MnDOT Aeronautics

hile an FAA licensed mechanic can sign your logbook for the maintenance they perform and the FAA is fine with it, the State of Minnesota is not.



Rick Braunig

The Minnesota rules state that: "Any person who, for compensation or for hire, provides or offers to provide aircraft maintenance as defined in current federal aviation regulations found in Code of Federal Regulations, title 14, part 43, major or minor repair, or

alteration to airframes or aircraft power plants or both, is deemed to be engaged in the business of aircraft servicing, maintaining, and repairing and must have a commercial operations license with an endorsement to certify the person's authority to engage in aircraft servicing, maintaining, and repairing."

Getting a license from the State would seem to be an easy proposition. There are only three things that are required: First, a building or shop on a public or private airport with adequate size and sufficient space to work on aircraft. Second; you will need permission from the airport owner, and third, the required insurances. Prove you meet these criteria and send in an application with the \$30 license fee and you are set to go.

In addition to premise insurance, Minnesota aircraft maintenance shops are required to have an insurance called "products hazard and completed operations." This insurance protects the aircraft owner and the maintenance provider from bad parts and bad maintenance. Without it the aircraft owner may find himself or herself in a bad spot through no fault of their own.

I know of a gentleman who had some maintenance done in his hangar by a mechanic that gave him a "good price." A half hour into his next flight the engine quit and an offairport landing followed. He and his son suffered minor injuries, but the aircraft was a total loss. The mechanic didn't have any insurance. Would your insurance cover you in this case?

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What about the mechanic? He wasn't protected in any way. If the owner or his insurance carrier sues the mechanic for the loss of the aircraft, how does he pay?

We also think hangar keeper's insurance is a good idea. This insurance protects your aircraft in case something happens to it while it is in the shop's hangar. What if the hangar catches fire and all the aircraft are destroyed. The hangar keeper's insurance pays for the damage to your aircraft. We don't require hangar keeper's insurance, but we do require the maintenance provider to inform their customers in writing if they do not provide it.

So if you are an aircraft mechanic and work for Delta Airlines, does Delta Airlines need a commercial license to perform aircraft maintenance? No, they don't, as long as they only work on their own aircraft. The same is true of Bemidji Aviation. They wouldn't need a commercial license for aircraft maintenance if they only worked on

their own aircraft, but because they choose to offer their services to others, they are required to have the Aircraft Servicing, Maintenance and Repair endorsement.

As an aircraft owner, there are certain maintenance tasks the FAA authorizes you to perform. If you happen to be a licensed airframe and/or power plant mechanic, you can exercise the full extent of those privileges on your own aircraft without a commercial operator's license. You could even help out your friend on their aircraft as long as you didn't take any compensation.

When we look for people to do maintenance on our aircraft, we are concerned that they have the tools, equipment and training to properly do the maintenance we are asking them to perform. Even then, there is no guarantee the repair will be perfect, but when it isn't, because we only use operators with a commercial license, we know we have recourse to get any

problems addressed.

The next time you need maintenance, I hope that one of the things you'll ask of your maintenance shop is to see their commercial operator's license. If you would like to check, we keep a list of all licensed operators on our website at: http://www.dot.state.mn.us/aero/ aviationbusinesses.html. If your shop isn't on our list, give us a call and we will work with them to get them licensed.

If you've been providing maintenance without the required commercial operator's license, I hope you'll take the time to get your commercial operator's license...without it you are breaking the law. You should also know that we will be working with the airport managers in the state, the Minnesota Aviation Trades Association and pilots and aircraft owners to identify and communicate with people who may be in violation of this rule.

The Peaceful Illusion of Glassy Water

by Rachel Obermoller AvRep, MnDOT Aeronautics

magine perfectly smooth water, without a ripple and reflecting a mirror-like image, the slightest bit of steam rising from the warm water into the cool morning air.



Rachel Obermoller

There is little more you need to add other than a peaceful sunrise, mug of steaming coffee, and the call of a loon from the middle of the lake to imagine the most quintessential and iconic "Up North" experience. Yet for a seaplane pilot, glassy water presents challenging water conditions and optical illusions, which pose significant hazards.

A former private pilot student of mine, Jonathan DeVall, is now serving as a missionary pilot in Brazil, and



This perfectly glassy water reflects the objects above without distortion. While a peaceful sight, this creates significant challenges for a seaplane pilot. Photo courtesy of Jonathan DeVall, http://mission-brazil.com/blog

uses a seaplane to transport people and supplies where there are no roads. Jonathan has a keen eye for photography in addition to being an excellent pilot and has shared many photos and videos of his adventures, including quite a few which capture completely glassy water and the undistorted reflection of the objects above. His experiences in Brazil have given him the opportunity to practice his glassy water technique often, as many days, there is little wind to manipulate the surface of the water enough to provide the necessary depth perception.

Glassy water can be present across a broad spectrum, from a crystal clear mirror-like surface, to rippled or even wavy water, which reflects a distorted image. The reason it presents such a challenge for seaplane pilots is that without texture on the surface of the water, there is no good way to judge height. The pilot has the illusion he is higher than he actually is and in this condition, flaring using a normal technique does not work, as the pilot would touch down much sooner than expected. For this reason, we must use a glassy water technique, the equivalent to an instrument approach procedure for the seaplane world.

A glassy water landing requires the pilot establish a nose up attitude prior to the loss of outside visual reference, such as crossing the shoreline of a lake or descending below the treeline

when landing in a river. Establishing the appropriate nose-up pitch attitude and airspeed, and controlling the rate of descent using power, should be accomplished before this loss of outside visual reference. If this is not accomplished, a go-around is necessary to avoid succumbing to the illusion of glassy water. The lack of a stabilized approach at the appropriate time is just one condition that requires a go-around during a glassy water landing.

Because we are making our approach with power and using a shallow rate of descent, a glassy water landing will require significantly more distance than a power-off landing. For this reason, it is important to establish a goaround point, and if the aircraft has not touched down by this time, we need to execute the go-around and re-evaluate the situation.

Choose a point for the go-around, which leaves sufficient water to stop the aircraft and also allows for terrain clearance during the go-around. A small body of water or tall obstacles to clear at the shoreline can make a glassy water landing difficult, and in some situations, a lake which is large enough on a normal day may prove too short to land on in glassy conditions. Thankfully, there are some tricks we can use to shorten the required distance to land on glassy water days.

Normally, glassy water exists when there is no wind, which makes the landing direction less important than it would be on a windy day. If the water body has obstacles along the shore, elect to cross the shoreline where they are shortest. This minimizes altitude to lose using the glassy water technique after the loss of outside visual reference, therefore minimizing the water length required for the landing. Maintaining outside visual references as long as possible by flying parallel to a shoreline and keeping it in your field of vision and being proficient at transitioning to the glassy water configuration efficiently, help to minimize the landing distance necessary. It should go without

saying that when all else is equal, we aren't concerned about terrain clearance, noise abatement or obstructions under the water, and the water body isn't a perfect circle, so land in the direction, which maximizes the distance available.



Even low speed taxi disturbs the glassy surface. Taxiing through the takeoff area to create wake is one method to try to minimize the takeoff distance when glassy water is present.

Photo courtesy of Jonathan DeVall.

Several times I have flown over a landing site that appeared to have enough texture to accomplish a normal power off landing, yet in the last few seconds before touchdown, the depth perception went away as the water appeared to smooth out and I lost the ability to judge my height above the water. Sometimes this necessitated a go-around, and other times I still had an outside visual reference by which to judge my height above the water with plenty of water in front of me and was able to quickly transition to a glassy water landing. Any time the surface of the water has any reflection, a seaplane pilot is wise to use the glassy water technique; and any time the winds are light, it is also wise to anticipate the need for a glassy water landing.

In addition to posing a risk during landing, glassy water can complicate a takeoff. Because the water is smooth, it produces constant drag against the float on the step, unlike water with waves where the drag is reduced because the water is not in constant contact. Couple this with the absence of wind, and you can see why it takes more water to get in the air. Taxiing through the takeoff

area can help create texture on the water, and we can see from Jonathan's photo that even low-speed taxi creates ripples across the water. There are also other techniques we can employ to maximize the available takeoff distance,

but we should always be thinking about our takeoff abort point, even when the water isn't glassy, much like we establish go-around points during a landing to ensure we can safely stop before the shore or other obstacle.

The glassy water technique is just one of the things a pilot can learn from training for their seaplane rating that can be useful in the other flying they do. The skills needed for glassy water are similar to those needed to fly a

glideslope on an instrument approach or establish a stabilized approach to landing on final. A seaplane rating also gives many pilots a new appreciation for the effects of wind, planning and executing docking, ramping, or beaching, and even securing the aircraft.

If you don't hold a seaplane rating, consider putting this on your flying "bucket list" or find another rating or skill to add to your flying repertoire. I've heard many glider pilots say the same types of things, and I've always been partial to taildraggers, but those are just a few ideas to get you dreaming. Whatever type of flying you do, make sure to keep your skills fresh, get recurrent training periodically, and brush up on the skills you haven't used recently. If you are seaplane flying, or your flying in general has taken a vacation over the winter, review the things you need to know and practice the things you need to do to stay safe and sharp in the airplane. A good resource for seaplane pilots to review comes out of the Anchorage Flight Standards District Office in the form of a "Seaplane Ops Guide," which you can find at https://www.faa.gov/about/ office_org/headquarters_offices/avs/ offices/afs/divisions/alaskan_region/ media/Seaplane_Guide.pdf

Keep the tips up, and don't forget the water rudders!

Minnesota's Seaplane Seminar & Fly-In To Be Held At Madden's Resort

adden's Resort on Gull Lake near Brainerd, Minnesota, will once again host the annual Minnesota Seaplane Pilots Association (MSPA) Seminar & Fly-In, May 15-17, 2015. Floatplanes can land on Gull Lake and fixed gear aircraft can land at East Gull Lake Airport, located immediately adjacent to Madden's. Madden's Resort has non-oxygenated 91 fuel at its marina

for floatplanes. Car rental and fuel is available at Brainerd Lakes Regional Airport (KBRD). Fuel is not available at East Gull Lake Airport, but Madden's will pick up pilots and their passengers upon their arrival. For additional information on East Gull Lake Airport, call 218-828-9279. East Gull Lake Airport is a grass airstrip, 2618 x 160 feet.

Madden's Resort is owned and operated by the Thuringer family, and Brian Thuringer and his son, Ben, are themselves pilots and aircraft owners. As active members of the Minnesota Seaplane Pilots Association, the Thuringers extend a warm welcome to fellow pilots.

Reservations for lodging can be made online at www.



maddens.com, by calling Madden's Resort at 800-642-5363, or emailing reservations@maddens.com.

Accommodations range from cottages and hotel rooms, to luxury villas. All seaplane seminar topics are pertinent to floatplane operations, and most are pertinent to both floatplanes and fixed gear aircraft. The Saturday night banquet will feature an entertaining speaker, and watching

the arrivals and departures of floatplanes on Gull Lake is spectacular!

Seminar speakers will include Minnesota DOT Office of Aeronautics Director, Cassandra Isackson; the chief pilot at MNDOT Aeronautics, Jeff Flynn; Seaplane Pilots Association Executive Director, Steve McCaughey; FAA aviation safety inspector, Kevin Morris; aquatic invasive species specialist at the Minnesota Department of Natural Resources, Jason Jenson; and float manufacturers Chuck Wiplinger of Wipaire, Inc., Jeff Voight of Aeroset, and Brian Huberty of Clamar. Discussing Unmanned Aerial Vehicles and rules

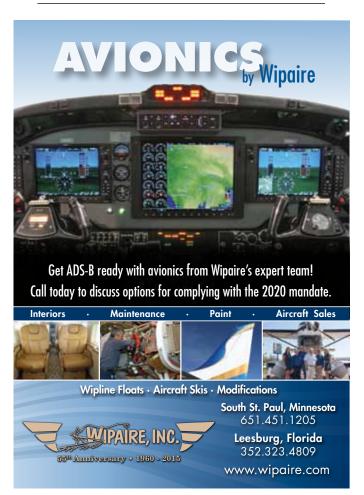
CONTINUED ON PAGE 62



Minnesota Aviation Industry News



ipaire, Inc., with headquarters at Fleming Field, South St. Paul, Minn., held its grand opening for its Leesburg, Florida facility, February 28, 2015.





Based at Leesburg International Airport (KLEE) since February 2013, Wipaire's service center has expanded into a new, larger hangar.

"Our new 10,000 square foot hangar more than doubles our facility footprint and provides us much-needed room to accommodate the entire range of aircraft that Wipaire manufactures Wipline floats for," stated Chuck Wiplinger, President and COO. "This means we can work on aircraft ranging in size from the Aviat Husky, all the way up to the Twin Otter."

The grand opening featured a safety seminar with a variety of topics and flying demos in Wipaire's Boss 182 and a Grand Caravan EX, continental breakfast and a catered lunch as well as door prizes. Wings seminars were also held.

For over 50 years, Wipaire has been engineering and manufacturing a full line of aircraft floats for all sizes of aircraft from the Piper Cub to the Viking Twin Otter, including most single-engine Cessna aircraft. In addition, Wipaire has engineered over 100 Supplemental Type Certificated modifications for improved performance, convenience, and reliability. As a leading aircraft service provider, Wipaire offers maintenance, avionics installation and repair, custom interior design and installation, and exterior paint refinishing (www.wipaire.com).

Academy College & Cape Air Create Pathway To The Airlines To Meet Growing Demand For Pilots



Academy College, Bloomington, Minnesota Dave Weiman Photo

by Dave Weiman

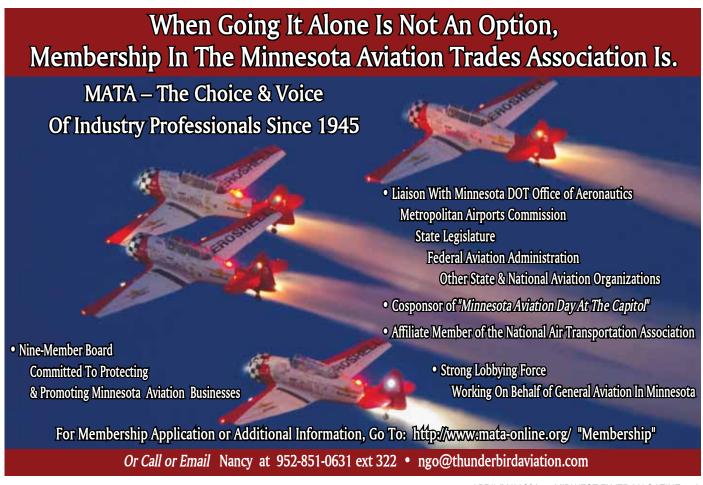
BLOOMINGTON, MINN. - The only four-year accredited aviation college in the Twin Cities - Academy College - has signed an agreement with Cape Air of Hyannis,



Cape Air Cessna 402 Cane Air Photo

Massachusetts, to create a clear-cut "pathway" to a career with the airlines. Both Academy College and Cape Air have programs designed to help students reach their ultimate goal.

Executives from both Academy College and Cape Air met March 4, 2015 at the Academy College campus in





(L/R) Julie Falk and Nancy Grazzini-Olson of Academy College, and Captains Steve Phillips and John Peck of Cape Air.

Bloomington, Minn., to sign the official agreement spelling out each other's roles and responsibilities. Academy College recruits students and provides the education, flight training and an opportunity to build flight time to qualify for an interview with Cape Air. Cape Air in turn guarantees all Academy College graduates a job interview and an opportunity to work towards their Airline Transport Pilot (ATP) Certificate.

The Pathway Agreement Signed

Representing Cape Air at the signing ceremonies were Captains Steve Phillips and John Peck, and the manager of flight dispatch, Shawn Fisher. As a form of introduction, I asked them if we were all pilots, and they responded in the affirmative, including Fisher, who once had aspirations of becoming a commercial pilot, but found his aviation career as a flight dispatcher.

Capt. Steve Phillips has been with Cape Air for 20 years, and has risen through the ranks as line pilot, chief pilot, and now director of operations. Phillips is type rated in each of the three aircraft flown by Cape Air: Cessna 402, Britten-Norman Islander, and ATR 42. Phillips and his wife own a 1946 Cessna 140 for recreational flying.

Capt. John Peck's aviation career

started out when he received his Navy wings in 1972. He flew F4 Phantoms extensively and was assigned to Naval Air Station-Patuxent River, Md., to test the catapult systems on aircraft carriers. Peck has had the rare privilege of landing on every aircraft carrier in the Navy, sometimes shooting as many as eight traps a day. From the Navy, Peck went to work for American Airlines flying 757s until he joined Cape Air as director of flight training and standards.

Academy College President Nancy Grazzini-Olson, and Aviation Director, Julie Falk, represented the college. Falk recently left Delta Air Lines and accepted her position with Academy College.

The Pilot Shortage Is Real

"The pilot shortage dilemma is real," says Academy College officials, and it's a worldwide problem.

From the top-down, U.S. mainline carriers will have to replace more than 18,000 pilots over the next 7 years, due to the mandatory age 65 retirement rule. Add to that, pilots will be needed to fly another 3,800 new jets, or an industry growth predicted by the FAA at 1.3%.

Lengthening the mandatory retirement age from 60 to 65 has helped some, but has only delayed the inevitable. Unless we train more commercial pilots, the pool will dry up.

Cape Air and Academy College are on the same page when it comes to making the pathway to an aviation career as seamless and relaxing as possible. Increasing federal regulations has not helped.

The FAA has raised the minimum requirements for first officers and captains under Part 121 air carrier operations, and has made it mandatory to be ATP certificated. NextGen poses a whole new set of issues, mostly having to do with increased costs.

About Academy College

Academy College can compete with the major aviation universities by providing two and four-year degree programs. Students who are from



the Twin Cities appreciate Academy College's close proximity, and the fact that their tuition stays in their home state of Minnesota. Academy College is located at 1600 West 82nd Street in Bloomington.

Academy College has the largest collegiate commercial pilot flight training program in the Twin Cities, an impressive aviation business program, and the only FAA-approved aircraft dispatch training program in Minnesota.

Academy College offers a Bachelor of Science Degree in Commercial Aviation, has FAA authority to certify its commercial pilot graduates for reduced aeronautical knowledge for the Airline Transport Pilot Certificate, and an Associate of Aviation Science (AAS) Degree program.

All flight training is completed at Academy's affiliate flight school, Thunderbird Aviation, with locations at Flying Cloud Airport (KFCM) and Minneapolis Crystal Airport (KMIC). Flight training is provided using Cessna and Piper aircraft and flight simulators. Testing for each pilot certificate and rating is done at Academy College. Nancy Grazzini-Olson is president and CEO of both Academy College and Thunderbird Aviation.

Academy College graduates can fly charter and fire watch patrols through a contract between Thunderbird Aviation and the Minnesota Department of Natural Resources, providing there are openings. They can also build time as a certified flight instructor at Thunderbird Aviation.

Once students have acquired their instrument rating, 3.0 GPA, and two professor recommendations, they are guaranteed an interview with Cape Air.

New Cape Air pilots are given flight duties to help them build time and to meet the qualifications for their ATP Certificate.

Cape Air is both a Part 121 and

Part 135 airline. (Part 121 includes all scheduled air carriers. Part 135 includes commuter air carriers and on-demand operations).

Flying For Cape Air

The pathway to the airlines is well known... Get a college education and flight training to meet minimum requirements for the regionals, then move up the ranks to the majors. But more and more, Cape Air has become the final destination for many pilots. The benefits are comparable, and the flying is unique.

Most flights are 30 minutes to an hour in duration, and VFR flying is encouraged. An instrument flight plan is optional, but generally not needed. Flight following and air traffic control services are utilized frequently, and Cape Air flight dispatchers are available anywhere in the world.

The Cessna 402s and Islanders are flown single pilot, and the pilot



is responsible for flight planning, customer service, and loading and unloading the aircraft. The ATRs are flown with two pilots and a flight attendant.

Pilot Dan Wolf of Harwich, Massachusetts, founded Cape Air in 1989 with one route, Boston to Provincetown, eight employees and a yearly passenger total of 8,000. Since then the airline has provided year-round service to some of the most beautiful destinations in the world.

Realizing the need to serve more communities, Cape Air soon expanded

its service across southern New England to Hyannis, Nantucket, New Bedford, Martha's Vineyard and Providence, Rhode Island. In 1993, the airline began offering flights between South Florida and the Florida Keys, and in 1998, the airline's Caribbean route took flight. Finally, in 2004, Cape Air began service in Micronesia and added two ATR 42s to its fleet. These aircraft seat 46 passengers and serve Cape Air's routes between Guam, Rota and Saipan.

Today, Cape Air operates a fleet of over 80 Cessna 402s, four Britten-

Norman Islanders and two ATR 42s, with up to 550 flights per day during high season. In 2014, Cape Air carried more than 735,000 passengers, making it one of the largest independent regional airlines in the United States. The airline is an employee-owned company with a workforce of 1000, and its chairman of the board, Capt. Wolf, remains current.

For additional information on Academy College and opportunities with Cape Air, call **952-851-0066** (www.academycollege.edu).

PILOT REPORT FROM PAGE 43

either. It sat there, below us, still and monolithic. 7MA was humming away happily. Brad pulled out his phone for a few mandatory shots. The mountainous Willis Tower (formerly the Sears Tower) rose up high into the sky. It suddenly dawned on me that there were probably people in the tower watching our little plane fly *below* them. Unreal.

It seemed like we weren't supposed to be there, practically in arms reach of it all. Some pilots preach about the freedom, and trust me when I say we are blessed. They say that aviation is the perfect metaphor for what this country stands for. I have always felt extremely lucky to be able to fly, but that assertion seemed a bit grandiose for me. But not anymore! This was exactly where we were supposed to be.

"We are now almost over Navy Pier, ready to call Midway Approach?" Brad brought me back to the task at hand. The most difficult part of the flight was coming up, and if Midway declined our transition, we would have to fly nearly to Gary, Indiana to bypass the airspace. We had the fuel to do it, but I was hungry.

I hit the transmit switch. Midway just had seven aircraft rapidly request VFR transitions over their field. I made number eight, but it didn't matter. They cleared us to fly directly over the field.

One tip for making this trip over Chicago: the controllers often use local Chicago landmarks as navigational aids. For instance, on our return trip, they asked us to fly "just north of the Stephenson Expressway" to keep us clear of airline traffic. It helps to have a road map handy in this situation. If you aren't familiar, don't hesitate to ask. The folks at Midway were extremely helpful.

A few minutes later, something caught my eye low and to our left as we began to over-fly Midway. It was a Southwest 737 on short final. As we made our final turn towards Bolingbrook, the heavy jet touched down and rolled out beneath us. Crazy, but beautiful to watch.

We continued the remaining 18 nm low over the Chicago suburbs. Once we had the field in sight, Midway had a special request for us. "7MA, squawk VFR and frequency change approved... Have a great breakfast. Would you mind bringing us some pancakes on your way back?" I told them I would see what I could do.

Entering the pattern over Bolingbrook, it was easy to see why this was such a popular airport. They claim over 70,000 landings and takeoffs each year. That's enough to make it one of the busiest general aviation airports in Illinois. Illinois pilots also know it as the home of the infamous Cavalcade of Planes show (this year happening June 6-7, 2015).

Bolingbrook reminds me of many of the approachable, communitydriven airfields in Wisconsin. The only difference here is that your approach brings you over homes and businesses, instead of cows and corn. As forecast, we encountered that moderate crosswind on final for 36. Weirdly, after two years of flying, lining up on final at an airport in Chicago seemed almost...normal. The entire trip had proved far easier than expected.

Despite the crosswind, we made a decent landing. We parked next to the Milwaukee squadron and hopped outside. It was above zero now, but the cold still hit us hard. We quickly bundled up 7MA and headed inside to find other Milwaukee pilots already warming up over coffee.

We were told to expect a considerable wait at Charlie's Restaurant (open daily from 7:00 am to 3:00 pm), but I think the frigid temps that day kept most pilots at home. That was okay with me. The pancakes were, as promised, fantastic!

EDITOR'S NOTE: By day, Ryan Dembroski is a mild mannered executive producer at a documentary film production company. By night (and on most weekends), he is a tailwheelendorsed private pilot with a passion for sharing aviation with everyone. He is currently a partner in a C-172R based out of Milwaukee Timmerman Airport. One of Dembroski's most enjoyable assignments was directing a documentary about the historic J-3 Piper Cub migration to Oshkosh in 2012 that involved 75 aircraft (www.cubs2oshfilm.com).

Flying For Fun On The Ice

Brad Thornberg Photos

GARRISON, MINN. -Shortly before the spring warm-up in the Midwest, pilots had the opportunity to land on Minnesota's second-largest inland lake, Mille Lacs Lake, Saturday, March 7, 2015, thanks to the owners of Twin Pines Resort in Garrison, Minnesota. The resort plows a two-mile stretch of snow on Mille Lacs each year, taxiways and a large aircraft parking area, so aircraft on wheels and skis can land, and pilots can partake in a meal and a little camaraderie.



Mille Lacs Lake is located approximately 100 miles north of the Minneapolis-St. Paul metropolitan area. Mille Lacs is French for "one thousand lakes." In the Ojibwe language, the lake is called Misi-zaaga'igan, meaning "grand lake."

Mille Lacs Lake consists of 132,516 acres of water and two islands, which comprise Mille Lacs National Wildlife Refuge, the smallest wildlife refuge in the United States (http://millelacs.com).



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Minnesota Education Section

Minnesota Transportation Center of Excellence

Northland Community & Technical College Awarded Minnesota Department of Agriculture Grant

THIEF RIVER FALLS, MINN. – Northland Community & Technical College was awarded a grant under the Minnesota Department of Agriculture's Minnesota Crop Research Grant Program on Jan. 15, 2015. The grant awarded Northland nearly \$250,000. The project titled, "Digital Imagery, Precision Agriculture," will focus on utilizing NextGen technology and unmanned aerial systems to aid the 21st century grower in creating yield efficiencies and promoting "green" agricultural practices.

The project will work extensively with growers in northwest Minnesota. The goal of this project will be to gather the necessary digital information from agricultural sensors and build application maps for growers so that commercial application equipment can apply crop nutrients and crop protection products in a real-time, true prescription agricultural format.

The project will leverage the assistance of industry expert partners such as:

Titan Machinery / Case New Holland

Evergreen Implement / John Deere

Farm Intelligence

Sentera

University of Minnesota, Magnuson Research Farms

Minnesota Association Wheat Growers

Minnesota Turf Council

Minnesota State University Moorhead

AgCentric MnSCU Center of Excellence

Students from Northland are expected to benefit from the experience of working within the project. Northland Imagery

Analysis and Geospatial Intelligence Analysis students will work to analyze and interpret the collected data. Students in Northland's Farm Business/Operations and Unmanned Aerial Systems programs will work with instructors to gain a handson understanding of how precision agriculture plays a crucial role in the future of their respective fields of study. Students at Minnesota State University Moorhead will provide expertise in satellite imagery through the direction of Earth Science faculty member, Kirk Stueve.

Northland Community and Technical College will utilize its Certificate of Authorization (CoA) from the Federal Aviation Administration to fly small, unmanned aerial systems (sUAS) in Roseau County Minnesota to gather data from participating growers' fields. Using sensors on the sUAS from project partners, the flights will collect data that can identify crop nutrient status, pest outbreaks, and soil and topography data. The Magnuson Research Farm's 40-acre site will serve as a hub for sUAS activity within the project.

The Digital Imagery, Precision Agriculture research will occur over three years from 2015 to 2017. Northland Community and Technical College is a comprehensive college with campuses in East Grand Forks, Minn., and Thief River Falls, Minn. One- and two-year degrees, transfer programs and diploma certification are available in a variety of majors, as well as workforce training and continuing education programs. Northland Community and Technical College is a member of the Minnesota State Colleges and Universities system, and accredited by the Higher Learning Commission of the North Central Association.

Visit Northland Community and Technical College at www.northlandcollege.edu

& Northland Aerospace at www.northlandaerospace.com

NCTC is an equal opportunity educator and employer.



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- First UAS Maintenance and Geospatial Intelligence Training programs in America.

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CALENDAR

Send the date, times, location (INCLUDE CITY, STATE & AIRPORT NAME & I.D.), and contact person's telephone number, as well as that person's address & email address for reference. First 15 words FREE, \$.75 for each additional word.

Complete "Calendar of Events" Form at www.MidwestFlyer.com

Or Mail To – Midwest Flyer Magazine, 6031 Lawry Court, Oregon, WI 53575

NOTAM: Pilots, be sure to call events in advance to confirm dates and for traffic advisories and NOTAMs. Also, use only current aeronautical charts, etc., for navigation and not calendar listing information. MIDWEST FLYER MAGAZINE IS NOT RESPONSIBLE FOR ACCURACY OF, OR RELIANCE ON, ANY INFORMATION PUBLISHED.

* INDICATES ANY NEW OR UPDATED CALENDAR LISTINGS SINCE THE PREVIOUS ISSUE.

2015

APRIL 2015

- 10-11* BLAINE (ANE), MINN. Great Minnesota Aviation Gathering at Golden Wings Air Museum, Anoka County Airport. www.mnpilots.org
- 10-12* Llano (AQO), Texas 2nd Annual Texas STOL Roundup, Short Takeoff And Landing & Obstacle Short Landing Competition, Flour Bombing Contest. Flyouts On Sunday. www. texasstolroundup.org
- 11* Оsнкоsн (OSH), Wis. - S.J. Wittman Birthday Fly-In Pancake, Sausage, Scrambled Eggs, Milk, Juice, Coffee Breakfast.
- MADISON (MDS), S.D. SDPA meeting 11* 11am-2pm. Program by Morris Riggin. At Noon Pizza & Pop Lunch. Contact Steve Hamilton at 605-665-8448 or skyhawk@iw.net www.sdpilots.com
- 15-17 St. Cloud, MINN. Minnesota Airports Conference at Rivers Edge Convention Center. Registration: 612-624-3745.
- LEE's SUMMIT (LXT), Mo. Pancake 18 Breakfast 8:30am-Noon.
- 18* AMES (AMW), Iowa - Breakfast 7-11am. 641-218-8733.
- 18* INDEPENDENCE (IIB), Iowa - Tailwheel Flying Ground School & Fly-in Breakfast 8am-noon. Seminar begins at 10am. FAAST Wings credit.
- DUBUQUE (DBQ), Iowa Breakfast 8am-19* Noon. 915-202-7481.
- 21-22 Des Moines, Iowa Iowa Aviation Conference at the Sheraton.
- 21-26 LAKELAND (LAL), FLA. Sun 'n Fun. www.sun-n-fun.ora
- 25* BLOOMINGTON. MINN. - Minnesota Aviation Hall of Fame at the Ramada, Mall of America Hotel. Deadline April 10th. www.mnaviationhalloffame.org
- 25* HILLSBORO (3H4), N.D. - Breakfast 9am-Noon. Prizes will be given out for the longest haul, oldest aircraft, and oldest pilot to fly in.
- FORT DODGE (FOD), IOWA Chili 11am-25* 2pm. 515-955-3434.
- 25* CLEVELAND (BKL), OHIO - Family Day 10am-3pm.

MAY 2015

- Brainerd, Minn. Minnesota Seaplane Pilot's Safety Seminar Dates are May 15-16.
- 9-10* QUAD CITY, Iowa Quad City Air Show at

- the Davenport Municipal Airport 5-8pm. www.quadcityairshow.com 10* POPLAR GROVE (C77), ILL. - Breakfast 7am-Noon.
- 11-13 La Crosse, Wis. Wisconsin Aviation Conference at the Radisson Hotel. For additional information go to www. wiama.org, or contact Bob O'Brien at 815-757-2869.
- 13-14 ROCKFORD, ILL. Illinois Aviation Conference at Clock Tower Resort. Hangar Party Sponsored by Poplar Grove Airmotive, Poplar Grove Airport/ Museum.
- 15-16* Brainerd, Minn. Minnesota Seaplane Pilot's Safety Seminar at Madden's on Gull Lake. www.mnseaplanes.com
- 16 LEE's SUMMIT (LXT), Mo. - Pancake Breakfast 8:30am-Noon.
- 16 SALINAS (SNS), CALIF. - To read more about the AOPA Fly-In go to www.midwestflyer.com/?p=8264. Starting in February you can RSVP to attend by going to www.aopa.org/ Community-and-Events/AOPA-Fly-In/2015/About
- 16* ORANGE CITY (ORC), Iowa -Breakfast 7-11am- Orange City Tulip Festival 7am-7pm. WWII Static Display Plus. octulipfestival.com
- 16* ANKENY (IKV), Iowa - Antique aircraft flyin, classic car show & lunch 9am-4pm. www.iowaaviationheritagemuseum. webs.com
- 16* GRAND RAPIDS (GPZ), MINN. - Pancake breakfast, 8am-Noon.
- 17 BRODHEAD (C37), Wis. - Pancakes, two sausages, scrambled eggs and choice of beverage breakfast 7am-Noon. Served up on our own airplane mechanic-designed professional pancake griddles. There is outdoor seating under the pavilion as well as heated indoor seating in case of inclement weather.
- 17 TAYLORVILLE (TAZ), ILL. - Biscuits and gravy, sausage and eggs, hashrounds, pancakes, donuts, cereal, coffee, tea, orange juice breakfast.
- 17* ROMEOVILLE (LOT), ILL. - Pancake breakfast 7am-Noon.
- 17* CANTON (CTK), ILL. - Fly-In at Canton Ingersoll Airport 7:30-11am.
- 23* SPENCER (SPW), Iowa - Fly-In 8am-1pm Lunch starting at 10am. 712-320-5280

- FREMONT (FFX), MICH. Pancake 23* breakfast 8am-2pm.
- 25* NEW PHILADELPHIA (PHD), OHIO -Pancakes, sausage, eggs breakfast.
- MONROE (EFT), Wis. Green County 30* Breakfast On The Farm 6-10am. Also enjoy farm tours, arts & crafts & entertainment. Pilot/aircraft owner, Dan Wegmueller, wishes to invite all pilots to fly into the Monroe, Wisconsin airport (KEFT) for a complimentary shuttle to his farm, 3 miles away. For additional information, email or call Dan at dwegs@tds.net: 608-293-2340.
- 30-31 BLAINE (ANE), MINN. Discover Aviation Days at Anoka-County-Blaine Airport. Pancake Breakfast & Lunch both days. Hangar Dance held on Saturday night. Check out aviation careers, kids' activities and more, 763-568-6072. www.DiscoverAviationDays.org
- 31* FORT ATKINSON (61C), Wis. - Wings & Wheels & Country Style Breakfast 8am-Noon.

JUNE 2015

- New Lisbon (82C), Wis. Friday Night Fish Frv 5-7pm.
- HEBRON (HJH), NEB. Nebraska 6 State Fly-In and Air Show. www. hebronairport.com.
- 6 FREDERICK (FDK), MD. - To read more about the AOPA Homecoming Fly-In go to www.midwestflyer.com/?p=8264. Starting in February you can RSVP to attend by going to www.aopa.org/ Community-and-Events/AOPA-Fly-In/2015/About
- 6* Council Bluffs (CBF), Iowa - Breakfast 8-11am, 402-981-4633.
- 4-7 JUNCTION CITY (3JC), KAN. - National Biplane Fly-In at Freeman Field. www.nationalbiplaneflyin.com
- 7 WILD ROSE (W23), WIS. - Pancake Breakfast 8am 'til gone and Pig/ Beef Roast and more lunch, 11:30 'til gone. Free kiddie "Plane Train" rides. Gamma Goat rides, 50/50 Raffles and Airplane rides (fee charged for airplane rides). Event held rain or shine.
- 7 AUDUBON (ADU), Iowa - Breakfast 6:30-10:30am. 712-563-3780.
- 7* BUFFALO (CFE), MINN. - Buffalo Days Fly-In & Drive-In Breakfast starting at 7:30am. Includes an Air Show, huge Car Show and aircraft Static Display.

- For more information call West Metro Aviation at 763-682-1516.
- 7* DEKALB (DKB). ILL. - Pancake breakfast.
- 7* MANDAN (Y19), N.D. - "Planes & Pancakes" Airport Breakfast 8-11:30am. Free rides to Buggies-n-Blues festival.
- JUNEAU (UNU), Wis. Pancake Breakfast 8am.
- 9* VINTON (VTI), Iowa - Tuesday Night Grill-Out 5-8pm at Vinton Veterans Memorial Airpark. 319-334-4000.
- 13* BUFFALO (CFE), MINN. - 2nd Annual North Central Sonex Fly-In. wflury@wh-link.net, 763-670-6021
- 13* Noblesville (180), IND. - Pancake breakfast 8-11am.
- 14* DENISON (DNS), Iowa - Breakfast 7am-Noon. 712-265-1608.
- 14* FERGUS FALLS (FFM), MINN. - Dad's Belgian waffle breakfast 8am-
- 14* ANN ARBOR (ARB), MICH. - Pancake breakfast 8am-Noon.
- 14* Poplar Grove (C77), Ill. - Pancake, waffle, eggs & sausage breakfast 7am-Noon.
- 20 LEE's SUMMIT (LXT), Mo. - Pancake breakfast 8:30am-Noon.
- 20* PERU (GUS), IND. - GUS Fly In Pancake breakfast (8-11am, burger & dog lunch 11am-1pm.
- 20* Keosaugua (6K9), Iowa - Pancake & sausage breakfast 7-10am.
- 21* STANTON (SYN), MINN, - Breakfast 7am-Noon, 507-645-4030.
- LACON (C75), ILL. Father's Day pancakes, sausage, eggs, waffles, 21* drinks breakfast & static displays.
- 21* SCHAUMBURG (06C), ILL. - Gourmet pancake breakfast 8am-Noon.
- 22* LACON (C75), ILL. - Safety Seminar 7-9pm. 32-246-2870.
- 23* INDEPENDENCE (IIB), Iowa - Grill-Out 5-8pm. 319-334-4000.
- 27* Menomonie (LUM), Wis. - Airfest and Autorama (car/bike show). Breakfast 7am-?. Kid activities.
- MANKATO (MKT), MINN. MN Air Spectacular Air Show. Featuring U.S. Thunderbirds, U.S. Army Golden Knights, Sean Tucker, John Klatt, Air Guard and Jet Waco, Dave Dacy, Jelly Belly, and warbirds.
- 28* Dodge Center (TOB), Minn. - Breakfast 8am-Noon. 507-272-5099.
- 28* RED OAK (RDK), Iowa - Breakfast 8-11am. 712-623-6523.
- MARION (C17), Iowa Breakfast 6am-Noon. 319-377-0457. 28*
- 28-7/3* Branson (PLK), Mo. Short Wing Piper Club National Convention. "Show-Me Short Wings Over the Ozarks." Piper Vagabond, Clipper, Pacer, Tri-Pacer and Colt. www.2015ShortWingConvention.com/

JULY 2015

- 1-3* Branson (PLK), Mo. - Short Wing Piper Club National Convention. "Show-Me Short Wings Over the Ozarks." Piper Vagabond, Clipper, Pacer, Tri-Pacer and Colt. www.2015ShortWingConvention.com/
- PHILLIPS (PBH), Wis. 2015 Price County Airport & Harbor View Fly-In, Float-In & Lake Rattle & Roll featuring a "Breakfast Buffet" at Harbor View Pub & Eatery on Saturday morning from 8:30-

FLY-IN / FLOAT-IN BREAKFAST & LUNCH - SAT., JULY 4TH - 8:30-11:30 A.M. Air Show - Friday, July 3rd - 7:00 p.m. & Sat., July 4th - 11:00 a.m.

PRICE COUNTY AIRPORT - PHILLIPS, WI (PBH)

Breakfast Before - OR - Lunch After Airshow at Harbor View Pub & Eatery On Long Lake West of Rwy 6/24 Floatplanes Welcomed

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- Airport Info: 715-339-3701

EMAIL: PBH@CO.PRICE.WI.US WWW.CO.PRICE.WI/US/GOVERNMENT/PRICECOUNTYAIRPORT

- 11:30am, air show performances at the airport on Friday night at 7pm and again 11am on Saturday, and Lake, Rattle & Roll with a live band Saturday from 8pm 'til Midnight at Harbor View.
- MANSFIELD (MFD), OHIO Airport Day & Car Show 8am-4pm.
- VINTON (VTI), IOWA Grill-Out 5-8pm. 319-334-4000.
- 12* Poplar Grove (C77), Ill. - Pancakes, waffles, eggs, sausage breakfast 7am-Noon.
- 12* MIDDLETON (C29), Wis. - Pancakes, eggs cooked to order, sausage. coffee, juice & milk breakfast 7am-Noon.
- 16-19 Brodhead (C37), Wis. Annual gathering of the Brodhead Pietenpol Association and the National Hatz Club.
- 18 LEE's SUMMIT (LXT), Mo. - Pancake Breakfast 8:30am-Noon.
- WASHINGTON ISLAND (2P2), Wis. Fish Boil, Hayrides & Music 11am-18*
- 19 TAYLORVILLE (TAZ), ILL. - Biscuits and gravy, sausage and eggs, hashrounds, pancakes, donuts, cereal, coffee, tea, orange juice breakfast.
- 20-26 OSHKOSH (OSH), Wis. - EAA AirVenture 2015 www.airventure.org
- 21* INDEPENDENCE (IIB), Iowa - Grill-Out 5-8pm. 319-334-4000.
- 25-26 Mason City (MCW), Iowa Fly Iowa 2015, www.flyiowa.org **AUGUST 2015**
- 4* VINTON (VTI), IOWA - Grill-Out 5-8pm. 319-334-4000.
- 8* MORAINE (173), OHIO - Flying Heritage Festival 7am-9pm.
- 9* LINO LAKES (MN24), MINN. - At Surfside Airport. Minnesota Seaplane Pilots Association Pig Roast, 12:00 noon to 4:00 pm. For additional information refer to www.MnSeaplanes.com or call or email Randy Schoephoerster at randy@airtreknorth.com 952-594-1184.
- Poplar Grove (C77), Ill. Pancakes, waffles, eggs, sausage, coffee, milk & juice breakfast 7am-Noon.
- 10-13 & 13-16 MIMINISKA LODGE, ONTARIO 2015 Canadian Fishing Fly-Outs. 3-Night/2-Day Trips.
- 10-15 & 13-18 5-Night/4-Day Trips. For more information call 1-888-465-3474.
- 14-15* Muskegon (MKG), Mich. Michigan Air Rally. 616-401-3637.
- Indianapolis (7L8), Ind. Taildragger Rendezvous at Post Air Airport 10am-2pm. www.900.eaachapter.org

CONTINUED ON PAGE 62



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HANGAR FOR RENT - Open bay heated hangar with 65' door available at the Detroit Lakes, Minnesota airport. FBO is turbine qualified. Call 218-847-3233 for information.

50% OFF T-HANGAR RENTALS - La Crosse Regional Airport (LSE) is offering a 50% discount on first 12 months of hangar contracts. Discount applies to new 12-month leases, some restrictions apply. Availability at http://www.lseairport.com/hangar-rentals.php. Contact Manager's Office: 608-789-7464 or gilletti@lseairport.com.

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HANGAR SPACE FOR RENT - Hartford Municipal Airport (HXF), Hartford, Wisconsin. 70 x 70 ft hangar with 60 x 16 ft door, unheated community space available with 24 hours access. Call Dana 608-235-9696 for rental rates and more information.

AVIATION BUSINESSES WANTED - Rice Lake, Wisconsin (KRPD). Restaurant or office space in new terminal. Avionics, Paint, Interior shops needed. Hangars and capital help available. Call Mike at **715-458-4400**.

HANGAR FOR SALE – Wisconsin – Dodge County Airport (KUNU) - 60W X 50D, Door 58'W X 18'H, hydronic floor heat. \$69,500. Contact Mary at 920-386-2402 or Mary.Gasper@WisconsinAviation.com. More details and photos available at WisconsinAviation.com.

HANGAR FOR SALE – Wisconsin – Dodge County Airport (KUNU) – 40W X 32D, Door 38'9"W X 10'H. \$27,500. Contact Mary at 920-386-2402 or Mary.Gasper@WisconsinAviation.com. More details and photos available at WisconsinAviation.com.

HANGAR FOR SALE – Wisconsin – Dodge County Airport (KUNU) – 50W X 60D, Door 44W X 11H. \$49,900 / MAKE OFFER. Contact **Mary** at **920-386-2402** or **Mary.Gasper@WisconsinAviation.com**. More details and photos available at **WisconsinAviation.com**.

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1979 Piper Arrow IV - N705WH Only 4160 TT, 340 SMOH, Garmin GNS 430! Autocontrol IIIB Coupled Autopilot, Good Glass & Good Paint!



1980 Piper Dakota – N8183X 6535 TT, 1680 SMOH, 487 SPOH, Fresh Annual (03/15), Garmin GTN 650! Aspen Evolution 1000 Pro EFD! Garmin Aera 796 with XM Weather! 406 ELT, Autocontrol IIIB, clean! New leather seats!

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1978 Piper Navajo C - N510CC 45 SFRM! 45 SPOH!

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1977 Cessna 414 -N126BT 3500 TT

917/874 SMOH, 367 SPOH, November annual, KX-165, KX-155, Argus 5000, Trimble 2000, 696 Weather, VGs. Priced for immediate sale at......\$139,900!

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MINNESOTA SEAPLANE SEMINAR FROM PAGE 49

and regulations affecting their operation will be Brian Addis, chief pilot at Wipaire, Inc.; Kevin Morris of the FAA; and retired air traffic controller, Mark Schreier. Floatplane maintenance and pilot medicals will also be covered.

To register for the seminar, go to: www.MnSeaplanes.com, or contact MSPA President Randy Schoephoerster at randy@airtreknorth.com (952.594.1184), or Ben Thuringer at Ben@maddens.com (218.838.2805).

In addition to the seminar and fly-in in Brainerd, the Minnesota Seaplane Pilots Association will hold its annual "pig roast" on Sunday, August 9, 2015 from 12:00 noon to 4:00 pm at Surfside Airport (8Y4) in Lino Lakes, Minnesota. For additional information refer to www.mnseaplanes.com or call Bruce Hanson at 651-332-0444 or contact Randy Schoephoerster at randy@airtreknorth.com (952-594-1184).

EDITOR'S NOTE: Pilots searching for an idyllic location to obtain their seaplane pilot certificate, while their families are enjoying various resort activities, might want to consider Madden's "Seaplane Flight Training Package" that includes four days/three nights of lodging, golfing and breakfast and dinner each day (meals and golfing are extra for each additional family member). For additional information, contact Madden's Resort.

CALENDAR FROM PAGE 59

- 15* FOREST LAKE (25D), MINN. Pancake, Lunch, Ice Cream Social & Car Show 7am-4pm at 2,700 ft. grass Daniel De Ponti Memorial Airport. 651-373-3779.
- 18* INDEPENDENCE (IIB), IOWA Grill-Out 5-8pm. 319-334-4000.
- 18* Madison (MSN), Wis. 1940s Style Hangar Dance featuring Ladies Must Swing 6-10:30pm at Wisconsin Aviation.
- 22 BLAINE (ANE), MINN. AOPA Fly-In at Minnesota Anoka County-Blaine Airport. To read more about the AOPA Fly-In go to www. midwestflyer.com/?p=8264. RSVP to attend by going to www. aopa.org/Community-and-Events/AOPA-Fly-In/2015/About
- 22* GLENCOE (GYL), MINN. Sweet Corn & Bratwurst Feed Fly-In 10am-2pm.
- 22* Noblesville (180), Ind. Pancake Breakfast 8-11am.
- 29* Washington Island, Wis. Death's Door Bar-B-Q (chicken, pork, pork ribs & beef brisket) starting at 10am. Kids activities, music. visit washingtonisland-wi.com

SEPTEMBER 2015

- 1* VINTON (VTI), IOWA Grill-Out 5-8pm. 319-334-4000.
- 5* New LisBon (82C), Wis. Planes & Old Cars 8am-1pm. Breakfast 7-10:30am, Lunch 10:30am-2:00pm.
- 5-7* CLEVELAND (BKL), OHIO Featuring U.S. Air Force Thunderbirds and Breitling Jet Team from France. Sean D. Tucker, Rob Holland, Shockwave Jet Truck, U.S. Army Golden Knights Parachute Team and military jet demonstrations.
- 12* Superior (SUW), Wis. Blueberry pancake breakfast 8am-Noon.
- 13* JOLIET (JOT), ILL. Airport Festival. Pancake, sausage, coffee & juice 8-11am. Warbird display & children's activities until 3pm.
- 13* POPLAR GROVE (C77), ILL. Pancakes, waffles, eggs, sausage breakfast 7am-Noon.
- 15* INDEPENDENCE (IIB), Iowa Grill-Out 5-8pm. 319-334-4000.
- 19 Lee's Summit (LXT), Mo. Pancake Breakfast 8:30am-Noon.
- 20 Taylorville (TAZ), Ill. Biscuits and gravy, sausage and eggs, hashrounds, pancakes, donuts, cereal, coffee, tea, orange juice breakfast.

- **20-22** Kansas City, Mo. 4 State Airport Conference at Downtown Marriott Hotel. 816-289-7218 or 816-810-5706.
- 23-24 Stevens Point, Wis. Wisconsin 2015 Airport Operations & Land Use Seminar at Stevens Point Holiday Inn & Convention Center (715-344-0200). For seminar information contact:

 Hal Davis (608) 267-2142 or email howard.davis@dot.wi.gov
- **24-26* К**ЕОКИК **(EOK)**, lowa L-Bird Fly-In & Convention of the Birddog. Pancake breakfast on the 26th.
- **COLORADO SPRINGS (COS), COLO. -** AOPA Fly-In at Colorado Springs Municipal Airport. To read more about the AOPA Fly-In go to www.midwestflyer.com/?p=8264. Starting in February you can RSVP to attend by going to www.aopa.org/Community-and-Events/AOPA-Fly-In/2015/About

OCTOBER 2015

- 10 Tullahoma (THA), Tenn. AOPA Fly-In at Tullahoma Regional Airport. To read more about the AOPA Fly-In go to www. midwestflyer.com/?p=8264. Starting in February you can RSVP to attend by going to www.aopa.org/Community-and-Events/AOPA-Fly-In/2015/About
- 11* POPLAR GROVE (C77), ILL. Pancakes, waffles, eggs, sausage, coffee, milk & juice breakfast 7am-Noon.

NOVEMBER 2015

- 7* CLEVELAND (BKL), OHIO Pancake Breakfast and Book Sale 8:30am-1pm.
- 13-14* В LOOMINGTON, ILL. Biennial Flight Instructor Refresher Clinic at Parke Hotel & Convention Center. Contact Linda Schumm 217-785-4215. Linda.Schumm@Illinois.gov
- 17-19 Las Vegas, Nev. NBAA 2015 Business Aviation Convention & Exhibition, www.nbaa.com.

For More Listings, Information & Updates
Or To Post Your Event Online,
Go To www.midwestflyer.com
(Calendar Of Events)

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