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## Closer Every Day

**A couple of months back, I told you that the FAA had closed the window for accepting potential avgas replacements for evaluation. Now, I'm excited to tell you that the search for a new unleaded aviation fuel has taken another big leap forward.**

The FAA has selected four fuels to go through the first stage of lab and rig testing. This is where we begin to move from fuels that look good on paper toward something we can actually use in our airplanes.

It took the FAA just a few weeks to go through the submissions and identify the most promising candidates for testing based on whether they can be produced and distributed widely, used safely, and sold cost effectively—all with minimal impact on the existing fleet. But this next phase, actually working in the lab with each fuel, is much more complex and will take considerably longer—about a year, in fact.

That means we can probably expect radio silence from the FAA when it comes to talking about avgas replacements. But it's important not to confuse that silence with inaction.

AOPA is a leading member of the Piston Aviation Fuels Initiative steering group, which brings together the GA community, the petroleum industry, and the FAA. You can rely on us to stay abreast of the FAA's progress and to make sure the needs of GA users are kept front and center. We will continue to be actively engaged throughout the process, and we'll be sure to bring you updates whenever possible.

Of course, even once the first phase of testing is complete, there will be more work to do. Full-scale testing in aircraft and engines will follow in order to ensure safety, generate standardized qualification and certification data, and develop property and performance data. The FAA has set a 2018 deadline to complete that process so one or more unleaded replacement fuels can come to market.

So, while the path forward is long and there's sure to be some rough air, we are moving decisively in the right direction.

A handwritten signature in black ink, appearing to read "Mark R. Baker".

Mark R. Baker  
President & CEO, AOPA



**ON THE COVER:** Airshow performer, Sean D. Tucker of Salinas, California, performs a triple ribbon cut in his Oracle Challenger III biplane, during EAA AirVenture Oshkosh, Oshkosh, Wis. The aircraft is powered by a 400 hp, custom-built Lycoming AEIO-540-D4B5 engine, and features a Hartzell three-blade composite propeller and a unique set of wings that use eight (8) ailerons instead of four (4). The tail of the aircraft is modeled after the tail used on high-performance radio control airplanes. Tucker has performed in more than 475 airshows since 1976 before an estimated 105 million spectators. He has won dozens of aerobatic competitions, and the top showmanship awards in the industry. Tucker was named the chairman of EAA Young Eagles in 2013 ([www.poweraerobatics.com](http://www.poweraerobatics.com))

*Photo by Chris Bildilli.*



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## Sharing The Experience!

by Dave Weiman

For all of us who attended EAA AirVenture Oshkosh 2014, we came away with a lot of memorable experiences in the people we met, the aircraft we saw and flew, and the activities we participated in – many of which you will read about in this issue of *Midwest Flyer Magazine*. But for me personally, no experience will be more memorable than the day I spent with our 5-year-old grandson.

Saturday was *his day* at “KidVenture,” and to watch the U.S. Air Force Thunderbirds perform in the afternoon airshow, and specially-equipped showplanes with lights and pyrotechnics in the night airshow.

KidVenture celebrated its 16th anniversary this year and was huge with activities for kids of all ages. Located in three hangars on Pioneer Airport across the runway from the EAA AirVenture Museum, KidVenture attracted a record 21,000 kids, parents and grand parents, thanks to the hard work and dedication of 400 volunteers.

There were 30 booths, from manually operated flight simulators to a real Redbird flight simulator that kids could log time towards their pilot certificate, and hands-on training in aircraft building and electronics to earn credit towards their airframe and powerplant certificate. Of course at 5 years old, the space capsule, pedal planes and model-building were the biggest hits with our grandson.

Now in his own words, and through the artwork that accompanies this article, this is what our grandson remembers most about his day at Oshkosh:



“KidVenture... Watching the day airshow by the vintage airplanes... Eating a Subway sandwich... Activities for kids at the Ford tent, especially the pedal cars... Sitting in a real fire truck... The night airshow... Staying overnight in grandma and grandpa’s camper, then waking up in the morning and getting donuts at the Red Barn.”

Sharing the experience of aviation, whether with your kids, grandchildren or friends, is an opportunity to relive the excitement of aviation, and hopefully plant the seed for aviators to come.



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# Can You Barter For Aircraft Rental and Expenses? The FAA Says "Yes."

by Greg Reigel

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**A**s you may know, the FAA defines compensation very broadly. Compensation may include not only the exchange of money, but also the exchange of value. With this expansive view of compensation as a backdrop, the FAA was recently asked whether it was permissible to "barter" services in exchange for (1) a private pilot's pro-rata share of operating expenses under 14 C.F.R. §61.113(c) and (2) rental of an aircraft.



Greg Reigel

In the first scenario presented to the FAA, a private pilot (Pilot A)

who is also in the business of aircraft detailing desires to barter aircraft detailing services in exchange for Pilot A's pro-rata share of expenses on common-purpose, recreational flights in an aircraft owned by Pilot B, also a private pilot, and with Pilots A and B as the sole occupants of the aircraft during the flights. The common-purpose for the flights would be the building of pilot time as allowed by applicable regulations.

For purposes of the request, the FAA was asked to assume that the aircraft's type certificate does not require operation by two crewmembers, the flights are operated under 14 C.F.R. Part 91, and during the common-purpose flights one pilot is acting as pilot in command and the other pilot is strictly a passenger and not a required crewmember.

Pilot A would perform aircraft detailing services for Pilot B's aircraft.


Pilot A and B would determine the fair market value of the aircraft detailing service and that amount would be applied to Pilot A's pro-rata share of the operating expenses of the flights shared by Pilots A and B.

Based upon this first scenario, the FAA answered the following questions:

**Question 1:** Does Pilot A's bartering of services in exchange for Pilot A's pro-rata share of the operating expenses of a common-purpose flight with Pilot B comply with 14 C.F.R. 61.113(c)?

**Answer:** Yes, as long as the amount of the bartered services did not exceed Pilot A's pro-rata share of the expenses, otherwise Pilot B would be in violation of § 61.113(c).

**Question 2:** May Pilots A and B agree upon the fair market value of the aircraft detailing services to be bartered against Pilot A's pro-rata share of the operating expenses for the common-purpose flight?





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**Answer:** Yes, the two parties to the transaction would need to reach an agreement with respect to the fair market value and, although FAA regulations do not require a written record of the agreement, they could certainly make such a record. (I would certainly recommend that the parties have a written agreement executed at the time of the transaction, rather than trying to later come up with documentation to prove the agreement as to fair market value.)

**Question 3:** May the fair market value of the aircraft detailing services be applied prospectively to Pilot A's pro-rata share of operating expenses for future/successive common-purpose flights with Pilot B?

**Answer:** Yes.

**Question 4:** What documentation, if any, would Pilots A and B need to evidence their compliance with 14 C.F.R. § 61.113(c) in this scenario?

**Answer:** None. The FAA does not require any documentation. (However, having appropriate documentation will definitely help in proving compliance.)

In the second scenario provided to the FAA, a private pilot (Pilot A) who is also in the business of aircraft detailing desires to barter aircraft detailing services in exchange for

rental of an aircraft owned by Pilot B for personal flights operated under 14 C.F.R. Part 91 and in which Pilot A would be the sole occupant. The FAA was asked to assume for purposes of the request that the aircraft being rented is a type certificated aircraft with a standard airworthiness certificate and is not subject to the Truth-in-Leasing requirements of 14 C.F.R. § 91.23.

**Question 5:** Does Pilot A's bartering of services in exchange for rental of Pilot B's aircraft violate any regulations administered by the Federal Aviation Administration?

**Answer:** It does not violate any FAA regulations.

**Question 6:** May Pilot A and B agree upon the fair market value of the aircraft detailing services to be bartered against Pilot A's rental of Pilot B's aircraft?

**Answer:** Yes, as long as the flight is not for compensation or hire.

**Question 7:** May the fair market value of the bartered aircraft detailing services be applied prospectively to Pilot A's future/successive rental of Pilot B's aircraft?

**Answer:** Yes, as long as the flight is not for compensation or hire.

**Question 8:** What documentation, if any, would Pilots A and B need to

evidence the barter arrangement under this scenario in order to comply with any applicable regulations?

**Answer:** FAA regulations do not require documentation.

Although the FAA's answers were short and sweet, without any in-depth analysis of the regulations' application to the factual scenarios, at least the FAA has provided some guidance regarding the viability of barter transactions in connection with aircraft use, rental and expenses. As with most situations when dealing with the FAA, having a paper trail to document your compliance is a good idea. Thus, if you are going to enter into a barter arrangement, make sure you have something in writing that not only explains the barter transaction, but also substantiates the fair market values upon which the barter transaction is based.

Thanks to the FAA's guidance, aircraft owners and pilots now have another option for aircraft use and rental. And that's a good thing.

**EDITOR'S NOTE:** Greg Reigel is an attorney with Reigel Law Firm, Ltd., a law firm located in Hopkins, Minnesota, which represents clients in aviation and business law matters.

For assistance, call (952) 238-1060

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## FROM OUR READERS

Dear Dave:

I love the frontal profile of the HondaJet (i.e. August/September 2014, *Midwest Flyer Magazine*).

I could not help but think how proud Howard Gregory would have been of the HondaJet.

A great guy, an officer and gentleman also, so to speak, and a good friend.

Ann Pellegrino

Rhame, Texas

**EDITOR'S NOTE:** Howard Gregory was the founder of Des Moines Flying Service and one of the founders of HondaJet Midwest. He passed away July 24, 2012 at age 94.

Dave:

Yes, I survived EAA AirVenture again. Every year I tell myself I'm going

to attend some of the forums, see a few more exhibitors, and look at airplanes. I'm only fooling myself... I get busier each year and this year was no exception. But in the end, it was still fun.

I finally got a chance to sit with the latest copy of *Midwest Flyer Magazine* and enjoyed your column, "Why Should You Care?" Loved it! I was wondering if we may, with your permission, use that as a short news item or similar on Wittman's website? I think your thoughts should be shared far and wide.

Peter Moll

Airport Director

Wittman Regional Airport

Oshkosh, Wisconsin

**RESPONSE:** One-time reprint permission is hereby granted, Peter.

*Thanks for making the request, and thanks for your feedback.*

Dave

Hello Dave & Peggy:

Just a quick note to let you know the reaction this evening at the Sunday Stoughton Airport cookout to the latest issue of *Midwest Flyer Magazine* (August/September 2014).

I would say without question everyone enjoyed the articles on Roger Amundson, and John Matson very, very much. We felt you did a very nice job capturing the character of Roger. And John Matson's comments tonight was he was most honored to be mentioned next to Roger's article!

Thank you for sharing these stories with others.

Douglas J. Tomas  
East Troy, Wisconsin



## Ask Pete!

by Pete Schoeninger

Email your questions to  
[Pete@Flymilwaukee.com](mailto:Pete@Flymilwaukee.com)

**Q:** What trends do you see in the used airplane market?

**A:** The demand for older (pre 1970) airplanes and most, but not all, twins continues to be soft. Late (last 15 years or so) model aircraft seem to have a stronger demand than older ones, as the price for new airplanes is hard to justify for many buyers. (Example: While a new Cessna 172 is over \$400,000, a 10-year-



Pete Schoeninger

old Cessna 172 with nearly identical performance can be had with a new engine and new paint for less than half that cost.)

**Q:** I am thinking of spending about \$25,000 on an airplane and am considering either a Cessna 152 or a Cherokee 140. What's your recommendation?

**A:** Unless your only purpose is training, I would almost always lean toward the Cherokee 140 or a Cessna 172. The 152 is in more demand than other airplanes because of demand from flight schools, both in the USA and abroad. The Cherokee 140 and Cessna 172 will carry more, go further, go faster, have lots more interior room, and operating expenses are not much more than a two-seater. Before buying, be sure to have a good inspection done by a reputable mechanic, and do a title

search to ensure the seller can hand you clear title.

**Q:** My car is fuel-injected and it always starts instantly with no input except turning the key! It seems like I need three hands to start my airplane engine when it is hot. Why are some fuel-injected engines hard to start?

**A:** One of many reasons your car starts easier than your airplane is your airplane engine spark plug gap is about .018 inches. Some modern cars have spark plug gaps three times as large with perhaps three times as much voltage, resulting in a hotter and bigger spark, which makes starting easier. In addition, cars have more modern electronic and computer-controlled mixture and ignition systems, and airplane engines use much older technology, which makes starting harder. □

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# **X, Y, Z Approaches Part II, ATC Communications & How To Amend A Reroute Clearance On The 430/530**

by Michael J. "Mick" Kaufman



Michael Kaufman

**I**n this issue of *Midwest Flyer Magazine*, I would like to add more insight into one of the topics I covered in the last issue on the puzzle of X, Y, Z approaches. A new topic that might

be of interest to our readers is how to better communicate with ATC and avoid misunderstandings, or worse yet, a **VIOLATION**. A side note topic explains how I amend a reroute clearance with a Garmin 430/530. I have a second title in this issue on EAA happenings that I am calling "*Captain Mick's Meanderings*."

Those X, Y, Z approaches are still somewhat of a mystery, but we are getting closer, thanks to some comments forwarded to me by one of our readers, Ray Glaser of Kenosha, Wisconsin. Ray did a study of the two approaches I referenced in the last issue of *Midwest Flyer Magazine* and shared several items that I had not seen.

The Y approach is for simultaneous close parallel operations and has a different final approach course listed compared to the Z approach: 37 degrees vs 35 degrees. The decision height for the Y approach is also 50 feet higher, probably because of the slightly different approach angle. It seems the logic on the 2-degree change in approach course for the 4L Y is to maximize separation between aircraft on simultaneous approaches. *Thanks, Ray, for your input!*

I made an effort at EAA AirVenture Oshkosh this year to track down a "TERPSTER," who seem to be an extinct animal, at the FAA building with all of the answers which I hoped

would be as easy to interoperate as the A, B, C approach charts. The quest for all of the answers is still out, so we will pick up the topic again in the next issue of *Midwest Flyer Magazine*.

Many years ago, I took up the challenge to help a new IFR pilot who was violated for being off the airway that she was supposed to be on. This led me to a passion to devote some of my teaching to the "understanding and clarification of ATC clearances."

In the incident that started all of this, a young lady with a new IFR ticket was flying on a victor airway as filed on her flight plan and given to her as a route in her clearance. All went well until a controller gave her a vector off of the airway for traffic, and then shortly thereafter, passed her on to the next ATC sector.

As she was never given a vector to rejoin the airway after passing the traffic, she continued to fly the assigned heading. That was until the new sector controller told her she was 7 miles off the airway and needed to call the facility when she landed. With my help at that time, and before the word GPS was in our vocabulary, we were able to get the tapes and tracks from the ATC facilities and the alleged infraction was resolved.

How could one have clarified the above situation before it happened?

We still have situations like this happen on a somewhat regular basis and my answer to this scenario would be as follows:

Any time you are passed on to a new controller, clarify what you are doing. In the above situation, my check-in would be as follows:

"Cessna 2852F, checking in at 5,000, 240 heading assigned."

If the previous controller had forgotten to tell your new controller of the heading or altitude assigned, you have alerted him/her of the discrepancy,

if any.

Many times during instrument flights, you get the dreaded call "Baron 2858B, we have an amendment to your routing. Advise when ready to copy."

You noticed I said "dreaded call," and after acknowledging, your only hope is that it is not a complete reroute. After copying the reroute you need to make a decision. Do you read it back immediately or check it first? It is common protocol to acknowledge ATC that you have successfully copied the reroute. In most cases, I acknowledge with the phrase "Stand by for read back." This confirms with ATC that you have indeed copied the clearance and do not need a portion of it reread.

It is important for a pilot to always check his/her new clearance to make sure he/she can comply safely; this is a pilot's responsibility. If I were flying a single-engine aircraft along the coast, but over land and the new reroute would take me 150 miles away from land and over water with no water survival equipment, I would refuse the clearance. If I had read the clearance back and had a communications failure, I would be compelled to fly the route as cleared. If, on the other hand, the reroute was simple and I was familiar with the waypoints involved, I would read it back immediately.

When receiving an IFR clearance on the ground prior to take off, I will read it back immediately as I have time to check the routing before taking off. If there is any discrepancy with the clearance, I will request a change or clarification. As in the above situation, if I should lose communications after take-off in Instrument Meteorological Conditions (IMC), my route had been confirmed and I must fly it.

I cannot mention reroutes without getting off the immediate subject and cover some helpful hints to fly the reroute with a Garmin 430/530 GPS

box.

You have spent a lot of time putting your flight plan in the GPS, and there are a dozen waypoints. You need to be a Jedi or at least a wizard to make the change in the flight plan and still fly the airplane. This is why the airlines and many corporations have two pilots on board.

It is important to know that Garmin allows you to enter "one" direct to waypoint at a time in the box and fly to it and not change anything in the flight plan. "Yes," the flight plan is totally unchanged, and you can re-enter it at any fix that is programmed there. I use this feature initially with every re-route as ATC wants us to start the re-route change immediately, not 5 minutes later when you have redone your entire route. I use only the direct-to-function for minor re-routes when a majority of the original flight plan stays in tact or allows me time to go into the flight

plan and revise it.

If you are fortunate to have two of these great old Garmin GPS boxes with identical databases, you can build your new flight plan in the second GPS and when done and checked for errors, you can crossfill the flight plan to GPS number one.

A recommended procedure for the two-Garmin setup is to set auto crossfill from number one to number two GPS, but manual crossfill from number two to number one GPS.


One more issue on communications before ending this month's column is to confirm your altitude. While climbing or descending, it is important to mention your current altitude and the altitude you are climbing or descending to. I do this any time while changing altitude and not just when changing controllers. "Bonanza 63DM, leaving 6,000 for 4,000, or Cirrus 26CD, checking in 2,500, climbing to 3,000."

End communications errors and discrepancy and a possible violation by communicating. Don't just "Roger" a clearance.


In many instances, the controller will ask you to verify a clearance: "Piper 6346R, verify land and hold short of Runway 36." Do it the first time and save on communications congestion.

Enjoy the beautiful autumn flying weather, as we know what season is next!

*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](mailto:captmick@me.com) or call 817-988-0174. □



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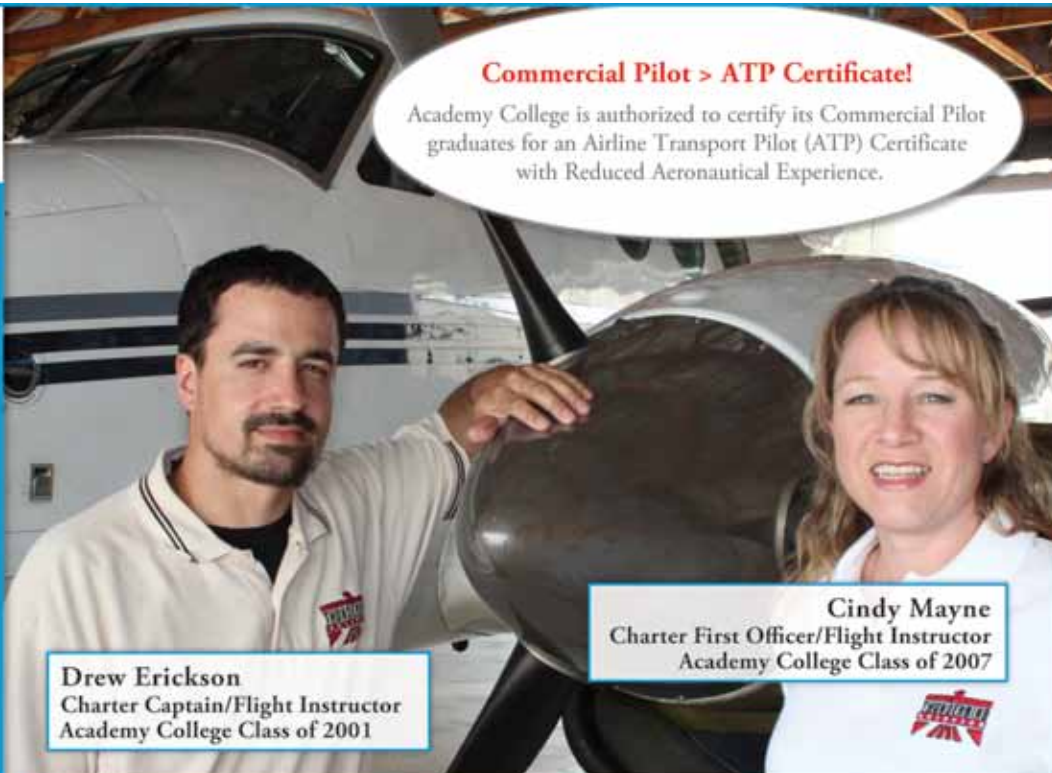
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AVIATION GRADUATES GUARANTEED AN INTERVIEW WITH THUNDERBIRD AVIATION



# Minimizing The Cost Of Instrument Training - Part II

by Harold Green

**T**his is the second of two articles intended to assist aspiring instrument pilots shorten their training time and hence safely reduce costs. The first article discussed pilot skills in flying the airplane. In this article, ways to enhance situational awareness and minimize the overhead involved in utilizing the avionics are presented.



Harold Green

Naturally, people beginning instrument training concern themselves primarily with flying the airplane without visual reference. The thought itself is scary for most rational people. If this was all there were to it, we could put in 5 to 10 hours and call it a day. By the time the student is able to perform steep turns, slow flight and stall in Instrument Meteorological Conditions (IMC), some of that trepidation disappears. Somewhere along the way the student will be treated to a zero-zero takeoff which produces tension, surprise and "Oh MY Gosh, I did that" responses. The real issue here is the ability to control the airplane without outside reference while navigating, communicating, talking with passengers, and reading approach charts.

The old saw "Aviate, Navigate and Communicate" is still valid. In fact, it is valid with a vengeance. That is because lack of attention to Aviate will result in unusual aircraft attitudes that can be very dangerous unless immediately recognized and corrected. Not only that, but because of the duties of an instrument pilot, there are many distractions which make it more difficult to Aviate.

Preferably, we don't get into that situation in the first place. The only way to prevent that is to develop the ability to spread our attention between the Navigate and Communicate functions without ANY reduction in Aviate attention. The achievement of this is the primary goal of the rest of the training for the instrument ticket.

In the previous article, we presented the Touch, Glance, Activate, Look (TGAL) approach to control manipulation, even though it wasn't given that name. Just to reiterate, TGAL means: Touch the control, Glance to confirm you are touching the control you want, Activate the control, and then Look to confirm it is where you want it. To Look and Glance, use a minimum of head movement to reduce the possibility of vertigo. In fact, it is best to use eye movement exclusively if possible. This technique is an important aid to reduce cockpit workload when working with avionics. As we will see, GPS and glass cockpits in general complicate this, but this can still be dealt with in a similar fashion.

While the demise of the VOR has been predicted, and hoped for by some, for a long time, it is still very much in use. During primary training, the emphasis is on tracking a course

using the VOR. In this context the mantra is; "Heading and OBS within 180 degrees, turn toward the needle." Since the Private Pilot test standards only require the student to track a course using a VOR, this is generally sufficient. Additionally, the student is taught that a radial is the line FROM the station. This sometimes sticks with the student and sometimes not. However, when flying under Instrument Flight Rules (IFR), the controllers expect the pilot to know what a radial means.

For example, the instruction to hold "On the 130-degree radial east of the 19 DME," means the plane should be southeast of the station 19 nautical miles out. The poor soul that was overheard one day explaining to approach that he was 18 DME south on the 360 radial thankfully was flying VFR. If IFR, he could have created a very tense situation for the controllers and anybody in the area. Since airway fixes and intersections are dependent on VOR radials, the instrument pilot needs to know where those lines are relative to the current aircraft location. Since radials often are NOT within 180 degrees of the current heading, this can result in brain strain and additional workload attempting to determine where a given radial is with respect to the aircraft's position. Additional work or brain strain when flying single-pilot IFR is bad because our workload is already adequate, thank you.

The answer in this case is quite obvious once a very simple fact is recognized.

Every Omni Bearing Selector (OBS) is surrounded by a compass rose. Now regardless of whatever the pilot sets into the OBS with the selector knob, the Course Deviation Indicator (CDI) will point to the compass direction of the number set into the OBS. This is independent of aircraft heading. In short, it tells you which way to go to get to that line. It does NOT tell you whether to turn left or right. By this time you are thinking in terms of North, South, East or West anyway, so this is natural.

Note, the settings of the two OBS dials in Figure 1.0. This was an actual student instrument approach. Note that the top OBS is set to 187 degrees with a TO flag showing and it indicates that the 187 degree line is to the west of the aircraft. The lower OBS is set to 007 degrees with a FROM flag showing, or the reciprocal of the top. The OBS shows that line to be to the west of the airplane. Therefore, to get to that line you go west regardless of whether that is left or right of the aircraft. *Gee, whaddya know!* (By the way, the lower OBS indicates the radial.)

Keeping this in mind when beginning instrument training will simplify life for the student. All ya gotta do is look at the compass rose and it will tell you where the line is. If you are going to that line and follow it, it then becomes your course. If it is FROM the VOR, it is a radial whether or not it is your course. Knowing this in advance will save considerable time and frustration during your training.



Fig 1: Two OBS indicators set to the same VOR with reciprocal settings.

There is great emphasis on Global Positioning System (GPS) equipment. Everyone seems to love this because it gives the pink (Magenta) line overlay on a map. Situational awareness just comes naturally. However, there is a price to pay. That price is additional complexity in setting up the equipment to do what you want.

While flying in visual conditions, this poses no significant additional burden. However, when you begin flying with only instrument reference, the situation changes significantly.

Most VFR pilots know how to set the GPS for "Direct To" operation and some can also set up a flight plan. Most pilots, however, are woefully unprepared to utilize the full capabilities of even basic GPS units.

You can help yourself prepare for IFR training by learning a few additional capabilities of your GPS unit. This applies even if, perhaps especially if, your airplane is equipped with a full glass cockpit.

To ease this, find a simulator provided by the manufacturer if possible to aid in this process. This will save you a lot of time and frustration during your training.

First learn the "flight plan" function. Learn to load a flight plan, modify it by adding and/or removing check points, invert it and generally do all the things your GPS unit will let you do. You should be able to do this without hesitation and while flying your airplane, talking to a controller and listening to your significant other, all at the same time. (Remember: When you can walk and talk and chew gum while patting your head and rubbing your tummy simultaneously, you are an instrument pilot).

When you begin approach training, realize that the GPS loads the approach into the flight plan page so modifications, with limitations, are also possible.

Sometimes there are two ways to accomplish the same thing. For example, selecting a new destination can be done by direct entry using the large and small knobs, or going to the nearest function and selecting the new destination. Learn why and when to use each. Learn to use the nearest function to find any resource your GPS will allow you to. These

actions, and more, should become second nature to you.

Now, most importantly of all, learn how to back out of any of these operations to allow you to correct errors. When things are going smoothly, life is good. But when things go bad, they go bad with a vengeance and you will find yourself as busy as a one-armed chainsaw juggler.

In summary, learn everything you can about your GPS and/or glass cockpit system so that you don't have to learn this while also learning to fly instruments. These devices should be an aid, not a hindrance.

The TGAL approach is still appropriate, but with different emphasis. It is still possible to select major functions in the same manner. You simply need to apply TGAL in conjunction with every function entry. You can reach major soft keys in the same manner by touching, glancing, activating and looking. Then reaching for subordinate soft keys requires more care. Typically it works to touch the frame next to the soft key and then glancing to see if you are near the correct one before actually activating it. Then looking after activation to make sure you have done what you want. You will need to adapt this procedure for your specific unit.

As you begin to execute GPS approaches, you will need to load an approach. The GPS treats this as a flight plan.

To fly the approach, you need to be able to select the transition points and the method of intersection. This

**CONTINUED ON PAGE 62**

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# FROM HEADQUARTERS

## My First Year

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

I've just finished my first year as AOPA president. And what a year it's been. I arrived with a pretty big to do list. I wanted to understand what matters to our members. Then I wanted to get back to our core competencies and align our resources with your needs. Next, I wanted to engage more with our members. And finally, I wanted to position AOPA to move toward the future. So, how did we do?

From day one, I've traveled the country talking to members—it's one of my very favorite parts of the job—and a few key themes have emerged. You're worried about the rising cost of flying; when your freedom to fly is threatened, you



Mark Baker

want AOPA to act decisively on your behalf; and you don't want to be burdened with expensive or excessive regulations.

I put those priorities at the heart of our decision making process, and they've guided us to some important victories in the past year. We got the FAA to back away from a policy that would have required thousands of pilots to go through expensive and intrusive testing for sleep apnea. And we brought a halt to the unwarranted stops and searches of domestic general aviation flights by Customs and Border Protection. And we're still fighting the biggest issue of all—third class medical reform.

I also really wanted to reset AOPA itself, so our priorities align with yours. We started with a careful evaluation of all our programs and people. Based on what we found, we eliminated some positions, refocused on our core competencies, and cut our expenses to the lowest level since 2006.

Then it was time to turn our attention to increasing engagement. We traded our national convention for a series of regional AOPA Fly-Ins—seven in all for 2014. Attendance is four to five times what we expected and members keep telling us how happy they are to see AOPA at their airports. These events help build the sense of community at airports. That's good for engagement today and it's an important part of my last agenda item—moving to the future.

To keep general aviation viable, we've got to increase GA activity. So over the past year we've begun building a comprehensive program to get people flying.

We're welcoming back lapsed pilots with the Rusty Pilots program—more than 1,700 people have already signed up. Through the AOPA Flying Club Initiative, we're making it easy to find or start a club near you. And our Reimagined Aircraft experiment is designed to bring down the cost of flying to about \$65 an hour, including fuel.

All in all, I think we've accomplished a lot in this first year—and it's just a beginning. I can't wait to see what we can achieve in year two. □

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# AOPA GREAT LAKES REGIONAL REPORT

## Airport Funding: What Came First, The Pilot or The Runway?

**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*

Over the past several years, you've probably noticed many of my columns in *Midwest Flyer Magazine* talk about AOPA's interaction with state legislators on the importance of both competitive aviation tax rates, but also on the importance of adequately funded general aviation airports. In the coming months as legislative bodies in all of the eight states of the Great Lakes Region convene their 2015 sessions, these aviation funding and tax questions will again be explored in several states.



Bryan Budds

Recently, Ohio's aviation industry and lawmakers have debated ways to address a long-term decline in resources available for the Ohio Airport Grant Program. The program is used to provide state matches to Federal Aviation Administration (FAA) Airport Improvement Program (AIP) grants, but also can be used to provide direct grants to airports that may not be eligible for AIP funds.

According to the Ohio Aviation Association, the Airport Grant Program has an annual budget of less than \$1 million available for distribution – far less than many neighboring state grant programs. Since the majority of the available funds come from aircraft registration fees and occasional legislative allocations, it has become difficult for airports to accurately plan future improvements.

On the other hand, pilots and aircraft owners, in addition to their aircraft registration fees, are paying a sales tax of 5.75% on their aviation fuel – a relative rarity among states. At \$6.00 per gallon, that is a tax of nearly \$0.35 per gallon. At this rate, current estimates of annual sales tax revenue collected from aviation fuel ranges from \$8 million to \$14 million annually, yet very little of that money is spent by the State on airports.

In the not so distant past, proposals in Columbus all targeted aviation fuel and pilots for a tax increase to address the airport funding issue. We were told to expect anywhere from a \$0.05 per gallon increase to something much higher, including a percentage increase. At that time, AOPA spent additional time in Columbus explaining the current issue from the perspective of a general aviation pilot and successfully prevented any tax increases on general aviation pilots.

Within the last year, AOPA, the Ohio Aviation Association, and several other organizations have formed a coalition to finally address the issue without causing an unwarranted burden on general aviation pilots and aircraft owners – knowing that airports need pilots just as pilots need airports.

Clearly, if fuel tax rates continue to climb, pilots would likely purchase fuel in some of the many more much competitive neighboring states, limiting activity and revenue at Ohio's airports. In the same line of thinking, if the condition of Ohio's airports decline, pilots will have no airports from which to operate.

This classic chicken and egg problem is not unique to any one state. But, I have seen in my travels that airport managers and pilots usually do not see eye to eye on what would be most beneficial to aviation – stronger airports or fewer taxes. However, given that so many states are looking for funding in every possible account, fighting for the benefit of all aviation is something we must come together to do now more than ever and I think we have set that stage in Ohio.

With an easy target of the existing sales tax revenue already being collected, AOPA and the Ohio Aviation Association have sought a proposal to eliminate the sales tax on aviation fuel and put a much more manageable and dedicated excise tax on aviation fuel -- allowing the State Department of Aviation to have several million more dollars for airport improvements while reducing the tax burden for pilots. This collaborative nature is one that I feel is a winning attitude for how we all can contribute to the strength of general aviation long into the future.

If you have any thoughts on the issue, please let me know at [bryan.budds@aopa.org](mailto:bryan.budds@aopa.org), [twitter.com/aopagreatlakes](https://twitter.com/aopagreatlakes), or at AOPA's Homecoming Fly-In in Frederick, Maryland on Saturday, October 4, 2014. □

**Contact Bryan Budds @ [bryan.budds@aopa.org](mailto:bryan.budds@aopa.org)**



# CENTRAL REGIONAL REPORT

## Last Events of 2014.... & Preparing For 2015 To Preserve & Promote GA

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

by Yasmina Platt

Regional Manager, AOPA Central Southwest Region

**W**hat a fun and active (although hot down in Houston where I live) summer it's been! As fall approaches, I am looking forward to attending a few more events and getting ready for 2015...

Before jumping into 2015 initiatives, I wanted to mention that Missouri voters did not approve the proposed amendment to the MO Constitution on the August 5th primary ballot that would have increased the state sales and use tax by 0.75 percent for 10 years starting in 2015 (excluding purchases that are currently exempt from state sales and use taxes, like aircraft maintenance, food, medicine and gasoline) to upgrade the state's transportation infrastructure, including 24 airport projects.

The 2015 legislative sessions will see a mixture of bills from and for the aviation community: Recreational Use Statute (RUS) bills to limit liability on owners of private airstrips, bills to mark (and light in some instances) Meteorological Evaluation Towers (better known as MET towers), tax bills to dedicate aviation funds for airports and reduce the burden on the GA community, bills to protect airspace and land use around airports, fly away exemptions to exempt out-of-state residents from paying sales tax when



Yasmina Platt

purchasing an aircraft in the state where the aircraft is originally based as long as the aircraft is to be based in another state, different Unmanned Aerial Systems (UAVs) bills that we will monitor to ensure they do not affect the GA community, etc.

And it is not all legislative work. Because of our increased member outreach and "meeting our members where they fly" philosophy, we are getting around more to different airports and more local aviation events. For example, Jim Coon, Senior VP of Government Affairs, participated in a congressional aviation town hall meeting with members of Congress and other general aviation industry leaders at the Wingnuts Flying Circus in Tarkio, Missouri. I will be in Kansas City for the 4-States Airport Conference, September 14-16, where I will talk about marketing for GA airports. I will also be all around Kansas the week of September 22 participating in the Kansas Air Tour and Kansas Aviation Expo in Wichita. The Ninety-Nines are also hosting a conference in Wichita later that week so you will be able to find me there as well.

The AOPA Homecoming Fly-in will be on October 4th at our HQ in Frederick, MD (KFDK) where we will be celebrating our association's 75th anniversary. If you can make it, you will get a chance to mingle with AOPA staffers at our home airport, including AOPA President Mark Baker and all seven regional managers. Let us know if you will be there so we can meet you (or see you again). There will also be educational seminars, exhibitors, aircraft on static display, etc. FMI and to RSVP: [www.aopa.org/fly-in](http://www.aopa.org/fly-in).

As always, you can stay up-to-date with my schedule and regional happenings via our Twitter page: [www.twitter.com/@AOPACentralSW](http://www.twitter.com/@AOPACentralSW). Until next time! □

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## Driver's License For Class III or Not?

by Dr. John Beasley, M.D.

Aviation Medical Examiner  
Professor Emeritus and Clinical Professor  
Department of Family Medicine  
University of Wisconsin - Madison



John Beasley

**D**riving up to EAA AirVenture Oshkosh this year, I'm in a Honda CRV. Passing Rosendale, Wisconsin (the nationally-known speed trap on Highway 26), I'm doing 55 on a two-lane highway. I have less than 10 feet of clearance between my CRV (empty weight 3426 pounds) and whatever vehicle is oncoming. We have a combined closing speed of 110 mph, assuming he or she is also going 55 mph. Traffic is heavy. If I'm not competent to drive or if I black out, the consequences could be severe.

While I have a Third Class Medical in my pocket, what makes this death defying drive legal is my driver's license. When I got my driver's license renewed, I had to demonstrate that I could successfully find the driver's license station, open the door, stumble to the counter, and pass the vision test. So, all in all, not a very demanding examination. But the system still works.

Society assumes that I'll use reasonable judgment and not endanger others if I am not able to drive safely. And, really, the same is true of our Aviation Medical Examination. If you walk out of my door after an exam, with the ink not yet dry on your medical certificate, and you come down with influenza, it is up to you not to fly until you have recovered.

Given this reality, it has been argued, and to me convincingly, that doing Class III medical exams is most often a waste of my time and your money, and adds little to safety. Pilots are self-certifying every time they get into the left front seat. That said, when I do exams and issue certificates, I feel compelled to "play by the rules," and I feel that when questions come up about "Am I safe to fly?" that I have some expertise in giving you a realistic answer. Plus, I love chatting with fellow pilots, many of whom are my friends.

There are really two considerations in issuing a medical certificate: 1) Can this pilot perform satisfactorily the duties of pilot in command? That is, does this person have the sensory, motor and psychological capacity to do what needs to be done? 2) The other consideration is (and this is a bit trickier), might this person be subject to sudden incapacitation?

Here, we try to evaluate the risk of heart attacks, seizures

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and the like. I'm currently trying to get a person with kidney stones through the system. If you have ever had one cause urinary obstruction, you know that they are painful to the point of being incapacitating and could certainly screw up a final approach, so there is some risk.

Regarding sudden incapacitation, there is one obvious difference between flying and driving which is that usually if somebody has sudden incapacitation while driving, it probably won't be so sudden as to not allow them to at least pull over and stop the car. In any case, the fact remains that we are horribly bad when it comes to predicting sudden incapacitation, whether for pilots or drivers.

Here is the rationale to understanding risk.

In engineering, there is a way to evaluate hazards by considering both the possible frequency of an event and the severity of potential consequences. One nice link for more on this is: [http://en.wikipedia.org/wiki/Hazard\\_analysis](http://en.wikipedia.org/wiki/Hazard_analysis).

Obviously, we worry more about situations where both the likelihood of an event and the severity of the consequences are high. We tolerate the possibility of very high severity events if the likelihood is very low. (Think of nuclear power plants, at least prior to Fukushima), or low severity events with higher likelihood. (Think of trying to land in a bad crosswind, where at worst, you'll probably help your mechanic finance his boat.)

The FAA does some reasonable hazard analysis, and accepted that the likelihood of a light sport aircraft having an accident due to a medical issue, is low, as is the potential severity (most likely involving only the pilot and his/her passenger), so the overall hazard is low. I commend the FAA for making a good start at this issue by allowing the driver's license certification for light sport aircraft operations. Both the likelihood and the potential severity are low.

For my patient with the kidney stones, the potential severity is not terribly high even though the incapacitation

could be severe. But the probability that this will happen while he is actually flying a plane, is vanishingly low. So the overall risk is quite low.

Other countries are ahead of us.

In June 2012, the Australian Civil Aviation Safety Authority decided to allow pilots to use a slightly modified driver's license certificate based on a "modified driver licence medical examination" that can be done by any physician. (They spell "license" differently down there, so that isn't a typo.) See: [http://www.casa.gov.au/SCRIPTS/NC.DLL?WCMS:STANDARD::pc=PC\\_100908](http://www.casa.gov.au/SCRIPTS/NC.DLL?WCMS:STANDARD::pc=PC_100908).

You will need a driver license medical certificate (aviation) confirming your fitness to fly, issued in accordance with the conditions in Instrument CASA EX 68/12. When applying for this medical, you must tell the doctor of any condition that may adversely affect your ability to fly safely. Examples include, but are not limited to diabetes, epilepsy, heart conditions, stroke, eye problems (such as cataracts), psychiatric disorders, blackouts or fainting. If you get your "Driver Licence Medical Certificate," you are good to go at what would be in the U.S., a Class III level. Obviously, it will be some years before we see the impact (no pun intended) of this on aviation, but they should be getting some good data. We already have very reassuring results from the Sport Pilot experience here.

I do hope that the FAA will elect to extend policy to aviation activities requiring a third-class medical certificate in the U.S. I might see my flying friends a bit less often in my office, but that's okay.

And, oh yes, I am a member of the American Medical Association (AMA), which at their June 2014 annual meeting, decided to oppose any change in the rule, to my displeasure.

BTW, I got that guy with the renal stones certified. The system works, but it could be easier. □

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## Flying Physicians Urge Swift Medical Reform

WASHINGTON, D.C. – The Flying Physicians Association (FPA) has become the latest group to lend support to third-class medical reform and is urging government officials to speed up their review of the Federal Aviation Administration's (FAA) notice of proposed rulemaking (NPRM). The NPRM would expand the number of pilots who could fly without a third-class medical certificate, a standard that has been successfully used by sport pilots for a decade. FPA is made up of pilot-physicians, including many aviation medical examiners.

The FPA letter asserted "from a medical perspective, very little significant pathology can be detected by an AME performing an FAA flight physical by the very nature of the examination requirements and procedures."

In a survey of its members, 80 percent of respondents said they believe the third-class medical system is not necessary, does not add to safety, and can be eliminated for private flying.

FPA is just the latest group to ask the Department of

Transportation to expedite its review process. Similar letters have been sent by 11 senators, 32 members of the House GA Caucus, and a coalition of seven general aviation industry groups led by the Aircraft Owners and Pilots Association (AOPA) which are co-sponsoring legislation to reform the third-class medical process.

In its letter, FPA suggested that pilots would be better served by a system that provides them with continuing education about maintaining their medical health and information needed to self-assess prior to flight.

"Additionally, a system is needed that encourages, instead of discourages, open and honest dialogue between pilots and their longtime personal treating physicians," the Flying Physicians wrote. "We believe this is a much better practice than a cursory medical exam with a doctor who has no history or clinical knowledge of an individual, as is often the case with FAA physicals." □

## GA Industry Urges Transportation Secretary To Take Swift Action On Medical Reform

WASHINGTON, D.C. – In a letter written August 15, 2014, seven influential general aviation organizations urged U.S. Department of Transportation Secretary Anthony Foxx to complete his department's review of the FAA notice of proposed rulemaking (NPRM) on third-class medical reform within the next 30 days and open the proposal for public comment.

The letter notes that changing the third-class medical process could save pilots as much as \$140 million a year and the FAA more than \$1 million a year – money that could be reinvested in ways that do much more to enhance safety, including increased proficiency flying and installing advanced safety equipment in aircraft (i.e. ADS-B out, which the FAA has mandated for all aircraft to be so equipped by January 1, 2020). The letter also notes that the

FAA first recognized that pilots do not need a third-class medical certificate to fly safely a decade ago when it instituted the standard for sport pilots.

FAA Administrator Michael Huerta told a crowd of hundreds of pilots gathered for the "Meet The Administrator Forum" during EAA AirVenture Oshkosh 2014 that he believes that it is in the best interests of all if his agency makes the changes without a mandate from Congress, as he believes there will be greater flexibility in tweaking any rule, versus a law created by Congress.

Nearly 3 years ago, AOPA and EAA jointly filed a petition with the FAA to enable pilots to fly without a third-class medical certificate with certain limitations and requirements. When the FAA allowed the AOPA-EAA petition to languish, AOPA turned to friends in Congress for help.

On Dec. 11, 2013, two Midwest congressmen, Rep. Todd Rokita (R-Indiana), a member of the House General Aviation Caucus, and GA Caucus Co-Chair Rep. Sam Graves (R-Missouri), introduced the "General Aviation Pilot Protection Act" (GAPPA). GAPPA now has 129 co-sponsors in the House and 17 in the Senate.

The leaders of the Experimental Aircraft Association, General Aviation Manufacturers Association, Helicopter Association International, National Agricultural Aviation Association, National Air Transportation Association and National Business Aviation Association cosigned the letter.

In preparation for third-class medical reform, the general aviation industry is developing a comprehensive online education course to ensure that pilots have the information needed to self-assess their fitness to fly. □

## GA House Caucus Seeks Speedy Medical Reform

In an August 22, 2014 letter to U.S. Transportation Secretary Anthony Foxx, 32 members of the U.S. House of Representatives

General Aviation Caucus urged the department to speed up the review of a Federal Aviation Administration (FAA) proposal to reform the third-

class medical requirements. That review must be completed before the FAA can issue a Notice of Proposed Rulemaking (NPRM) for public comment. □

## Senators Urge Quick Action On Third-Class Medical Reform

In September 2, 2014 letters, 11 U.S. senators, all co-sponsors of a bill to reform the third-class medical process, asked U.S. Department of Transportation Secretary Anthony Foxx and U.S. Office of Management and Budget Director Shaun Donovan to take quick action on their review of the Federal Aviation Administration's (FAA) proposed medical reform rule. The letter warned Foxx and Donovan that "this is a time-sensitive issue" and asked that both agencies complete their review within one month. Once the reviews are complete, the FAA can open its Notice of Proposed Rulemaking (NPRM) for public comment. □



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## Randal Mack, Corporate Pilot/Professional Engineer

DANE, WIS. – Corporate pilot and airport engineer, Randal Mack, 45, passed away September 5, 2014, unexpectedly. He is the son of Roland (Rollie) and Joan (Meinholz) Mack of Waunakee, Wisconsin, and was employed at Mead & Hunt, Inc., Middleton, Wisconsin.

Randal Mack graduated from the University of Wisconsin-Platteville in 1993 with a bachelor's of science degree in civil engineering. He was married to Karen Swanson on March 12, 1994, and had two children – Hannah, 17, and Andrew, 15.

Mack started flying with his dad at a young age, taking lessons when he was 14. His first solo flight was at age 16. He and his father enjoyed a very close relationship, whether at the airport, or working on the family farm.



Mead & Hunt's Cessna 340 being flown by Randal Mack.  
Dave Weiman Photo



Randal Mack with his son, Andrew.  
Dave Weiman Photo

Randal Mack succeeded his father as the corporate pilot at Mead & Hunt in 1999.

Mack took a great deal of pride in flying the company Cessna 340, and in his work as an airport engineer. He was featured in the October/November 2011 issue of *Midwest Flyer Magazine*: "The Life of A Corporate Pilot & Airport Engineer, Two Generations & Counting" (<http://www.midwestflyer.com/?s=randal+mack>).

Condolences may be made online at [www.gundersonfh.com](http://www.gundersonfh.com).

Donations for the education of Randal Mack's two children may be made payable to:

Randal Mack Memorial Fund  
c/o Mead & Hunt, Inc.  
2440 Deming Way  
Middleton WI 53562



## Former FAA Regional Administrator Publishes Book On Playing Golf

**F**ormer Federal Aviation Administration Regional Administrator Christopher R. Blum's first book "Playing All 50, Golf & More" is a metaphorical and metaphysical trek through the human experience and a man's love for the great game of golf. The book is a grand compendium of vibrant reflections upon golf and life.

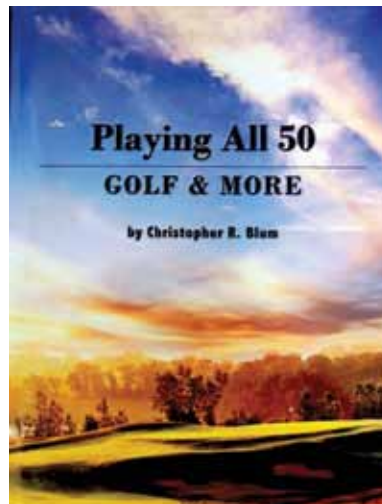
Blum's book is a beautiful window into one man's realization of his dream to travel and play the sport that he loves in all 50 states, while telling of the many adventures he encountered along his way.

"Golf is a game you can never win," says Blum. "You always think you could have done better, and you always believe you'll do better the next time out. The thrill of golf is that while playing, your worldly problems and worries are blocked. Your only concern is hitting that little white ball."

"Chris worked tirelessly as our FAA Administrator in the Great Lakes and Central Regions at the same time, doing the job of two administrators for three years," said Dave Weiman, editor/



Christopher R. Blum



publisher of *Midwest Flyer Magazine*. "Golf obviously was Chris' escape from the bureaucracy and tremendous

workload at the FAA, and he shares his great escape with others through this book."

Blum was the Federal Aviation Administration (FAA) Administrator for the Great Lakes (2005-07) and Central Regions (2001-09). As administrator for the two regions, Blum oversaw all public airports in 12 Midwest states. This had never been done before by one person, nor tried since then. Before that, Blum was Manager of the Air Traffic Division in the Great Lakes Region (1999-2001), overseeing 89 facilities and 1500 employees.

Blum is currently Vice President and Program Manager of Aviation Programs with CACI International, Inc., a multinational professional services and information technology company headquartered in Arlington, Virginia. He is also Vice President of Marketing for Young Enterprise Systems (YES).

"Playing All 50, Golf & More" is available at bookstores everywhere, or online at the Apple iTunes store, Amazon, Google Play or Barnes and Noble.





## President of Wings of Hope To Retire

ST. LOUIS, MO. – Douglas Clements has announced that he is stepping down in 2015 as President of “Wings of Hope,” the international air relief organization. Clements joined Wings of Hope in 1997, and together with the board of directors, built the St. Louis-based organization into a world resource to help the impoverished.

Wings of Hope was founded in St. Louis in 1962. By 1997, its board of directors had reorganized and brought several new directors to guide the organization. They included present chairman, Larry Lemke. Together, they established formal goals and processes oriented to increase the programs and projects, assisting marginalized citizens worldwide.

Under Clements, noted world humanitarians General Colin Powell, actor Harrison Ford, and Dr. Sherrill Kazan (President of the World Council of Peoples for the United Nations) joined with Wings of Hope to lend their influence to help the world's poor to deliver more focused human services.

Clements and the board designed front-line processes focused on raising the poor to a level of parity and to deliver services directly to those needing them:

- Sustainable Food and Water
- Basic Education and Healthcare
- Community Development, Job Skills and Women-Managed Businesses
- The U.S. based Medical Relief and Air Transport (MAT) Program

Combined with the use of small aircraft for transportation, no region of the world is out of reach.

Wings of Hope serves over 1,000,000 people at 157 bases in 47 countries annually. The organization focuses on strategies to help raise the poor to self-sufficiency and do not accept government or taxpayer funds.

Wings of Hope is a Four-Star Charity on Charity Navigator and a Gold Charity on GuideStar - the highest ratings possible and has been nominated twice for the Nobel Peace Prize.

The Board of Directors initiated a search in August to replace Clements.

For more information about Wings of Hope, go to [www.wings-of-hope.org](http://www.wings-of-hope.org) or call (800) 448-9487 or email [woh206@earthlink.net](mailto:woh206@earthlink.net). □

## Pilot Mall Founder, Neil Glazer

If the competition among pilot supply companies was not fierce enough, one general aviation pilot decided there was room for one more!



Neil Glazer

Neil Glazer founded the Internet retail business “Pilot Mall” in 1998 at Stewart Airport in the Hudson Valley of New York. He was 21 and had just graduated from The State University of New York with a degree in economics. He relocated to St. Petersburg, Florida in 2005 and established the Pilot Mall Aviation Superstore at Sun 'n Fun in Lakeland, Fla. in 2009. That same year Glazer took over all on-site retail operations for Sun 'n Fun.

In 2012, Glazer acquired AvShop, the industry's first Internet-based pilot supply retailer. He also acquired iPilot.com to offer Pilot Mall customers free educational resources, flight planning tools, an electronic logbook and a classified ad and message service. Glazer moved his headquarters to Lakeland Linder Regional Airport in 2013.

An innovator in his field, Glazer has brought humor and the younger generation's perspective to aviation marketing.

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## PEOPLE IN THE NEWS

For instance, “Bubba,” Pilot Mall’s office dog, is a featured pitchman. Bubba’s own weekly specials are billed as “Paw-Tested and Bubba-Approved.”

The success of Pilot Mall has enable Glazer to own a 2008 Mooney Ovation III, which he uses for business and to help others.

Glazer, who holds a Commercial

Pilot Certificate with instrument and multi-engine ratings, is one of 11 U.S. Bahamas Flying Ambassadors working with the Islands of the Bahamas to promote and facilitate pilot tourism. In 2011, Glazer teamed with air tourism operator Air Journeys to organize GA relief missions, transporting post-hurricane supplies to the islands. In

2012-2013, Glazer administered “The Bahamas Pilot Challenge,” a contest for those landing at a minimum of 12 of the 20 Bahamas airports of entry.

Pilot Mall offers more than 5,000 items of pilot supplies and equipment, aviation gifts and educational resources at [www.pilotmall.com](http://www.pilotmall.com), and at its Aviation Superstore in Lakeland, Fla. □

## Jet Quest Names New President/CEO



Robin Eissler

GEORGETOWN, TEXAS – Jet Quest has named Robin Eissler President and CEO. Her father and co-founder, Don Richards, who has led the company for 15 years said,

“I am proud to pass the torch on to Robin. She has worked by my side since

she was 18 and knows this business better than anyone.”

Eissler brings to the new role 15 years experience as Vice President and Co-Founder and 20 years experience in aircraft sales. She is also the founder of the business aviation flight charity “Sky Hope Network” and played an essential role coordinating over 800 flights during the 2010 business aviation relief effort in Haiti. Eissler is a Certified Aviation Manager (CAM) and an

active member of the National Business Aviation Association through her role on the Corporate Aircraft Management Committee. She was Co-Chair of the 2012 and 2013 NBAA Leadership Conferences and is an avid advocate for the industry.

Founded in 1999, Jet Quest, Inc. is an aircraft sales and brokerage firm. The company has offices in Florida, Texas, and Ohio, and brokers aircraft transactions on a wide range of aircraft, from twin turboprops to large cabin business jets ([www.jet-quest.com](http://www.jet-quest.com)). □

## Woody Minar Earns Fifth Master Instructor Certification

The National Association of Flight Instructors (NAFI) has announced that Woody Minar of St. Croix Falls, Wisconsin, has

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(L/R) Martha King of King Schools, Woody Minar and John King

earned accreditation as a NAFI Master Flight Instructor. This is Minar’s fifth NAFI Master Instructor accreditation.

After serving in the U.S. Navy and the CIA for 30 years, Minar took up flying. He received his Private Pilot Certificate in 2000, and his Commercial Pilot Certificate and Certified Flight Instructor Certificate in

2003. In 2012, Minar was given Designated Pilot Examiner (DPE) authority by the Minneapolis FSDO with Private, Commercial, and Instrument authorizations for ASEL and ASES. He is a CFI (ASEL & ASES), CFII, MEI, CFI-G (Glider), Gold Seal CFI, IGI, AGI, and FAA Team Representative.

In 2009, Minar was named the Minneapolis FSDO CFI of the Year. In 2012 he was the Minneapolis FSDO and Great Lakes Region CFI of the Year, and in 2013, the Minneapolis FSDO and Great Lakes Region FAA Safety Team Representative of the Year.

Minar is the Chief Flight Instructor at Osceola AeroSport in Osceola, Wisconsin (KOEO), and a flight instructor with Adventure Seaplanes in Lino Lakes, Minn. and Lake Wales, Fla. □

## Personnel Changes At AOPA

FREDERICK, MD. – Bruce Landsberg, President of the AOPA Foundation and Executive Director of the AOPA Air Safety Institute for the past 22 years, has moved into a new “Senior Safety Advisor” role, which allows him to get out of management,



Bruce Landsberg

and focus more on writing, blogging, and speaking on air safety.

AOPA welcomes Jim Minow to head the AOPA Foundation and George Perry to lead the Air Safety Institute. Minow brings 30 years of development experience in the non-profit and charitable world. For the past nine years he has served as chief development officer for Foundation Fighting Blindness. Minow began flying when he was in college and currently

owns a Beechcraft Sundowner.

Perry, who has a diverse background in general aviation and military aviation, has spent the past year as director of fleet and special mission aircraft sales for Cirrus Aircraft. Prior to that, he completed a 20-year career in the U.S. Navy as an F-18E squadron commanding officer. He holds Airline Transport Pilot, Certified Flight Instructor-Instrument, and Multi-Engine Instrument Pilot Certificates. □

## Iowa Aviation Hall of Fame Inducts Three Doolittle Raiders

GREENFIELD, IOWA – The Iowa Aviation Hall of Fame inducted three members of the famed Doolittle Raiders at ceremonies held October 2, 2014. Inducted were Cpt. Charles Greening, Sgt. Bill Dieter and Cpl. Leland Faktor.

Reacting to the damage done by the Japanese’ sneak attack on Pearl Harbor on December 7, 1941, an ambitious

plan was put into motion.

Led by Col. Jimmy Doolittle on April 18, 1942, 16 B-25 “Mitchell” bombers flew off the aircraft carrier USS Hornet to bomb targets on the Japan mainland. Not knowing of the mission until the carrier was at sea, the volunteers were simply told, “you’ll

either be heroes or in heaven.”

On May 24, 2014, all 80 members of the Doolittle Raiders were awarded the Congressional Medal of Honor. Iowans Dieter and Faktor were two of the three crewmembers killed when their bombers crash-landed following the raid. □

## Date Set For Wisconsin Aviation Hall of Fame Banquet

OSHKOSH, WIS. – The Wisconsin Aviation Hall of Fame will hold its 29th annual induction banquet, Saturday, October 25, 2014, at the EAA AirVenture Museum in Oshkosh,

Wisconsin. Six aviators will be inducted including Brig. Gen. Peter Drahn (ret.), Vice Admiral James H. Flatley, Jr., Donald Volland, and brothers

James, Ed, and Ray Knaup. Those interested in attending can contact Rose Dorsey at 920-385-1483 or [rdorsey@wisconsinaviationhalloffame.org](mailto:rdorsey@wisconsinaviationhalloffame.org). □

## Frank Butler Butler Aviation

CHICAGO, ILL. – Frank Butler, 85, the son of Paul Butler who founded Butler Aviation and the village of Oak Brook, Illinois, died August 22, 2014 at a rehabilitation facility in West Palm Beach, Fla. The family farm became the village of Oak Brook. Frank Butler’s mother was Marjorie von Stresenreuter. □

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## Mead & Hunt Builds \$12 Million Office Building One Mile From Airport

MIDDLETON, WIS. – The national engineering and architectural firm, Mead & Hunt, has built a new \$12 million office building just over one mile from Middleton Municipal Airport – Morey Field, where the company keeps its Cessna 340. The firm has offices nationwide, and is known for its airport development work. Previous to the move, the company's headquarters was located more than six miles from the airport.

The company had simply outgrown its old offices, and leasing additional space nearby was not conducive to collaboration or teamwork, which is essential in a

design-consulting firm, according to company CEO Raj Sheth. Mead & Hunt had been in its former Madison location since 1987.

"It was important to use the most current practices in sustainability and green building, while embracing a forward, innovative aesthetic look to match Mead & Hunt's image," said Andy Platz, President of Mead & Hunt. The three-story building is constructed cast-on-site, tilt-up of



Andy Platz

about 69,000 square feet. It makes the most of natural elements, such as extensive natural lighting, radiant tube heat along the building perimeter, and a combination of corrugated aluminum and sandblasted concrete to reveal aggregate and exposed steel columns.

The Mead & Hunt architectural team has been deeply involved in schematic space planning, internal programming and collaboration with KEE Architecture to achieve this unique aesthetic.

"One of my favorite features is the 'Innovation Café,' a large, open work area designed to accommodate diverse work styles, foster collaboration, provide a different environment for head-down work and enable team building," said Platz. He went on to describe a dramatic entryway with a central staircase and steel railings, cloud ceilings and exposed structural elements throughout.

As a national planning and design-consulting firm, technology is an important feature of the new building. The wiring is 10 times faster than the company's previous location, which is essential when collaborating on projects via the Internet. The building also has state-of-the-art conference rooms with improved

audiovisual capabilities, bigger screens and a fully integrated scheduling system. All of the workspaces are pushed to the interior of the layout, which means that most employees have daylight walls.

Founded in 1900, the employee-owned consulting firm employs approximately 500 engineers, planners, historic preservationists, environmental scientists, architects, technicians and support specialists at 31 offices in 18 states across the nation. There are approximately 200 employees at the Middleton office.

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## New FAA Hangar Policy Draft – Confusing!

WASHINGTON, D.C. – Two weeks after the FAA unveiled its draft policy for allowed uses in hangars at airports that receive federal grant funding, much confusion has emerged regarding the overall effect of the policy and what it means for hangar tenants. That's particularly true for homebuilders, who have heard conflicting stories about what it means for building an aircraft in an airport hangar.

For homebuilders, the draft policy offers protections that never existed in an FAA policy. For the first time, aircraft construction is included as a protected aeronautical activity. Previously, homebuilders had no protection from airports that

demand only fully operating aircraft housed in hangars. But according to the Experimental Aircraft Association (EAA), the language in the draft policy includes some final assembly stipulations that need to be amended.

EAA will ask the FAA to consider all active aircraft construction as an aeronautical activity. EAA believes that any type of active homebuilding meets the standard of aeronautical activity. EAA will urge all aircraft builders to fully read and understand their airport's hangar rental agreement to prevent any future disputes over what is and is not allowed at their airports. □

## Cedar Rapids Names Interim Airport Director

CEDAR RAPIDS, IOWA – Don Swanson has been named Interim Airport Director at Eastern Iowa Airport to replace Tim Bradshaw, who accepted a position as the executive

director of Roanoke–Blacksburg Regional Airport in Roanoke, Virginia. A nationwide search is underway for a permanent replacement. □

## Doing Business In Winona

WINONA, MINN. – The economy has taken its toll in recent years on the small southeastern community of Winona, Minnesota, but

things are looking up. Three Hawker Beechcraft Premier Jets were in town for business reasons recently, and landed at Winona's Max Conrad Field. Airport manager, George Bolon,



*Photo Courtesy of Win-Air.*

believes that this may be the first and only time there have been three large aircraft of the same make and model at the airport, and hopefully not the last time. According to Bolon, there are only 290 Premier Jets in the total fleet. □

## City Takes Over FBO In Hopes of Increasing Traffic

RANTOUL, ILL. – Like many small towns that lose their fixed base operator, the City of Rantoul, Illinois, has decided to take over the fixed base operation. This decision came about as a result of Rusty's Flying Service not wishing to continue providing these services. Rusty's will continue, however, with its aerial application business at the airport.

To help increase traffic, airport manager Rune Duke said that the city will be lowering fuel prices in hopes of increasing traffic. If traffic increases, the city plans to install a self-serve fuel system. Thus far, the city has hired an aircraft technician, and is looking to also hire a line service manager. During the month of July, the airport averaged 330 operations per day – 10,238 for the month. □



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## North Dakota Leaders Celebrate GA's Economic Impact At Jobs Rally

GRAND FORKS, N.D. – U.S. Senators John Hoeven and Heidi Heitkamp, U.S. Representative Kevin Cramer, and North Dakota Lt. Governor Drew Wrigley joined the General Aviation Manufacturers Association (GAMA) and hundreds of manufacturing workers, local officials, business leaders, educators, and university students for a general aviation (GA) jobs rally on the campus of the University of North Dakota (UND), September 5, 2014. The event, GAMA's twelfth jobs rally throughout the United States, celebrated general aviation's positive contribution to the state's economy.



(L/R) Senator Heidi Heitkamp (D-ND), and GAMA President Pete Bunce.

*Wes Van Dell Photo*

The Grand Forks region is leading the country in aviation and unmanned aerial systems education and technology, providing real opportunities for high-paying careers in a dynamic field of work, U.S. Senator John Hoeven (R-ND) said. The University of North Dakota's Odegaard School of Aerospace Sciences in Grand Forks, Northland Community College in Thief River Falls, Minnesota, and world-class companies like Appareo Systems, Cirrus Aircraft, Piper Aircraft, and UTC Aerospace Systems in Jamestown, make Grand Forks and North Dakota a hub for aeronautics education and technical entrepreneurship.

"General aviation is more important to America's economy

than many people realize," noted U.S. Congressman Sam Graves (R-MO). "It's not just about flying planes; it's about creating good-paying jobs and economic opportunity, not only in states like North Dakota and Missouri, but all across the country. General aviation is responsible for employing roughly 1.2 million people and contributes approximately \$150 billion to the overall economy."

GAMA President and CEO Pete Bunce concluded, "Ensuring we have strong general aviation leaders in the future has been one of GAMA's goals for years, which is why we are pleased to celebrate today's

jobs rally with so many bright, talented, and motivated young people. I am very confident these men and women will take an active role in the development of state-of-the-art products and technologies. Their aviation studies and future industry employment will bring even more skilled, good-paying jobs to North Dakota. We salute and thank the political, business, and education leaders in North Dakota for recognizing the importance of general aviation to their state and to the nation.

After the rally, UND hosted a Career Fair for students, and more than a dozen companies and organizations took part.



## Two Pilots To Land At 49 State Capitals In 2 Weeks For GA Awareness

MIDDLETON, WIS. – A former Madison, Wisconsin resident and the former owner of Morey Airplane Company and Morey Airport in Middleton, Wis., Field Morey of Medford, Oregon, and Conrad Teitell of White Plains, New York, have accepted the challenge of flying a general

aviation airplane to all 49 state capitals in the lower 48 plus Alaska within a two-week period of time. Morey and Teitell are making the flight to raise public awareness about the importance of smaller airports to communities and the nation's air transportation system.



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Called the “Capital Air Tour,” the pilots will use Morey’s 2013 Cessna Corvalis TTx, departing Tuesday, September 16, 2014, and landing in several states each day.

The idea of flying the Capital Air Tour came to Teitell when he wanted to “raise the bar” after he and Morey completed Teitell’s quest to fly from the highest airport in the U.S. to the lowest airport in 2013.

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

Throughout his career, Morey has been at the forefront of technological advances in general aviation aircraft and avionics, and is THE instrument pilot and instructor.

Morey, a Certified Instrument Flight Instructor and highly rated in single and multi-engine piston aircraft, as well as gliders and tail-draggers, is an expert in adventure flights, and has instructed hundreds of instrument student pilots on exciting “real world weather” flights to Alaska, the Rocky Mountains and the Idaho backcountry through his company, Morey’s West Coast Adventures (<http://www.ifrwest.com>).

Because the entire flight will be tracked using an onboard Spot Generation 3 GPS tracking device showing the real-time location of the aircraft, the flights offer teachers a chance to give lessons in time, distance and U.S. state capitals. A complete itinerary with a tentative schedule, along with the tracking map, is available on the flight’s web page at [www.ifrwest.com/cat](http://www.ifrwest.com/cat).

Each day along the Capital Air Tour route, Morey and Teitell plan to hold media interviews in cities where that day’s series of flights conclude. They will be distributing information from the Aircraft Owners & Pilots Association (AOPA) to help demonstrate the value of local airports, while allowing the press to get a close-up look at the airplane being used for the flight.

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

Morey’s Cessna Corvalis TTx is equipped with a Garmin G2000 “glass cockpit” that includes NEXRAD radar for storm avoidance, anti-ice equipment, and terrain and traffic avoidance devices, along with the latest autopilot technology



Cessna Corvalis TTx

essential for avoiding crew fatigue. Morey said that their flight plan is subject to diversions caused by unsafe weather conditions.

“September is the heart of hurricane season and that could be the biggest influence on our route,” said Morey. “A major route decision will be made prior to leaving Wisconsin

on September 20th as we prepare to continue east. The remaining route of our flight plan will all depend on the weather moving up through the Gulf States along the Atlantic Coast at the time.”

For more information, visit [www.ifrwest.com/cat](http://www.ifrwest.com/cat). □

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# **EAA AirVenture Oshkosh 2014 – An Opportunity For Fun & Forums To Learn & Engage**



U.S. Air Force Thunderbirds  
*Larry Reid Photo*

OSHKOSH, WIS. – “It was a tremendous week on many levels,” stated EAA Chairman Jack Pelton during a press conference, August 3, 2014.

“We filled Wittman Regional Airport with aircraft for the first time in several years, with both aircraft camping and parking areas completely full at mid-week. The cooperation and support of the airport’s east side community made possible the historic first appearance of the U.S. Air Force Thunderbirds at Oshkosh, which brought in many people to



EAA Chairman Jack Pelton

The ramp at Platinum Flight Center, Outagamie County Regional Airport, Appleton, Wis.

*Dave Weiman Photo*

Once Wittman Regional Airport in Oshkosh, Wis., was full, aircraft were diverted to nearby Outagamie County Regional Airport in Appleton, Wis., (below) and other area airports.

*Dave Weiman Photo*







Photos by  
Chris Bildilli







(L/R) FAA Administrator Michael P. Huerta and EAA Chairman Jack Pelton at the first "Meet The Administrator" forum at EAA AirVenture Oshkosh in two years.  
*Dave Weiman Photo*

(TOP RIGHT) A new exhibit along Boeing Plaza featured photographs and quotes by EAA Founder Paul Poberezny.  
*Dave Weiman Photo*



(RIGHT) Among the many big draw forums during EAA AirVenture Oshkosh 2014 was one featuring retired Lt. Col. Richard "Dick" E. Cole, the copilot of aircraft No. 1 of the famed Doolittle Tokyo Raiders. Lieutenant Colonel James "Jimmy" Doolittle, U.S. Army Air Forces, handpicked Cole to copilot his B-25 Mitchell Bomber to bomb Tokyo on April 18, 1942. This was the first air raid to strike the Japanese Home Islands, and was in retaliation for Japan's attack on U.S. naval base, Pearl Harbor, on December 7, 1941.

Sixteen U.S. Army Air Forces B-25B Mitchell medium bombers were launched without fighter escort from the aircraft carrier "USS Hornet," which had sailed to the Western Pacific Ocean.

Doolittle wanted to bomb military targets in Japan, then fly on and land in China. Fifteen of the aircraft reached China, and the other one landed in the Soviet Union. All but three crewmembers survived, but all the aircraft were lost. The Japanese Army captured eight crewmen in China, three of whom were executed. The B-25 that landed in the Soviet Union at Vladivostok was confiscated and its crew interned for more than a year. Fourteen crewmembers, except for one crewman, returned either to the United States or to American forces.

The raid succeeded in its goal of raising American morale and was a psychological blow to Japan imperialism, but only caused negligible material damage, hitting only non-military targets or completely missing targets.

The EAA forum was packed, and everyone was in awe of Cole, 99, who described his role in the raid with impeccable detail.  
*Dave Weiman Photo*

our event. Exhibitors reported outstanding business throughout the week, with some selling out of product. We also had a tremendous amount of aviation innovation brought to Oshkosh with new airplanes and aviation technology, and our "KidVenture" youth area had a record attendance year."

More than 500,000 people attended EAA AirVenture Oshkosh 2014, with a total increase of five to six percent.

"Certainly the Thunderbirds' first performances at Oshkosh helped the attendance, as Saturday and Sunday (August 2-3) saw 20 percent attendance increases from similar days in 2013," said Pelton. "There was another factor, too – a renewed sense of optimism that was reflected in people coming to Oshkosh to celebrate the world of flight. You could feel it among the attendees, exhibitors and our 5,400 volunteers whose work made the event possible."

Pelton made it clear at his opening press conference, July 28, that while everyone would miss seeing EAA Founder Paul Poberezny for the first time in the history of the event, members were there this year to honor his legacy and celebrate his many contributions, not to mourn his loss. Poberezny died

shortly after EAA AirVenture Oshkosh 2013 on August 22 at the age of 91.

A new exhibit along Boeing Plaza featured photographs of Poberezny and many of his famous quotes. Members had the opportunity to write messages and sign their names on posters in memory of the founder. It was a way to say thank you for making EAA and AirVenture what it is today.

Opening night, there were two big attractions – a tribute to Paul Poberezny in Theater In The Woods, and a concert on Boeing Plaza featuring Kenny Loggins.

But Oshkosh was not all fun and games. Members had the opportunity to express their concern over FAA's delay in reforming the Third-Class Medical.

At the first "Meet The Administrator" forum in two years, July 31, Pelton thanked FAA Administrator Michael P. Huerta for attending EAA AirVenture Oshkosh 2014, but did not





"KidVenture," located across the runway from the EAA Museum at Pioneer Airport, had the largest turnout of kids in the history of AirVenture.  
Dave Weiman Photos



waste any time in stating that EAA wanted the FAA to get moving on reforming "Third-Class Medical" requirements.

Huerta told the membership gathered that he knows how important this issue is to them, and that it was a high priority at FAA.

Relief from the requirement to obtain and carry a medical certificate may be just a few months away for many pilots, he said. The FAA signed off on a new proposed rule the week prior, and it was being forwarded to the U.S. Department of Transportation (DOT) for review. Once DOT has finished its review, the proposal will be available for public comment and ultimately rule making.

Huerta warned EAA members that it is better that the proposal goes through rule making at the FAA, rather than have Congress mandate a ruling, because there will be more flexibility to fine tune the final rule if the proposal goes through the normal rule making process. Pelton agreed, but EAA and AOPA will keep Congress involved to move the process along.

Huerta further suggested that once the proposed rule comes up for public comment, that EAA and Aircraft Owners and Pilots Association (AOPA) members should try to keep their comments simple and to the point to reduce the amount

of time needed to review each comment.

The proposed rule responds to a 2012 petition jointly filed by EAA and AOPA to expand the number of pilots who are not required to obtain a medical certificate.

Besides the movies each night at EAA's outdoor theater, there were two night airshows on Wednesday and Saturday night to entertain attendees.

EAA's annual Gathering of Eagles fundraiser held July 31, brought together a thousand supporters who helped raise more than \$2 million in support of EAA's youth education programs. The highlight of the fundraising auction was a one-of-a-kind Ford Mustang, with a design inspired by the new F-35 Lightning II fighter jet that went for \$200,000.

There were 2,649 showplanes (308 more than in 2013), including 997 homebuilt aircraft, 1,050 vintage airplanes, 303 warbirds, 122 ultralights and light sport aircraft, 91 seaplanes, 40 rotorcraft, 38 aerobatic aircraft and eight (8) hot-air balloons.

More than 2,081 international visitors registered from 69 nations, with Canada (505 visitors), Australia (416), and Brazil (194) the top three nations. This total includes only





NationAir Aviation Insurance founder, Ralph Bauer (left), with his son and company president, Jeff Bauer (right). NationAir hosted a dinner for customers and staff during EAA AirVenture Oshkosh 2014. NationAir Aviation Insurance is headquartered at DuPage County Airport, West Chicago, Illinois. *Dave Weiman Photo*



Wag-Aero is one of the oldest commercial exhibitors at EAA AirVenture Oshkosh, and for that reason, was asked to host Wisconsin Governor Scott Walker at their booth. (L/R) Mary Myers, President; William Read, Chairman and CEO; Bridget Payne; and Mary Pat Henningfield. *Dave Weiman Photo*

non-U.S. visitors registered at the International Visitors Tent, so the actual international contingent is undoubtedly larger.

There were 917 media representatives on-site, from five continents.

Save the dates! EAA AirVenture 2015 will be held July 20-26.

"We're already planning for 2015, with more details coming as soon as we finalize them," said Pelton.

"Legendary aircraft innovator Burt Rutan indicated he would like to return to Oshkosh in 2015 to share some innovations with the aviation community. We're eager to bring the

soon-to-be-restored B-29 "Doc" here for a public showing as part of the 70th anniversary of the end of World War II. And, of course, there will be plenty of other highlights that you can only see at Oshkosh."

Information updates will be posted at [www.airventure.org](http://www.airventure.org). □

## Audrey Poberezny & Earl Lawrence Honored At AirVenture



EAA Chairman Jack Pelton presents EAA's "Freedom of Flight Award" to Audrey Poberezny. *Dave Weiman Photo*

OSHKOSH, WIS. – Audrey Poberezny, who cofounded the Experimental Aircraft Association (EAA) with her husband, Paul Poberezny, in the basement of their home in 1953, and former EAA Vice President Earl Lawrence, were honored during the organization's annual meeting, July 30, 2014. Poberezny received EAA's "Freedom of Flight Award," the association's highest honor; and Lawrence received the "EAA Chairman's Award" for his work to guide the sport pilot/light-sport aircraft initiative through the complex federal bureaucracy to its approval 10 years ago. Lawrence is currently manager of FAA's Small Airplane Directorate in Kansas City, Missouri.



In accepting EAA's "Chairman Award," former EAA Vice President Earl Lawrence, who now works for the FAA, said of EAA AirVenture Oshkosh: "My spirit comes from this event." *Dave Weiman Photo* □



# AirVenture 2014 – A Time To Remember

*by Jim LaMalfa*



Two members of the GEICO Skytypers Airshow Team perform the Lead Turn Guns Pass during EAA AirVenture Oshkosh 2014 in which the two solo aircraft cross one another. The pilots are Steve Salmirs of Scottsdale, Arizona (#5 Lead Solo), and Tom Daly of Garden City, New York (#6 Opposing Solo). The aircraft are 1941 North American SNJ-2s. The GEICO Skytypers Airshow Team is a flight squadron of six SNJ-2 World War II trainers.

*Photo by Chris Bildilli*

Paul Poberezny, who founded the Experimental Aircraft Association (EAA) in 1953, belongs to the ages now, but he was honored at this year's fly-in at Wittman Regional Airport, Oshkosh, Wisconsin, July 28 - Aug. 3, 2014, as were veterans from the Viet Nam conflict at Wednesday's airshow. Paul was honored with a special exhibit of his prized P-64 and P-51 Mustang, "Paul I," as well as with a special exhibit on Boeing Plaza.

The airshow, which started at 3:00 pm, featured the usual stellar aerobatic performances and the GEICO Skytypers, flying SNJ-2 warbirds. Besides their demonstration of digital skywriting, the team gave a special presentation of military air-ground attack tactics. Wednesday's show also featured an all Viet Nam warbirds show including the Cessna L19 "Bird Dog," three Douglas AD1 "Skyraiders," and a demonstration by Viet Nam-era helicopters, two rescue medivac helicopters and a AH-1 Cobra gunship. The demonstration was meant to honor Viet Nam veterans from all branches of the military. It was pointed out that over 5,000 U.S. troops were saved by medivac Hueys. Additionally, and for the first time, the USAF Thunderbirds, flying F16 Falcons, performed at the airshow Friday, Saturday and Sunday. At previous fly-ins, the Canadian Snowbirds and the Italian Frecce Tricolori military teams have performed, but never a U.S. team.



(TOP LEFT) Fairey Gannet, a post World War II carrier-based aircraft from Great Britain, features two four-blade, contra-rotating propellers. *Larry LaMalfa Photo*

(TOP RIGHT) U.S. Air Force Thunderbirds in the Diamond Formation. *Larry Reid Photo*

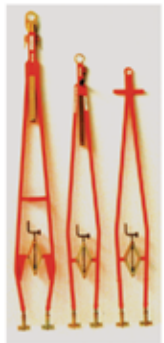
(BOTTOM LEFT) Flying in the airshow was this "Gee Bee" racer. *Tony LaMalfa Photo*

(BOTTOM RIGHT) This Diamante Diamond Twin DA42 is part of the training fleet at LeTourneau University, Longview, Texas. *Tony LaMalfa Photo*

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2014 is the 100th anniversary of WWI, so EAA also featured replica and original WWI aircraft and a special JN4 Jenny hangar where visitors could see the aircraft without linen covering.

In addition to the Viet Nam honor flight and superb aerobatics, EAA also introduced the public to half-scale radio controlled models. One, a Clipped Wing Cub, which cost \$12,000, was flown by the owner, along with a full-sized aerobatic aircraft. The point? Hollywood uses large scale models to simulate real aircraft and movie goers can't tell the difference. Miniatures, as they are called in movie jargon, are cheaper than computer-generated imagery (CGI) effects and look more like real aircraft (see the WW I film, "Flyboys" and "The Battle of Britain"). Also flying at Wednesday's airshow was a two-place Gee Bee racer, QED.

Many visitors to EAA AirVenture Oshkosh 2014 were seen queuing up to participate in the One Week Wonder project. EAA chapter members and the general public took part in the building of a Zenith CH 750 Cruzer airframe with the goal of completing the aircraft during the fly-in. Visitors could drive one rivet and got to sign the sheet metal. The aircraft taxied on Sunday.

A walk-about the AirVenture grounds with my two sons, Larry and Tony, brought us to an area west of the tower where many aviation schools were represented. I chatted with spokesmen Jon Weber from LeTourneau University, a Christian aviation school in Longview, Texas.

"Notice the tail-wheel trainer we use, a Decathlon," said Weber. "We believe in training pilots with the traditional stick and rudder approach. After they have mastered basic flight training, we put them in a Diamante Diamond twin DA42."





ICON A5 ESN-1 Amphibious Aircraft  
Larry LaMalfa Photo



The "Flabob Express" DC-3.  
Jim LaMalfa Photo

A number of light twin jets were on view at AirVenture 2014, including the first certified HondaJet, a new model of the Eclipse 550, and Cirrus Aircraft's Vision SF50, which will be certified in 2015. Don Augustine of Eclipse Aerospace noted the new, more powerful engines.

I asked Augustine if the fanjets could handle hail. "Walk around to the nose, and look at the engines," he said, and I did. "Can't see them," I replied. "Right; the fuselage bulges around the cockpit and deflects hail."

If a corporate jet doesn't fit your pocketbook, consider John Monnet's Sub-Sonex minijet. Sonex aircraft are kit built. The wing span on the Sub-Sonex single-place jet is 18 feet, it uses a PBS TJ-100 jet engine, has a gross weight of 1000 lbs, a useful load of 520 lbs, takes off in 1200 feet, and climbs at 1400 feet per minute. The Sub-Sonex cruises at 240 kts TAS and is stressed for aerobatics. Besides Cirrus and other new kids on the block, the old reliables – Cessna, Piper, Mooney (back in business), Beech, Bonanza, Bellanca and Bell – were very much in evidence at AirVenture 2014.

Many manufacturers are offering Light Sport Aircraft since the rule went into effect 10 years ago.

Cessna is offering their Skyhawk JT-A with a turbocharged diesel engine that burns Jet-A fuel.

Turbocharged diesel engines are also used in ultralight and sometimes certified light aircraft.

We chatted with a Bell Helicopter rep while eyeing Bell's new 407GX. I asked what the scissors-like device located above and below the windscreen was for.

The rep replied: "It's exactly that; scissors made of tungsten-carbide steel. We don't like flying into wires, so we can cut them and save a multi-million dollar aircraft."

Bell makes corporate rotary wing aircraft and medivac versions with medical equipment onboard.

Enstrom Helicopter, Menominee, Michigan, was also displaying their helicopters, which are now made in three passenger versions, as military trainers and medivacs.

I talked to a rep from CAV Aerospace, a company that makes wet wings for general aviation aircraft, including Cirrus, for flying into known icing conditions.

"This is a glycol-alcohol wet wing system. We install titanium panels at the leading edge with 800 holes per square inch laser drilled. It basically protects the entire wing surface, unlike boots. We do the wing, props and windscreen. We can't do an aftermarket on a Cirrus, but they can install the system when they lay up the composite wing. They charge

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Light sport aircraft (LSA) marketed by new companies other than the "old reliables" were well represented at AirVenture 2014, including the ICON A5 ESN-1, a carbon fiber amphibious two-place, high-performance aircraft.

Cirrus was well represented with its Vision Jet SF50 personal jet, all-digital 2015 SR22T Special Edition "Accelero," and a wall-sized poster showing Red Bull racer, Mike Goulian, who flew the airshow on Wednesday.

Airshow central featured warbirds, as well as the "Flabob Express" DC-3. The venerable Douglas transport just seems to go on forever, and you can get a rebuilt one at Basler Turbo Conversions with prop-jet engines, right at Oshkosh. The storied Flabob Express is used today for EAA's Air Academy for youth. Also on display was the Fairey Gannet, a carrier-based post WWII British aircraft featuring two four-bladed, contra-rotating props. The Gannet was the first fighter to be designed to carry small nuclear bombs.

Just north of a B-24 Liberator, which was open for tours, sat three friendly enemies, the Commemorative Air Force B-17 "Yankee Lady," the only flying and restored Japanese Zero, and a Vought F4U bent winged birdy, the "Corsair."

Working our way north, we admired the beautiful silver XtremeAir XA42.

The aircraft is a high-performance aerobatic composite competition machine made in Magdeburg, Germany. It is powered by a Lycoming AEIO-580-B1A six-cylinder engine, rated at 315 hp. Rate of climb is 3,212 feet per minute, and it cruises at 185 KIAS. The aircraft is rated aerobatic III unlimited, plus and minus 10gs.

The new kid on the block is the "LSA Trail," made in Italy. It can be purchased ready to fly or as a kit for \$28k. It has folding wings and seating is tandem (ala, the venerable J-3 Cub). The airframe is square steel tubing, covered with sheet aluminum.

Zenith of Mexico, Missouri, showed its kit-built aircraft, as well as featuring the "One-Week Wonder Cruiser" built on the airfield.

The Airboss homebuilt features an all-carbon fiber, precast twin boom fuselage that should simplify homebuilding. Boeing's 777 is built entirely of carbon fiber and many first line U.S. Air Force fighters have empennage and other components that utilize carbon fiber.

WWI fighters were plentiful at EAA AirVenture Oshkosh and that included a British-built Sopwith Camel (N6184), maintained by Kingston Aviation on the Thames. The Kingston Aviation Centenary Project is a celebration of the colorful history of the Sopwith Airplane Company.

Interview circle at the north end of Wittman Regional Airport always features interesting aircraft. This year

we gazed in awe at three Lockheed P-38 Lightnings, one being EAA's 993 "Marge," painted up to look like Richard Bong's fighter. Bong, from Poplar, Wisconsin, was the leading ace in the Pacific during WWII. He survived the war with 60 kills, only to be killed while testing a Lockheed P-80 in California.

The P-38 "Glacier Girl" was retrieved from Greenland after it was recovered 250 feet below the ice. In 1942, a flight of six P-38s and two B-17s were being ferried to Britain, but bad weather forced them to land on the ice. The crews were all rescued, but the aircraft were abandoned until 1992, when one of the Lightnings was brought up in pieces. It was subsequently restored and given a second life.

The P-38 "Ruff Stuff" belongs to Ron Fagen of the Fagen Fighter Museum, Granite Falls, Minnesota.

About 350 warbirds were on display at AirVenture 2014 including four North American B-25 Mitchell Bombers; a Lockheed Ventura, used by the British for anti-submarine patrol in WWII; and Rudy Frasca's restored Supermarine Spitfire Mk. XVIII.

EAA AirVenture Oshkosh 2014 was indeed a time to remember. Some highlights of past AirVentures include Paul Poberezny driving around the convention grounds in his chopped VW Beetle, "Red 1," stopping to sign my daughter Brenda's hat when she was 10 years old; Charlie Hillard, Tom Poberezny and Gene Soucy flying with the Red Devils Aerobatic Team, and then the Eagles Aerobatic Team; brilliant performances by Bob Hoover in his Shrike Commander, and Duane Cole in his Clipped-Wing Taylorcraft; EAA's annual Aviation Art Competition, which Tom Poberezny and I founded in 1976; attending the World Aerobatic Championships at Oshkosh in 1980; and last, but not least, attending AirVenture every summer since 1973 with my two sons and sometimes my daughters. So EAA, thanks for the memories – they are irreplaceable! □



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# NASA WB-57F Makes First Visit To EAA AirVenture Oshkosh



NASA WB-57F high-altitude research aircraft.

Chris Bildilli Photo

by Woody Minar

**O**SHKOSH, WIS. – For what seems to be a small, yet large aircraft for high-altitude work, NASA showed off its WB-57F High Altitude Research plane at EAA AirVenture Oshkosh, July 28 – August 3, 2014. According to pilot Scott Gahrning, they perform “weather reconnaissance” above 60,000 feet.

The British built the first B-57 and the U.S. bought it in the late 1950s as a bomber. The “A” through “E” models flew in Viet Nam. After the war, the WB-57F that appeared at Oshkosh sat in a boneyard for 40 years before being resurrected back to flight by NASA.

The plane has several missions, one of which is earth science, such as studying ice crystal size in clouds and ice reflectivity along with Department of Defense missions. Gahrning smiled and had a twinkle in his eye when he said “they filmed a rocket launch from Cape Canaveral from 50,000 feet.”

NASA has three planes in use. Since the plane was outdated and now had different missions, NASA modified the original plane’s design by retrofitting it with F-15 landing gear, wheels, and brakes. Then they made the wingspan longer, which meant they had to install engines with more thrust, which resulted in having to make the tail bigger.

When asked how the WB-57F compares with the SR-71, Gahrning said that the SR-71 flies at 80,000 feet at Mach 3-plus. With a 122 ft 7 inch wingspan, the WB-57F cruises at 197 knots IAS with a range of 6.7 hours or 2500 nm. “A lot of planes pass us,” he said.

For more information, watch this video:  
<https://www.youtube.com/watch?v=HNnjN5Y56s4>

*EDITOR’S NOTE:* Woody Minar is a master certified flight instructor and designated pilot examiner at the Osceola, Wisconsin airport (KOE0). □

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# First Production HondaJet Makes Public Debut At AirVenture



*Chris Bildilli Photo*

OSHKOSH, WIS. – The first production HondaJet made its public debut, July 28, 2014, at EAA AirVenture Oshkosh. Following a celebratory event commemorating the occasion, the HondaJet concluded the day with an entertaining flight demonstration during the afternoon air show that included high and low-speed passes.

“EAA AirVenture Oshkosh has been the setting of several HondaJet firsts and in many ways, this event was the true beginning of Honda’s aviation venture,” said Honda Aircraft Company President and CEO Michimasa Fujino. “We decided to debut the first production HondaJet here as part of Honda’s commitment to inspire others through the power and realization of our dreams.”

“We again welcome the impressive innovation and technology from the Honda Aircraft team, as it is a perfect fit for the world of flying ingenuity we see every year at EAA AirVenture Oshkosh,” said Jack J. Pelton, EAA’s chairman of the board. “It has been fascinating to watch the development of the HondaJet from its original concept to the production aircraft shown here at Oshkosh. It is a tribute to the entire Honda team that made it possible.”

The first production HondaJet was on static display in the



Honda Aircraft Company President & CEO Michimasa Fujino (left) with John M. Lowe (right), Chairman of the Board of HondaJet Midwest, Des Moines, Iowa, in the cockpit of the first production HondaJet at EAA AirVenture Oshkosh 2014.

*Dave Weiman Photo*

Honda Aircraft Company exhibit.

The HondaJet Over-The-Wing Engine Mount (OTWEM) configuration, natural-laminar flow wing and fuselage nose, and composite fuselage were developed from long-term research activities. These innovations combine to make the HondaJet the fastest, most spacious and most fuel-efficient jet in its class ([www.hondaJet.com](http://www.hondaJet.com)). The OTWEM design also reduces cabin sound, minimizes ground-detected noise, and allows for the roomiest cabin in its class, the largest baggage capacity, and a fully serviceable private aft lavatory.

The HondaJet is powered by two highly fuel-efficient GE Honda HF120 turbofan jet engines, and is equipped with the most sophisticated glass flight deck available in any light business jet, a Honda-customized Garmin® G3000 next-generation, all-glass avionics system composed of three 14-inch landscape-format displays and dual touch-screen controllers.

Honda Aircraft Company, LLC, founded in 2006, is a wholly owned subsidiary of American Honda Motor Co., Inc. The company’s world headquarters is in Greensboro, North Carolina, where there is more than 600,000 square feet of state-of-the-art R&D, production, administration and customer service facilities.





The test pilots and support team for the HondaJet gather in front of the aircraft just minutes prior to its demonstration flight at EAA AirVenture Oshkosh 2014.

*Dave Weiman Photo*



Mike Whalen, founder/president/CEO of Heart of America Restaurants & Inns, Moline, Illinois, is anxious to take delivery of a new HondaJet from HondaJet Midwest, Des Moines, Iowa. "There's been a lot of attempts to develop a new jet, but I knew Honda would do it," says Whalen.

*Dave Weiman Photo*

## Honda Aircraft President Receives Award For Innovation In Aeronautics

ST. PETERSBURG, RUSSIA – The International Council of the Aeronautical Sciences (ICAS) presented its 2014 Award for Innovation in Aeronautics to Honda Aircraft Company President and CEO Michimasa Fujino during the 29th ICAS Congress, September 10, 2014 in St. Petersburg, Russia. Fujino was recognized by ICAS for his pioneering contributions in the design and development of the HondaJet and its optimum Over-The-Wing Engine Mount configuration.



Honda Aircraft Company President & CEO Michimasa Fujino.

*Dave Weiman Photo*



Former test pilot and airshow icon, Bob Hoover (right), met briefly with HondaJet chief test pilot, Warren Gould (left) to congratulate Gould on a successful two-ship flight at EAA AirVenture 2013, and to wish him a successful demonstration flight in the first production HondaJet at EAA AirVenture 2014.

*Dave Weiman Photo*

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# Powered Parachutes Take Flight

by Woody Minar

Going into this “assignment” at EAA AirVenture Oshkosh 2014, July 28 – August 3, with no knowledge of powered parachutes, I came away wanting one.

These three-wheeled “carts” are sturdily built unlike some ultralights that use light tubular steel. Based in Hastings, Michigan, Powrachine started in 1999, experimenting with various designs, culminating with two affordable and very safe designs today – the Airwolf 912 and the Pegasus 582. They fall in the Experimental Light Sport Aircraft (LSA) and Special LSA categories.

From a safety standpoint, powered parachutes have frontal fuselage bars to protect the occupants from fences, power lines, tree limbs, etc. They also have roll over protection and trussing of the frame from the pylon to the nose wheel for added strength.

With 500-550 square feet of canopy that is 13 x 39 feet, the 4-stroke 100 hp Rotax 912ULS with a three-blade



Powrachine's 912 powered parachute.

propeller can take off in 50 to 300 feet, and land in 10 to 100 feet. A powered parachute can climb at 700 to 1,200 feet per minute, and will cruise from 32 to 36 mph. The only restriction is

that LSAs are limited to 10,000 feet. They come with many options, but most have a 10-gallon tank and burn 5 to 6 gallons per hour. The maximum payload is 575 to 700 pounds, depending on the model. Steering is straight-forward with the left rudder “pedal” pulling down the left trailing edge of the canopy and vice versa for turning right. Weighing 390 to 462 pounds, a powered parachute can easily be trailered.

New powered parachutes by Powrachine can be purchased from the low \$20s to high \$30s, depending on accessories.

Since these are LSAs, only a Sport Pilot Certificate is needed. For those of us currently certified, it is an add-on rating needing only about three hours of training, most of which is ground school to learn about the aircraft.

For more information about PowrAChute, go to [www.PowrAChute.com](http://www.PowrAChute.com).

*EDITOR'S NOTE:* Woody Minar is a master certified flight instructor and designated pilot examiner at the Osceola, Wisconsin airport (KOE0). □

## Captain Mick's Meanderings

by Michael J. “Mick” Kaufman

EAA AirVenture Oshkosh is over for another year, and I would like to share a few of my thoughts with you from my perspective.

The first EAA Convention I

attended was in 1965 at Rockford, Illinois. It was much smaller and different than the event is today. I have not missed the convention since 1965, and I flew my own aircraft to the event in 1967. It was an Aeronca L3 (Defender), which I bought for

\$425.00. I was living in Oshkosh at that time and never would have dreamed the event would move there and become the size it is today.

I have volunteered at EAA AirVenture Oshkosh for 12 years and seemed to have found my niche as “point controller” at the EAA Seaplane Base. The job of point controller is to give advisory to arriving and departing seaplanes and control aircraft water taxiing into and out of the lagoon.

My interest in seaplanes came early on in my flying career, and I was one of the caretakers of the seaplane base, once owned by Bill Brennand and Al Zebell during the mid-1960s. I paid for my flight training by working for Bill Brennand, and one of my duties was cutting the grass. For those who have never visited the seaplane base during EAA AirVenture Oshkosh, it is completely opposite from the fast-paced event at Wittman Airport. The seaplane

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Paul and Ann Seehafer

base is hidden from sight by woods with a nature trail winding its way from the main gate to the water.

This year's seaplane base attendance totaled 91 seaplanes and approximately 20 amphibians at the airport, according to Ann Seehafer, co-chairman at the base. I started my volunteer work on the Sunday evening before the opening morning and spent most of the convention, there. The weather on several occasions forced evacuation of the point between Lake Winnebago and the bay where seaplanes are moored, because of storms, and there were not many seaplane arrivals during the first few days of the convention. Lake Winnebago can get extremely rough with north or east winds, and the roughest seaplane landing in my entire seaplane flying career was in my seaplane during arrival at the convention several years ago.

There are always certain interesting aircraft that visit the seaplane base; some of them are in rare form as seaplanes. Last year, AOPA President Mark Baker arrived in his immaculately polished twin Beech 18 on floats. This year, a cabin-class Howard and Waco

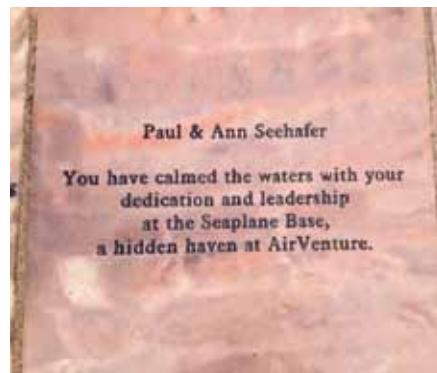
were among some of the more unusual aircraft visiting the base.

Some of the rather unique aircraft, which made their debut at the seaplane base over the years have included a Russian seaplane that sat so low in the water that its wings were almost hidden when stationary. Also, there was an ICON amphibian ([www.iconaircraft.com](http://www.iconaircraft.com)), which created a great deal of interest among seaplane pilots at the show. The first production ICON aircraft manufactured was completed in June of 2014, and the first deliveries are scheduled to begin in early 2015 of the more than 1,000 orders already placed – a good sign for GA!



MVP Model 3 Amphibious Aircraft  
MVPAERO Inc. Photo

This year another new seaplane was the MVP and is a proof-of-concept aircraft, only, at this point. I was personally impressed with the design and if it reaches production, I would consider owning one. In many respects, the MVP has a lot of similarities to the ICON in design with numerous enhancements that add to the aircraft's versatility. If you did not see the aircraft on display at Oshkosh,



be sure to view this promotional video: [http://mvp.aero/?utm\\_source=Introducing+the+MVP&utm\\_campaign=MVP&utm\\_medium=email](http://mvp.aero/?utm_source=Introducing+the+MVP&utm_campaign=MVP&utm_medium=email)

Every year, the EAA staff and management choose six volunteers for an award called the "Brown Arch Brick Award" to honor the dedicated service of volunteers. The brick is engraved with the volunteer's name and placed at the Brown Arch, the main walkway where literally hundreds of thousands of people enter AirVenture. This year Paul and Ann Seehafer, the co-chairs of the EAA Seaplane Base, were chosen for this prestigious award. I have worked with Paul and Ann for many years at the EAA Seaplane Base and would like to add my personal congratulations to them as well. The Seehafers have been great people to work with, and are as dedicated to the volunteers that work under them, as they are to the tasks at hand.

Until EAA AirVenture Oshkosh 2015, fly safe! May there be smooth, but not glassy water wherever you splash down. □

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# Amelia Earhart Addresses Aviation Explorers

by Jim Bildilli

Members of the Aviation Explorer Base at EAA AirVenture Oshkosh 2014, July 28 - August 3, were treated to a presentation by Amelia Earhart on her around-the-globe flight. Not to be confused with the Amelia of the 1930s, Amelia Rose Earhart completed her 24,300-mile flight on July 11, 2014 by landing in Oakland, California, where she departed on June 26, 2014.

The Explorers listened and watched intently as Earhart explained the details and pictures taken during the journey, which included 17 stops and over 108 hours of flying. Accompanied by her copilot, Shane Jordon, the trip was made in a Pilatus PC-12 NG that was modified to include an additional 200-gallon fuel tank located in the aft passenger compartment, giving her a full 600 gallons of useable fuel. Earhart is now in the record books as the youngest female pilot to circumnavigate the earth in a single-engine aircraft.

Earhart's flight was across the U.S., then south to the Caribbean, then on to Brazil, across the Atlantic Ocean and the African Continent, and continued on to the Indian Ocean, the Pacific Islands and Hawaii, with the final leg returning to Oakland. Although not exactly the same route that her namesake took in 1937, she tried to emulate the original flight as closely as possible considering the current state of world affairs.

Earhart told the Explorers that it all started as a result of people asking her if she flew when introducing herself as Amelia Earhart. The idea of learning to fly gained momentum and she soon found herself taking flying lessons in a Cessna 172 in 2004. Like most aviators, her flying lessons were directly tied to the amount of money she saved to pay for them. She obtained her Private Pilot Certificate and again,



Amelia Earhart with her 1937 Lockheed 10E Electra.



Amelia Rose Earhart stands before the Pilatus she flew on her around-the-globe/24,300-mile flight, June 26 to July 11, 2014. Dave Weiman Photo

when the funds were available, she obtained her Instrument Rating. Of course, all of this was done in her "spare" time as a traffic and weather reporter with an NBC affiliate in Denver, Colorado. She worked some "odd" hours in order to fit in her flying lessons.

The idea of an around-the-world flight started to gain momentum in her mind, but she had no idea where to start and how it would be funded. To make it become a reality, she started calling on businesses and organizations for sponsorships. Items such as an aircraft, fuel, weather services and the general logistics of the concept were mind boggling, but eventually people and companies stepped forward.

In 2013, Earhart attended AirVenture and made public her intentions to make the flight. She also received the "Amelia Earhart Pioneering Achievement Award," given by the Atchison Kansas Chamber of Commerce for women who carry on the late Amelia Earhart's spirit. It wasn't until late 2013 that Earhart found out that she was not a direct descendant of the original Amelia Earhart. Although disappointed and feeling that she had let her sponsors down, she soon found out that it didn't really matter to them and that they still wanted to continue their support.

Earhart is an active member of the Wings Over the Rockies Air and Space Museum and has started the "Fly With Amelia Foundation." The foundation grants flight scholarships to boys and girls ages 16-18.

Earhart announced the 2014 scholarship recipients while circling over Howland Island via Twitter. Howland Island was the intended landing site of Amelia Mary Earhart in 1937 when she and her copilot, Fred Noonan, vanished.

Amelia Rose Earhart can be reached on Facebook, Twitter and her website, [www.flywithamelia.org](http://www.flywithamelia.org). □

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# Rare Warbird Makes Appearance At Oshkosh

OSHKOSH, WIS.

– EAA AirVenture  
Oshkosh, July 28 –  
August 3, 2014, is  
where everyone wants  
to display their rare  
aircraft, as did Don  
and Ann Pellegrino of  
Rhame, Texas.

Flying at a  
respectable 135-140  
mph, the Pellegrinos  
arrived at Oshkosh in  
their one-of-a-kind  
Fairchild XNQ-1/T-31  
in 7 hours with two  
fuel stops.

The Fairchild XNQ-1/T-31 was  
designed in 1945. Of the three XNQ-  
1/T-31s, only the Pellegrinos' aircraft  
– 75726 – still exists. Ownership  
transferred from the Navy to the Air  
Force; Civil Air Patrol; John St. Clair;  
Airpower Museum at Antique Airfield,  
Ottumwa, Iowa; and then to the  
Pellegrinos.

The XNQ was developed to  
replace the AT-6 trainer. In September  
1947, the U.S. Air Force requested  
procurement of 50 of the planes in  
January 1950, 114 in April 1950, and  
176 in July 1950, but the influence  
of the Korean War, politics, and the  
tricycle gear were factors leading to the  
eventual selection of the T-34.

In November 1948, it was pointed  
out that normal procurement channels  
had not been followed, and Beech



Ann & Don Pellegrino with their one-of-a-kind Fairchild XNQ-1/T-31 warbird.  
*Sparky Barnes Photo*

requested a fly-off competition, even  
before the YT-34 had been test flown.  
On March 17, 1949, the chairman of  
the evaluation board voted the XNQ-1  
first, the T-34 second, and the T-35  
third.

The Pellegrinos say that the XNQ  
is easy to fly, burns 15 gph, and is big,  
noisy and impressive. The aircraft's  
rarity drew large crowds at Oshkosh. At  
1950 RPMs and 23 inches of manifold  
pressure, the XNQ indicates between  
135 and 140 mph. A 3.5 hour flight  
leaves a good reserve.

*EDITOR'S NOTE:* Pilot, musician  
and author, Ann Dearing Holtgren  
Pellegrino, was born in Chicago, Illinois  
in 1937, went to school in Michigan,  
and spent most of her life on a farm  
with an airstrip in Story City, Iowa.  
In 1967, Pellegrino and a crew of  
three airmen successfully flew a 1937

## D'Shannon Aviation Moves To Oshkosh

OSHKOSH, WIS. – Minneapolis-  
based D'Shannon Aviation is relocating  
its aircraft engine overhauling facility to  
Wittman Regional Airport in Oshkosh,  
Wis.

D'Shannon Aviation is the world's  
largest STC holder and manufacturer  
of upgrades for the Beechcraft fleet  
of Bonanzas, Debonairs and Barons,  
leading the industry for more than 50  
years.

To complement a 50-year history

of providing elite products to upgrade  
Beechcraft aircraft, D'Shannon Aviation  
(formerly Beryl D'Shannon) has just  
introduced its high-performance  
Genesis engines.

The company will work with  
local fabrication shops in Oshkosh to  
produce parts, and will occupy a hangar  
on the airport until the company can  
have its own facility in the aviation  
business park under development. □

Lockheed 10A Electra, similar to the  
model 10E Electra flown by Amelia  
Earhart, to complete a world flight that  
closely mirrored Earhart's of 1937.  
On the 30th anniversary of Earhart's  
disappearance, Pellegrino dropped  
a wreath over the tiny Howland Island  
in her honor and returned to Oakland,  
California, completing the 28,000-mile  
commemorative flight on July 7, 1967.

In 1974, Pellegrino was appointed  
to the Iowa Aeronautics Commission,  
the first woman thus serving in Iowa,  
and also to the Iowa Department  
of Transportation Commission, the  
first woman in the nation to serve  
in that capacity. She was inducted  
into the Iowa Aviation Hall of Fame  
(1990), the Michigan Aviation Hall of  
Fame (1991), and the Experimental  
Aircraft Association – Vintage Aircraft  
Association Hall of Fame (1997).  
Pellegrino was inducted into the Iowa  
Women's Hall of Fame in 2001.  
Pellegrino's first book, "World Flight,  
the Earhart Trail" was published in  
1971. The first two volumes of her  
trilogy "Iowa Takes to the Air" were  
published in 1980 and 1986. □

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# EAA, AOPA, Piper Hosts Caring Students At AirVenture Oshkosh

OSHKOSH, WIS. – The Experimental Aircraft Association (EAA), Aircraft Owners and Pilots Association (AOPA) and Piper Aircraft hosted a special group of students and their teacher from Appleton, Wisconsin, during EAA's AirVenture Oshkosh 2014

A number of years ago, Woodland Elementary School fifth grade teacher Eric Vander Loop's teacher's aide shared that his mother had been diagnosed with cancer. Vander Loop saw an opportunity to help while teaching his students about kindness to strangers. Since then, students at the school district in Appleton have raised more than \$120,000 for cancer research, a compassionate outcome that earned Vander Loop a recent opportunity to represent the Milwaukee Brewers during the All-Star game as one of 30 winners of People magazine and Major League Baseball's All-Star Teachers campaign presented



Wisconsin, enjoyed a day at EAA AirVenture Oshkosh, courtesy of Piper Aircraft, Inc. and the Aircraft Owners & Pilots Association. The special day at EAA was in appreciation for the school district raising \$120,000 for cancer research.

*Piper Aircraft Photo*

by Target. The students that began the program in fifth grade are high school juniors today.

When Piper's Senior Manager of Marketing, Rorie Ainbinder, who coordinates Piper's air show exhibits, read about Vander Loop and his students in the People article, she thought of friends and family who have been impacted by cancer. She also saw an opportunity to reach out to an extraordinary teacher and his special students by giving them a day to remember at EAA

AirVenture Oshkosh.

Ainbinder arranged for the teacher and his students to have their admissions to AirVenture and lunches provided by Piper, and she enlisted the support of EAA and AOPA to make the day even more special. EAA gave the group a VIP tour and AOPA offered the kids a membership in AOPA's AV8Rs program for aspiring aviators.



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## Peak Is Peak, Other Temperatures Are Cooler!

In the feature article entitled “Not Flying Blind Anymore!” (*Midwest Flyer Magazine*, August/September 2014, page 26) which describes one pilot’s experience in using an Insight Avionics G4 Graphic Engine Monitor, there needs to be a correction pertaining to Exhaust Gas Temperatures (EGT).

The article states:

Temperatures depicted when leaning lean of peak are “hot,” or degrees hotter than peak temperature, and the temperatures depicted when leaning rich of peak are “cool,” or degrees cooler than peak temperature. Lean temperatures are depicted in “black and white,” preceded by the letter “L,” and rich temperatures are depicted in “cyan,” preceded by the letter “R.”

*Based on reader input, the article should be corrected to state as follows:*

Exhaust Gas Temperatures (EGT) depicted when leaning **lean of peak** is measured in degrees “cooler” than peak

EGT, at a leaner or lower fuel flow than the fuel flow was at peak EGT.

Exhaust Gas Temperatures depicted when leaning **rich of peak** are also “cooler” than peak EGT, though at a richer or higher fuel flow than the fuel flow was at peak EGT.

Lean of peak temperatures are depicted in “black and white,” preceded by the letter “L,” and rich of peak temperatures are depicted in “cyan,” preceded by the letter “R.”

Additionally, in aircraft with a 24-volt electrical system, the buss voltage will be annunciated in **cyan** (*not green as stated in the article*), so long as the voltage is 24.2 to 28.7 (inclusive). Below this range, the alternator is not charging the battery, and above that, it is overcharging, and the buss voltage will be annunciated in **red**. *End article amendment here.*

NOTE: Once you find where the peak EGT is, do not spend a lot of time in that peak EGT zone, especially at

high power. Once you find where the peak temperature is, you want to run either lean of peak for air-cooled fuel injected engines, or rich of peak using fuel for cooling carbureted engines.

CAUTION: You do not want to approach the maximum EGT as defined by the manufacturer for more than a few seconds. General Aviation Modifications, Inc. (GAMI) calls this the “big pull,” and “avoid the Red Box.”

EDITOR’S NOTE: The information provided here or elsewhere in *Midwest Flyer Magazine* is based on limited observations by one or more pilots, operating one or more aircraft, and should not be relied on as technical advice or recommendations for any other aircraft. Readers are urged to refer to the owner’s manual and DVD that come with each Insight Avionics graphic engine monitor, their aircraft operator’s handbook, and their engine manufacturer’s operation guidelines, and consult directly with Insight Avionics ([www.insightavionics.com](http://www.insightavionics.com)), General Aviation Modifications, Inc. ([www.gami.com](http://www.gami.com)), and other technical sources. □

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## Building A Backyard Airstrip

*by Hal Davis*  
*WisDOT Bureau of Aeronautics*

**H**ow many landing facilities would you guess there are in Wisconsin? If you guessed “a lot,” you would be right! In all, Wisconsin has well over 700 separate landing facilities, and more than half of those are private-use airstrips.

Many pilots, including me, dream of being able to walk out my back door and take to the skies from my own private airstrip. While I may be a long way from realizing this dream, many pilots in our state already have. Aside from the means of flight and an adequate piece of real estate, all it takes is a phone call to the Wisconsin Bureau of Aeronautics (BOA) to get the approval process rolling.

There are two separate, but related, approval processes that must be completed in order to establish a private airport in Wisconsin. Fortunately, BOA is a “one-stop-shop” for all your airstrip approval needs. On the federal level, FAR Part 157 establishes standards and notification requirements for anyone proposing to construct, alter, or deactivate an airport. Similarly, Chapter 114.134 of the Wisconsin state statutes establishes a statewide approval requirement for all new airports.

At this point you might be asking yourself, “What constitutes an airport?”

In Wisconsin, an airport is any area of land or water which is used, or intended for use, for the landing and takeoff of aircraft. In other words, any area used for takeoff or landing is an airport regardless of its size, location or type of aircraft.



Hal Davis



Big Foot Airfield (7V3), Walworth, Wisconsin.

That means all private airstrips are considered airports and, consequently, must be approved.

An alternative perspective is that anyone who takes off or lands an aircraft in Wisconsin is required to do so from an approved airport as the mere action of using a site for landing or takeoff establishes it as an airport under Wisconsin law.

Wisconsin State Statute Chapter 114.134 prohibits the establishment of new airports without a certificate of approval for the location, thereby prohibiting anyone from operating an aircraft at an unapproved airstrip, helipad, etc. While FAR Part 157 accounts for temporary landing facilities, it's important to note that Wisconsin law makes no such distinction.

Before contacting BOA to start the approval process, it goes without saying that you should probably make sure your property is suitable for an airstrip. Depending on the size and shape of your property, you may only have one or two options for locating the runway. Runway dimensions will depend on your aircraft's performance. Neither the Federal Aviation Administration (FAA) nor BOA publish standards for runway dimensions; however, in Wisconsin, other airport

standards do exist. Specifically, your runway threshold must be a minimum distance from public roads and railroads. For a more detailed discussion of these standards, reference the *Wisconsin Airport Standards* document available on our web site or available through the mail upon request. Finally, in addition to runway dimensions, be sure to take into consideration other factors like prevailing winds and terrain when planning your runway.

At this point, you will also need to decide if your airstrip will be made available to other pilots. In Wisconsin, you can designate an airport as “personal” meaning only you will use

the airstrip; “private” meaning other pilots will be able to use the airstrip with your permission, or “public” meaning anyone can use the airstrip. How you designate your airport may affect safety standards, publication on charts, insurance and compliance with local ordinances.



Brennard Airport (79C), Neenah, Wisconsin.

your county and local municipal government for applicable ordinances, laws or regulations concerning your proposal early on in this process. Local ordinances vary greatly, and this oftentimes can be your greatest hurdle in the establishment of your airport.

Once you have chosen the location for your new airstrip, it's time to begin the paperwork. The good news is that both the federal and state processes are free, and once the approval process is complete, neither BOA nor FAA will ever come out to inspect your airstrip unless the general public is involved somehow.

We strongly recommend contacting BOA prior to beginning the paperwork, but the required forms are also available on our web site. They include the Wisconsin Application for Site Approval and FAA Form 7480-1: Notice of Proposed Landing Area. You may notice the two forms ask for similar information. Fortunately, free mapping web sites have made obtaining information like geographic coordinates and distances much easier in recent years.

As part of the Wisconsin site approval application, you will be asked to provide a U.S. Geological Survey (USGS) quadrangle map depicting the outline of each runway. To help, BOA will send you a copy of the appropriate USGS quadrangle map upon request.

After completing the two forms, send them both to our office. We will forward FAA Form 7480-1 to the FAA for analysis. On our end, BOA will ensure your airstrip meets state standards. If it does, your proposal will be sent to your county, municipality and any existing airport owner within 10 NM of your airport site for comment. We suggest contacting

For example, some airstrips may require zoning adjustments, conditional-use permits or other stipulated conditions concerning the operation of your airport in order to be approved locally. BOA is willing to help resolve problems encountered with local zoning offices if needed. Often the issuance of these permits will depend on your neighbors and whether or not they object to your proposed airstrip. It may be a good idea to meet individually with each neighbor, brief them on your intentions, and address any concerns prior to applying for a permit with the local zoning authority.

Final state approval for your airstrip is contingent on a favorable FAA determination in addition to the resolution of all local concerns regarding your proposal. Once those conditions are met, BOA will issue you a certificate of approval for your airstrip. The process takes a minimum of two months to complete.

For more information and links to Wisconsin Airport Standards, Application for Site Approval, and FAA Form 7480-1: Notice of Proposed Landing Area, visit: [www.dot.wisconsin.gov/travel/air/airport-ops.htm](http://www.dot.wisconsin.gov/travel/air/airport-ops.htm)

For questions, or to begin the approval process, contact Mark Pfundheller at 608-267-5272 or [Mark.Pfundheller@dot.wi.gov](mailto:Mark.Pfundheller@dot.wi.gov).



## Meet Paula Groom...

*Airport Development Engineer  
WisDOT Bureau of Aeronautics*

MADISON, WIS. – Paula Groom joined the Wisconsin Department of Transportation's Bureau of Aeronautics (BOA) in May 2014. As an airport development engineer, Paula is responsible for managing projects at 10 airports around Wisconsin – the largest being Chippewa Valley Regional Airport in Eau Claire.

Her duties include helping the airports develop achievable capital improvement plans; contracting with consultants



Paula Groom

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

Paula earned a Bachelor's of Civil Engineering Degree in 2013 from the University of Wisconsin-Platteville. She completed her coursework with a structures emphasis in 3½ years. In addition, Paula has 15 years of experience working in residential construction with her father. Prior to joining BOA, Paula worked for an architectural and engineering consulting firm in Chicago.

Paula is an Engineer in Training, working toward her Professional Engineer title. She is originally from, and currently lives in Mineral Point, Wisconsin, where she volunteers as an emergency medical technician. She enjoys hiking with her dog, skiing, and fishing in northern Wisconsin.







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## WISCONSIN AVIATION TRADES ASSOCIATION

### Heavy Bombers Weekend At Madison



The B-25 Bomber "Miss Mitchell" of the Minnesota Wing of the Commemorative Air Force.  
*mgnphoto.com by Mike Nightengale*



B-17 Aluminum Overcast.  
*mgnphoto.com by Mike Nightengale*

MADISON, WIS. – The "Heavy Bombers Weekend" was once again held at Wisconsin Aviation, Inc., Dane County Regional Airport in Madison, Wis., July 25-27, 2014. The event was produced by the Experimental Aircraft Association (EAA) and Commemorative Air Force (CAF).

The Heavy Bombers Weekend

prides itself in allowing visitors to see, touch, feel, hear, smell, and climb through a collection of aircraft to help educate younger generations of the sacrifices made to defend our basic freedom in the United States of America. The event is family friendly for all ages. A 1940s Hangar Dance was held in the Wisconsin Aviation hangar.



A Ryan PT-22 Recruit of the Minnesota Wing of the Commemorative Air Force.  
*mgnphoto.com by Mike Nightengale*

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A Badger Honor Flight to the war memorials in Washington, D.C., also occurred that weekend.

Featured aircraft included the CAF B-25 Mitchell Bomber, "Miss Mitchell," and EAA's B-17 "Aluminum Overcast." Other aircraft included

the P-51 "Gunfighter," a T-6 Texan, Canadian Harvard MK IV, Vultee BT-13, Ryan PT-22, and L-5 Sentinel. Additional ground tour aircraft included an Air National Guard F-16 Falcon, a University of Wisconsin medflight helicopter, and many

experimental aircraft.

Madison, Wisconsin is a perfect stop for the EAA and CAF aircraft for their national tours on their way to EAA AirVenture in Oshkosh, Wis., the following week.



## Washington Island Lions Fish Boil Fly-In

by Jim LaMalfa

**A**pproximately, 120 airplanes flew to Washington Island off the Door County Peninsula for the annual Lion's Club Fish Boil Fly-In on Saturday, July 19.

The weather was ideal with a 20-knot southeast wind keeping landing rolls on Runway 32/14, short.

A mix of aircraft types was in evidence from certified Cirrus SR22s; a Maule; Bonanzas; an Enstrom helicopter from nearby Menominee, Michigan; two Boeing Stearman WWII trainers – one done in U.S. Navy colors, the other in blue and yellow U.S. Army Air Corps colors. I chatted with a member of EAA Chapter 217 in Kenosha, who flew in with a slick Sonex V tail homebuilt, powered by a Volkswagen engine, converted for aircraft use.

I also interviewed two Menominee pilots: a retired American Airlines pilot, Mike Berger, and Bob Bannow. Berger owns a Cirrus SR22, which gets him to the island, and he keeps a beautiful UBF Waco three-holer in a hangar on Washington Island for local flights. Berger has owned the Waco for five years, which was built by the Weaver Aircraft Company. Weaver also built U.S. Army WWII troop gliders. The wooden wings for the CG 16 and 14 gliders were made in Iron Mountain, Michigan.

"The Waco is an older restoration

done in 1991-92," Berger commented. "It hung in the Air & Space Museum in San Diego after being donated by the owner, Woodsen Woods. He bought it back, restored it, and sold it to his son, Scott. Waco built the UPF as a military trainer during WWII, but the UBF was rarer, only 18 were built. It's powered by a 220 hp Continental radial engine. I'm

the 26th owner, the first being a woman pilot from New York. She was friends with Amelia Earhart who may have flown the Waco."

Washington Island Airport has made many improvements to their grass airstrip, lengthening both runways to 2200 feet, and lowering the uphill grade on 32/14 to a manageable and hardly noticeable incline.

The view of Washington Island, Door County, and Michigan's Upper Peninsula, flying towards the north, is spectacular! Nearby airports are Menominee Twin County in Menominee, Michigan, and Escanaba, Michigan, a bit further north.

How was the fish? Excellent if you like fist sized cuts of whitefish! And the burn off of fish oil is always spectacular to watch!



Washington Island Airport (2P2)

Peggy Weiman Photo

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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

Mail Stop 410 • 222 East Plato Boulevard • St. Paul, MN 55107-1618  
651-234-7200 or (toll free) 1-800-657-3922

## CIP Season Is Starting Soon!

by *Cassandra Isackson*

*Director, Minnesota DOT Office of Aeronautics*

**T**he Minnesota DOT

Office of

Aeronautics and the

Federal Aviation

Administration

(FAA) will host

meetings at regional

locations from

late August to

early October to discuss the Capital

Improvement Program (CIP) with

city officials, airport managers, airport

commission members, and airport

advisory board members. All interested

parties are welcome to join us at these

meetings.

The Capital Improvement Program

is used to plan for the delivery and

construction of projects that develop



Cassandra Isackson

and preserve the system of Minnesota's publicly-owned airports. Projects that are CIP eligible include obstruction removal, planning, land acquisition, paving, lighting, navigational aids, equipment purchases, fencing, and other needs.

Each year more projects are identified than are funded.

There are 135 publicly-owned airports in Minnesota, 97 of which qualify for federal funding. MnDOT and the FAA use CIP to allocate limited financial resources to airports. CIP is also a very important planning tool for airports. The more the plan reflects the reality of an airport's situation, the more likely the funding process will flow smoothly. The best chance of success for any project happens when the airport, MnDOT, and the FAA all agree that the project is necessary and justified.

The CIP update cycle begins in the fall, collecting data from each airport

sponsor regarding projects they plan to deliver within the next 5 years. Long-range planning, beyond the 5-year time frame, is also encouraged. Projects are then prioritized statewide for state and federal funding. In early spring, projects at the top of the priority list are offered funding grants. Remember, CIP is not only a great planning tool; it is also a requirement for funding consideration.

As you may know, state or federal funding will not cover all capital improvement costs, so having an accurate and complete CIP helps the local government budget for its share of the proposed costs.

As I close, I ask you to remember that the best likelihood for success is when the FAA, MnDOT Aeronautics, and the airport (local sponsor) *all* share the same vision for the airport.

If you have additional questions, checkout the resource information on our website at:

<http://www.dot.state.mn.us/aero/airportdevelopment/cip.html> □

## The Continually *Growing* Buffer Paradox

by *Daniel McDowell*

**O**ne of the more significant problems in aviation today is that of incompatible development around airports. Three primary issues stand out when there is development around airports, especially off the approach or departure ends of runways: noise, incompatible development, and encroachment. The noise problem is very closely connected to land use because the greatest

mitigator of noise is distance from the source. In other words, an ideally situated airport should be surrounded by a noise buffer area consisting of open land and clear runway approach and departure zones.

Land located near the high noise impact area (under approach and departure paths), which should be clear of buildings and other obstacles, could be used for less noise-sensitive activity like agricultural, environmental watershed, or possibly even highway

interchanges where appropriate. Sadly, for those airports that *do* have open land around their perimeter, that open land appears to be a magnet for developers with goals that are too often discordant with the airport's goals and needs.

Far too often airports are surrounded by buildings that are incompatible with airport area land-use and noise mitigation recommendations. Many former "buffer" parcels around airports all over the country have

been developed and now contain residences, noise sensitive businesses, schools, and public gathering facilities.

This encroachment is largely driven by the overriding draw of “potential” or “perceived” dollars for the tax base or profit by cities and developers. It continues to happen because of a lack of understanding or sensitivity about airport safety zone restrictions and needs, noise mitigation, and aviation safety guidelines by developers, cities and counties.

Land-use planning and zoning are the responsibilities of local and state governments. It is unfortunate that many of these government entities (across the nation), have been unable and in some cases simply unwilling to provide mutual protection for city and airport development. Thus the seemingly “underutilized land” surrounding or bordering an airport, becomes very “valuable,” and too easily attracts potential development.

Even when appropriate ordinances and guidelines exist, developers are frequently able to obtain permits, variances, and waivers. These permits, variances, and waivers may ultimately impact the safety of the airport including the pilots and passengers that use the airport. They additionally impact the safety of the people living and working in the encroaching homes and businesses. Allowing encroachment also begins to severely limit the growth potential, as well as the asset value of the airport.

Whether through the lack of understanding, or because of perceived or real political pressure, courts have frequently ruled in favor of the developers, disregarding the *safety* and *health* risks that future residents of that development would face on a daily basis.

The continued unfettered encroachment on airport land can also severely restrict or eliminate the ability of the airport to expand and grow as the city’s traveling population grows. Encroachment will also restrict the airport’s ability to respond to the demands for more aviation services, as needs increase.

Complicating the continually growing buffer paradox is the frequent inability of governmental entities to effectively communicate and cooperate with each other.

Few airports exist completely within the jurisdiction of one municipality that owns and operates the facility. Thus, the municipalities are potentially faced with conflicting rules, different interpretations of rules, different best practices, or conflicting philosophies and priorities in relation to the airport and its operation.

For example, a municipality that *owns* an airport may be well aware of the advantages and even disadvantages of that airport, whereas a municipality that simply *borders* an airport may primarily see only the perceived disadvantages.

Many airport operators have sole liability for damage due to airport noise. Recognizing that, some surrounding municipalities may feel little if any need to support or enforce zoning laws because complaints will be directed to the owning municipality and not to them.

Airport commissions, boards and managers too often are inconsistent in keeping their municipality leaders

educated and informed about the value of the airport to their communities. Thus, when the municipality or city leadership changes, hard fought and won protection for the airport is weakened or significantly eroded because the supporting leadership mindset has changed.

One example of this is the “new” Denver International Airport (DIA), which was built 23 miles from downtown Denver on the open plains and farmland.

It was built there on 34,000 acres (approximately 53-square miles of land) to allow for future expansion and noise mitigation among other important reasons. But development of residential housing near the new airport has brought about the very thing the airport tried to avoid happening. That is the problem of aircraft noise impacts on surrounding communities, and the resultant complaints. In the second quarter of 2014, DIA registered 33 noise complaints.

This has come about because of changes in local governments. Those changes include local priorities, the economy, the municipal leadership’s lack of understanding of the importance and value of the airport, and the critical need for buffer land for clear runway safety zones and noise mitigation. Most governmental agencies are not against compatible land use, when safety for the flying public, as well as those on the ground, is involved.

The future of many of our nation’s airports is at significant risk of being encroached upon, and thus their potential for growth may be severely restricted, if not eliminated. In addition, significant safety and health risks are being placed upon our citizens when incompatible construction is allowed to encroach upon any airport. This is especially important when the construction is placed within runway safety zones, or under landing and departure paths. It should also demonstrate the vital importance of following your state’s airport zoning laws and guidelines.

Every aviator and aviation enthusiast, and every person who flies anywhere, whether for business or pleasure, should take an active interest and play an active role in working to secure the future of their hometown airport. Your airport is a very valuable asset to your community and your state. Failure to protect it and support it will ultimately be a significant blow to aviation locally and to the municipality. This will happen when the airport can no longer meet the needs and demands of the citizenry, or because of encroachment, it becomes unsafe for aviators to use it.

The loss of jobs and revenue from airport sales and services, and the loss of tourism dollars from the demise of an airport, will affect every citizen of that community.

Companies and the people they employ, move to cities that have capabilities of providing the air transportation services and needs that a traveling and time-aware workforce and the general public demands. When incompatible construction is allowed to continually encroach upon our airports, communities could be forced to close that airport, and the front door to those communities will be gone forever!

**CONTINUED ON PAGE 62**



## Thunderbird Aviation Removes Original Terminal Building To Make Room For Expanded Ramp



EDEN PRAIRIE, MINN. – In 2012 – 50 years since the company was founded in 1962 – Thunderbird Aviation invested \$2 million in building a new 8,000 square foot facility at its Flying Cloud Airport (KFCM) location in Eden Prairie, Minnesota. Then on August 14, 2014, the fixed base operation removed its 1950s-style, 2,000 sq. ft. wood-framed building to make room to expand its ramp.

Thunderbird Aviation is one of the oldest fixed base operations in the Midwest and has grown over the years – first under the leadership of founder, Albert Grazzini, and for the past 20 years, under the leadership of Grazzini's daughter, Nancy Grazzini-Olson. Olson purchased the business from her father in 2000.

Thunderbird has traditionally focused on flight training and professional pilot development, aircraft

Nancy Grazzini-Olson, President and CEO of Thunderbird Aviation, behind the controls of the bulldozer, takes the first bite out of the old terminal building to make room for an expanded ramp at Flying Cloud Airport (KFCM), Eden Prairie, Minnesota.

*Photo by Dan Iverson, The Anthologie*

rental, aircraft maintenance and 100LL fuel sales, and will continue to provide those services. But Thunderbird's new terminal and expanded ramp will enable the company to also serve its growing executive clientele.

Thunderbird offers jet fuel sales and corporate aircraft services, including aircraft servicing and catering, meeting room space, and ground transportation. The company has long been the number one retailer of 100LL on the airport. Its goal is now to become the number one distributor of Jet A.

Flying Cloud Airport has also undergone some major improvements in recent years, including a new 5,000-

Staff, friends and customers of Thunderbird Aviation prior to the demolition of the old terminal building: (L/R) Laura James, Mary Erickson, Matt Keleher, Robin Erickson, Chris Cape, Nancy Grazzini-Olson, Minnesota State Representative Mike Beard, Peter Kroll, Alicia Olson, and Julie Falk.

*Photo by Dan Iverson, The Anthologie*

ft. runway in 2009, and new sewer and water. There's also a control tower and parallel and crosswind runways.

Chris Cape is Thunderbird's general manager and director of operations. In addition to the Flying Cloud facility in the southwest suburbs of Minneapolis, Thunderbird Aviation also operates a flight school at Minneapolis Crystal Airport (KMIC) in the northwest suburbs. Both operations combined, the company employs about 100 people.

For additional information about Thunderbird Aviation at Flying Cloud Airport, call 952-941-1212, or 763-533-4162 at Crystal Airport ([www.thunderbirdaviation.com](http://www.thunderbirdaviation.com)). □

## Meet MATA Board Member, Alison Wynne

MINNEAPOLIS, MINN. – Alison Wynne is one of nine aviation professionals on the board of directors of the Minnesota Aviation Trades Association – an organization made up of fixed base operators and other aviation businesses that serve the Minnesota aviation community. She is an insurance



Alison Wynne

broker in the Aviation Division of Hays Companies, headquartered in Minneapolis. Hays Companies is ranked among the Top 20 insurance brokers by *Business Insurance Magazine*. Prior to joining the aviation team at Hays, she managed an aviation specialty brokerage in Minnesota.

Wynne holds a bachelor's of science degree in Aviation Science Administration from Western Michigan University – College of Aviation, and is an active instrument-rated Private Pilot. Her experience in the industry includes the placement and servicing

of insurance for airlines, corporate flight departments, EMS operations, charter operators, fixed based operators, airports, flight schools, and governmental entities.

Wynne's professional experience also includes work as a flight dispatcher at Western Michigan University College of Aviation, an internship at Gerald R. Ford International Airport, and as a service representative at Northern Air, a full-service fixed base operation in Grand Rapids, Michigan. She is an active member of several national and regional aviation associations.

Wynne is married and has one son. □

## Wipaire Announces New Approvals For Cessna 182 Modifications

SOUTH ST. PAUL, MINN.

– Wipaire, Inc. has received approval for performance- and utility-enhancing modifications for the Cessna 182 Skylane. These modifications currently include the Lycoming IO-580 engine conversion and a gross weight increase to 3,500 lbs (1,587 kg) when on Wipline 3000 floats.

“Our goal for this project was to provide owners and pilots a more useful, better-performing airplane, and these modifications do just that,” stated Chuck Wiplinger, President and COO. “We like to say that these improvements are ‘the cure for the common Skylane.’”

The Lycoming IO-580 engine produces 315 hp from the factory, making it the most powerful factory-new engine conversion available for 182 owners. Owners may elect to port and polish their engines for even more spirited performance. The conversion is approved for the 182S and 182T models. The new carbon fiber structural composite Hartzell Trailblazer series propeller is standard equipment. A



Cessna 182 Skylane with Wipaire modifications.

natural composite MT propeller is also available immediately, with other propeller options pending certification.

Landplane certification efforts for the IO-580 engine conversion are expected to be completed in 2014, along with a gross weight increase to 3,158 lbs (1,432 kg) in the landplane configuration. Additional approvals will include wing

extensions in the future.

Wipaire's gross weight increase to 3,500 lbs (with a 3,510 lb ramp weight) is available for the following Wipline 3000-equipped Cessna 182 models:

- 182S and 182T, when equipped with the Wipaire IO-580 conversion.
- 182Q and 182R, when equipped with the AirPlains IO-550 conversion.

The IO-580 engine conversion results in a 23% reduction in water run and 35% increase in rate of climb, even with an additional 250 pounds of gross weight.

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## Wipaire's "Smart" Amphibious Gear Advisory System Certified

Wipaire, Inc. has obtained certification of the first "smart" amphibious gear advisory system. The system has been certified for installation in the Cessna 182 on Wipline 3000 floats.

The new system is centered around a laser array "eye," which detects if the aircraft is over water or land, and can be combined with a second-generation gear selector and display (currently completing the certification process). The laser provides intelligent warnings to the pilot, only providing an audible reminder to check the gear when the aircraft is in the wrong configuration for the detected landing surface. This functionality is also tied to a timer, which reminds the pilot to check the landing gear position if the gear is not raised within 60 seconds after takeoff.

The intelligent warning system aids the pilot in the flurry of post-takeoff activity and increases safety by providing a reminder to ensure the gear is in the correct position for a given phase of flight. This feature is especially of note to pilots who routinely fly short flights from paved airports to a body of water.

The laser gear advisory system will be available in the

fourth quarter of 2014 for the Cessna 182. Certification for additional models will follow.

## Wipaire Completes Installation of Floats On Mahindra's Airvan 8

Wipaire, Inc. has completed installation of Wipline 3450 amphibious floats on a Mahindra Airvan 8, and has begun conducting preliminary flight tests. Pending a successful outcome of the feasibility tests, a certification program will launch later this year.

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, all in one convenient location at South St. Paul Municipal Airport - Fleming Field in South St. Paul, Minnesota ([www.wipaire.com](http://www.wipaire.com)). □

## Park Rapids Aviation Expands Aircraft Painting Services

PARK RAPIDS, MINN. – Park Rapids Aviation has expanded its aircraft painting at Park Rapids Municipal Airport in Park Rapids, Minn. Jeff Voigt is president of the company, which in addition to aircraft painting, specializes in aircraft floats, floatplane maintenance, aircraft maintenance and aircraft sales. Aircraft painting services is part of the company's Northwoods



Quest Kodiak

Aircraft Painting division.

Park Rapids Aviation is an Aerocet float distributor. For additional information call Jeff Voigt at 218-237-8528, or email [jeff@parkrapidsaviation.com](mailto:jeff@parkrapidsaviation.com) ([www.parkrapidsaviation.com](http://www.parkrapidsaviation.com)).

Also located at Park Rapids Municipal Airport is Park Rapids Avionics ([www.parkrapidsavionics.com](http://www.parkrapidsavionics.com)). □

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For more information about Wings of Hope, go to <http://www.wings-of-hope.org/>.

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## Making Old Airplanes Work To Strengthen Aviation

FREDERICK, MD. – The Aircraft Owners and Pilots Association (AOPA) wants to open new doors to aviation by exploring the concept that aircraft ownership can be made more accessible and affordable through the development of “Reimagined Aircraft.” AOPA believes that older airplanes that have been updated from tip to tail may be one way to truly bring down the cost of flying, especially when owned and operated in a flying club, partnership or flight school.

Familiar to tens of thousands of current and aspiring pilots, the Cessna



A Cessna 152 “Reimagined” aircraft on display at the AOPA Pavilion, EAA AirVenture Oshkosh 2014. *Dave Weiman Photo*

150 and 152 were AOPA’s choice to test this concept because they are dependable, simple to maintain, inexpensive to operate, widely available, and above all else, fun to fly! AOPA has partnered with Aviat Aircraft to create these Reimagined Aircraft.

After they have been carefully refurbished, overhauled, and given new interiors and paint, these aircraft will be available at a base price of \$89,900 and \$99,900 respectively. The hourly rate to own and operate these aircraft is estimated at \$65 per hour, including fuel.

For more information on how to obtain a 150Reimagined or 152Reimagined for a flying club, flight school or ownership group, contact Aviat at 307-885-3151.

AOPA will not sell or profit from the refurbishment of a Reimagined aircraft, but will ensure that they can be acquired with competitive financing and insurance options through the AOPA Aviation Finance program and AOPA Insurance Services. ☐

## Piper To Deliver Two New Arrows To Kent State University

STOW, OHIO – The Aeronautics Division at Kent State University’s College of Applied Engineering, Sustainability and Technology, is taking delivery of two new Piper Arrows. The aircraft will operate from Kent State’s Andrew Paton Field in Stow, Ohio, one of few university-operated airports in the world.

The Kent State Aeronautics Program has more than 500 students seeking degrees in Flight Technology, Aviation Management, Aeronautical Systems Engineering Technology, Aeronautical Studies and Air Traffic Control. The two trainers will join Kent State’s learning fleet of more than 20 single-engine and two twin-engine aircraft.

The Piper Arrow is the only complex single-engine trainer available today. The aircraft is powered by a 200 hp Lycoming piston engine and cruises at speeds in excess of 137 kts. The aircraft features the Garmin G500 glass avionics suite.

In addition to the Arrow, Archer TX



Piper Arrow

and DX, Piper Aircraft Inc., headquartered in Vero Beach, Fla., manufactures the M-Class series – the Meridian, Mirage and Matrix; and Twin-Class Seneca V and Seminole ([www.piper.com](http://www.piper.com)). ☐

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## **A Whole New Skill-set: Aviation Maintenance Technicians Then & Now**

*by Zackary Nicklin*

*Aviation/UAS Maintenance*

*Northland Community & Technical College*

**S**ince the time of Charles Taylor, there was a skill-set almost written in stone as to what made a good, well-rounded, Aviation Maintenance Technician. You had to be able to troubleshoot and repair engines, fix or fabricate portions of an airframe generally made from wood, cloth or metal, adjust control cables and maintain the integrity of hydraulic and pneumatic systems. Although there is a bit more to it than that, these were the main skills needed to keep most aircraft in the air. These basic skills are still very much needed in the industry, but the model of maintainers only needing these skills, is slowly going the way of vacuum tubes, carbureted car engines, and dope and fabric airframes. We can find examples of all of these products in use today, but their applications are fewer and farther between. The same can be said of an aircraft maintainer who is comfortable with where he or she is, and sees no need to expand his or her knowledge base.

In my admittedly short time in the aviation industry, I have met maintainers from across the spectrum, everyone from the owner/operator who fixes his own aircraft, all the way up to corporate and commercial maintainers who service entire fleets. A common thread among many of them seems to be an aversion to technology outside of their comfort zone. Upgrade an engine



Zackary Nicklin

and many of us will run for our tools to be the first in line to install it, but add a new microcontroller, and many of us will shy away so suddenly, one would think it was a live snake. This is the barrier that the next generation of maintainers will have to break.

Aircraft are becoming more and more complex and integrated every day, and if we want to keep these birds in the sky, we will have to pursue education that is outside of the average maintainers comfort zone. We will have to start wrapping our greasy hands and mechanical minds around a new group of skills, such as composites, computers, networking, routers, and virtualization software, and delve even deeper into electronics.

### **Composites**

Since 2007, Boeing has been producing the 787 "Dreamliner." The airframe is primarily made of composite material and contains roughly 35 tons of carbon fiber reinforced polymer (CFRP). According to the National Institute of Aviation Research, the aerospace composite market is set to quadruple over the next 20 years. Gulfstream, Lockheed Martin, Learjet, Cirrus and many other small manufacturers are moving even farther into composite aircraft structures and soon this is going to be the rule, rather than the exception at your local airport. Getting into a good composites program, or even just taking a class to improve familiarity with terms and techniques, will pay off.



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## Electronics

Using the 787 example, Boeing has decided to move to a bleedless architecture for a few of their systems. This means bleed air and even hydraulic systems are being minimized in favor of electronics-based systems. The APU start, wing ice protection, cabin pressurization, brakes and engine start systems are now electronically controlled. These improvements save space and weight, while decreasing the mechanical complexity of these systems.

The avionics suites in many aircraft are moving quickly from old "steam" gauges to new integrated flight systems with large LCD displays and many menu options that can show you everything from your artificial horizon to an imaginary highway in the sky where the pilot simply has to fly from box to box all the way to his destination.

## Computers

Moore's law, together with Dennard's scaling, tell us that integrated circuits, like those used in computers, will double in performance every two (2) years and reduce the power needed for that performance by nearly 50% in every generation.

You may not have heard of either of those terms before, but you can see the reality around you every day. Cell phones,

computers, watches, and GPS are all getting smaller, lighter and faster, leading us to find more compatible uses. This is great for the pilot who can touch a button and get up-to-date weather information displayed on a full color moving map, or have the aircraft not only fly itself, but even land and take-off at the push of a button.

As maintainers, we will have to know how to isolate faults in these complex computer systems, upgrade hardware and update software or firmware without compromising the integrity of the system. These systems can also help with troubleshooting.

Many computer systems come with the ability to run a BIT or Built In self-Test, giving maintenance personnel a trouble code that could potentially isolate the fault. If you pair that ability with a handheld computer, then with the right software, your computer could indicate the correct procedure in an electronic aircraft manual and automatically generate the forms necessary for the repair.

## Networking

We have all heard the term "networking" before, but many of us associate this with going to an industry event and meeting your peers. Here I am referring to being able to make computers and their associated networks speak to each other. Whether it is a wired or wireless network, some type of IP addressing will need to be done.

Over 41 commercial airlines across the globe offer some type of Wi-Fi for their passengers, while flight attendants carry handheld computers to process credit and debit card transactions and people conduct business using VoIP phone systems. Everything from in-flight entertainment systems, to security and access control systems, can be controlled through a computer network. Today, and into the foreseeable future, aircraft mechanics are going to need to broaden their basic skill-set to stay competitive in this industry. Northland Community and Technical College's Aviation Maintenance Technician program, along with the nation's first Unmanned Aerial Systems Maintenance program, can teach you the skills needed to make you stand out from your peers at your next job interview or performance review. Set yourself up for success and a career where you love what you do. ☐



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## CALENDAR

Send the date, times, location (**INCLUDE CITY, STATE & AIRPORT NAME & I.D.**), and contact person's telephone number, address & email address for reference. First 15 words **FREE!** *FOR LARGER LISTINGS, REFER TO THE CLASSIFIED AD SECTION ON PAGE 60*

Complete "Calendar of Events" Form at [www.MidwestFlyer.com](http://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 for navigation and not calendar listing information.**

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

### OCTOBER 2014

- 3\* **BLAINE (ANE), MINN.** - 44th Annual National World War II Glider Pilots Reunion will be held at the Golden Wings Museum from Noon to 4pm. Come meet some of the remaining few men who flew on silent wings to deliver troops, weapons and supplies in key points on the World War II front. 763-786-5004.
- 4 **FREDERICK (FDK), Mo.** - AOPA Homecoming Fly-In. [www.aopa.org/](http://www.aopa.org/)
- 4 **GREENVILLE (GRE), ILL.** - Airstavaganza - Static displays, food, rides, T-34 demo team. 10am-5pm. 618-664-0926 for more info. Rain date 5th.
- 4\* **EAU CLAIRE (EAU), Wis.** - Chili Feed 11am-2pm & Young Eagles Rally 10am-2pm.
- 5 **NOBLESVILLE (180), IND.** - BBQ lunch Noon-6pm.
- 5 **WATERTOWN (RYV), Wis.** - Pancake Breakfast & Airport Open House 8am-Noon; Airplane Rides 10am-1pm; Various Displays/Demos throughout the day.
- 11\* **EXCELSIOR SPRINGS (3EX), Mo.** - Chili Bowl Fly-In & Chili Cookoff. Setup 12:30pm, judging & eating 1pm. Also serving burgers & dogs. [www.thenew3EX.com](http://www.thenew3EX.com)
- 12 **POPLAR (C77), ILL.** - Pancakes, eggs & sausage breakfast 7am-Noon.
- 14-17 **FLORENCE, IND.** - Aviation Association of Indiana (AAI) Annual Conference At the

- Belterra Resort Hotel.
- 21-23 **ORLANDO, FLA.** - NBAA 2014 Business Aviation Convention & Exhibition. [www.nbaa.com](http://www.nbaa.com)
- 25 **OSHKOSH, Wis.** - Wisconsin Aviation Hall of Fame Banquet & Induction Ceremony at EAA AirVenture Museum. Social Hour 5pm. Banquet & Ceremony 6pm. Inductees Pete Drahm, Vice Adm James H. Flatley, Jr., Don Volland, and Ed, James, & Ray Knaup. [www.wisconsinaviationhalloffame.org/](http://www.wisconsinaviationhalloffame.org/)

### 2015

#### FEBRUARY 2015

- 12 **MADISON, Wis.** - Wisconsin Bureau of Aeronautics Engineer's Workshop will be held at the Crowne Plaza Hotel. Registration go to <http://www.dot.wisconsin.gov/news/events/air/engineers-workshop.htm>.

#### APRIL 2015

- 15-17 **ST. CLOUD, MINN.** - Minnesota Airports Conference at Rivers Edge Convention Center.
- 21-22\* **DES MOINES, IOWA** - Iowa Aviation Conference at the Sheraton.

#### MAY 2015

- 11-13 **LA CROSSE, Wis.** - Wisconsin Aviation Conference at the Radisson Hotel. For additional information go to [www.wiama.org](http://www.wiama.org), or contact Bob O'Brien at 815-757-2869.
- 13-14\* **ROCKFORD, ILL.** - Illinois Aviation Conference at Clock Tower Resort.

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### JULY 2015

- 20-26 **OSHKOSH (OSH), Wis.** - EAA AirVenture 2015 [www.airventure.org](http://www.airventure.org)

### AUGUST 2015

- 10-13\* **MIMINISKA LODGE, ONTARIO** - Canadian Fishing Fly-Out 2015. 3-Night/2-Day Trip at Wilderness North. (See ad on page 63 for more info.) 1-888-465-3474.
- 10-15\* **MIMINISKA LODGE, ONTARIO** - Canadian Fishing Fly-Out 2015. 5-Night/4-Day Trip at Wilderness North. (See ad on page 63 for more info.) 1-888-465-3474.

### NOVEMBER 2015

- 17-19 **LAS VEGAS, NEV.** - NBAA 2015 Business Aviation Convention & Exhibition. [www.nbaa.com](http://www.nbaa.com).

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**T-HANGAR RENTALS** – La Crosse Regional Airport, La Crosse, WI. Various door sizes and options. Visit <http://www.lseairport.com/hangar-rentals.php> for availability. Call airport manager's office for rental at **(608) 789-7464** or email [torpc@lseairport.com](mailto:torpc@lseairport.com).

**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](mailto:Mary.Gasper@WisconsinAviation.com). More details and photos available at [WisconsinAviation.com](http://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](mailto:Mary.Gasper@WisconsinAviation.com). More details and photos available at [WisconsinAviation.com](http://WisconsinAviation.com).

**HANGAR FOR SALE** – Wisconsin – Dodge County Airport (KUNU) – 50W X 60D, Door 44W X 11H. \$60,000 or OFFER. Contact **Mary at 920-386-2402** or [Mary.Gasper@WisconsinAviation.com](mailto:Mary.Gasper@WisconsinAviation.com). More details and photos available at [WisconsinAviation.com](http://WisconsinAviation.com).

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### **FLIGHT TRAINING FROM PAGE 13**

occurs while you are talking to controllers, flying the airplane and analyzing the approach. This is the most likely point at which an entry error will occur and you will need to correct the error.

If your aircraft is equipped with an autopilot coupled to your navigation equipment, practice with it. You should be able to use the autopilot in conjunction with any equipment to which it is coupled. In particular, learn what GPS actions will de-couple the autopilot from the GPS. In any event, it is good practice to check the autopilot after every GPS change. You'll be surprised how often the autopilot decouples itself.

As an added thought, pilots who employ glass cockpit in instrument conditions should seriously consider acquiring an autopilot if one is not currently installed in their aircraft. Even a simple wing leveler gives a tremendous advantage when your attention is demanded by the modern electronics. In fact, one manufacturer lists autopilot functionality as critical to instrument flight and states unequivocally that the airplane should not be flown in IMC unless the autopilot is working.

As an added comment, the FAA checkride guidelines call for pilots of autopilot-equipped airplanes to fly the checkride using the autopilot and simply demonstrate they can hand-fly the airplane, which is a reversal of past policy. Therefore, it behooves the aspiring instrument pilot to learn the use of the autopilot. This is a task which can safely be done in VFR also. While you won't be able to learn everything you need to know about the autopilot without instrument instruction, you can reduce the training time by becoming very familiar with its operation prior to beginning your training.

While I run the risk of being accused of being a curmudgeon, I believe it is appropriate to point out what I believe becomes obvious with experience. Modern GPS,

glass cockpits, weather uplinks, etc., are a tremendous aid to safe instrument flight, but they add considerable training overhead. This is an investment that is well worth the cost. Conversely, if adequate training is not received, these same devices can impede safety because they can detract from the ability to aviate. If you were trained on glass from the beginning, this will be an easier transition for you.

As a final note, you should know how to use every piece of equipment in your aircraft. It is amazing how many people will willingly spend thousands of dollars to add a piece of redundant equipment for safety, but fail to learn how to use something as basic as an ADF when it is already installed. If it is in the airplane, you should know how to use it. Otherwise, it is just taking up panel space and weight for no good reason.

Cranial redundancy (i.e. your ability to use everything in the airplane) is cheap and without it, nothing else matters. Almost all equipment can be learned while flying in visual conditions.

These recommendations are based on experience teaching instrument students and watching the learning curve they experience. Of course I never had any of these issues in my training. (Anyone want to buy a bridge?)

The typical student spends unnecessary time learning basics during their instrument training that they could have safely taught themselves and have committed to practice before beginning their instrument training. Not only will this save time and money, it frees up instruction time to learn those things that truly apply to instrument flying. Incidentally, these practices also make for a safer and smoother pilot whether or not instrument flying is the goal.

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

### **MnDOT FROM PAGE 51**

Once strip malls, housing, or business complexes are built in airport buffer or safety zones, or along/under direct approach and departure flight paths of an airport, the future of that airport is in jeopardy. Bear in mind that once an airport is gone, the possibility of replacing it would be at best, extremely low, while the cost of replacing it would be, with little doubt, extremely high.

Every aviator should endeavor to stay fully aware of what is happening at their airport, and stay up to date on

significant local issues. This is so each individual can help to inform the non-flying members of the community and the community leaders about the value and importance of the city's airport and the critical importance of providing proper safety corridors and zones for the airport. Support your local airport manager!

Only through active, consistent, and clear communication and information, will aviators, cities, and their airports be able to reduce or avoid the continually growing buffer paradox. □

## **New Aeronautics Planning & Finance Director**

ST. PAUL, MINN. – Ryan Gaug is the new MnDOT Office of Aeronautics Planning and Finance Director, effective July 30, 2014.

Gaug began his career at MnDOT as a planner in 2008 and first came to Aeronautics as a planning and zoning coordinator from 2011-2013. From 2013 to July 2014, Gaug moved to the Metro District's Program Management Section.

Ryan Gaug



He is a 2012 graduate of the MnDOT Leadership Foundation Program.

Please welcome Ryan back to Aeronautics and his new management position. He can be reached at: 651.234.7236, or [ryan.gaug@state.mn.us](mailto:ryan.gaug@state.mn.us). □

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