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OCTOBER/NOVEMBER 2016

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## Saving an aviation tradition

Most teenagers can't wait to get a driver's license. It represents freedom and independence, and taking that test on your birthday is a time-honored tradition for millions of young Americans.

For teens who yearn to fly, there's another time-honored tradition—the birthday solo. But when a change in procedures put an end to that tradition earlier this year, AOPA worked with the FAA to bring it back.

Student pilots who are learning to fly gliders or balloons can solo when they turn 14. Those flying all other types of aircraft can solo when they turn 16. But changes to the process of applying for a student pilot certificate implemented in April meant that pilots-in-training couldn't apply for a student pilot certificate until their birthday. Because of TSA security vetting requirements, applicants could not get the certificate the same day they applied, making it impossible for them to solo on their birthday.

When it became clear that the new process would put an end to birthday solos, AOPA asked the FAA to change the procedure and offered a series of recommendations for doing so. In July, the FAA restored the birthday solo and implemented many of AOPA's proposals.

Now a student pilot can submit a paper application up to 90 days before his or her eligible birthday, allowing time for the application to be processed and the student to be vetted by TSA before their birthday. Once approved, the FAA will provide the student with a temporary authorization through the Airmen Online Services section of its website and mail the permanent certificate.

The paper application process is a temporary fix. The FAA will eventually allow flight instructors to process an application through IACRA, the FAA's web-based application system, up to 90 days before the student's eligible birthday.

Traditions matter and AOPA is proud to have helped keep this one alive so young pilots can once again mark an unforgettable milestone in their aviation careers with a birthday solo.



Mark R. Baker  
President & CEO, AOPA



**ON THE COVER:** The 64th annual Experimental Aircraft Association fly-in convention in Oshkosh, Wisconsin, July 25-31, 2016, featured the Canadian Snowbirds, numerous and impressive modern military jet fighters, an outstanding warbird display, and some of the best civilian aerobatic performers in the airshow entertainment industry today. But it was the gigantic “Martin Mars” water bomber that captured the attention of spectators the most. *Complete story beginning on page 34.*

*Photo by Chris Bildilli*

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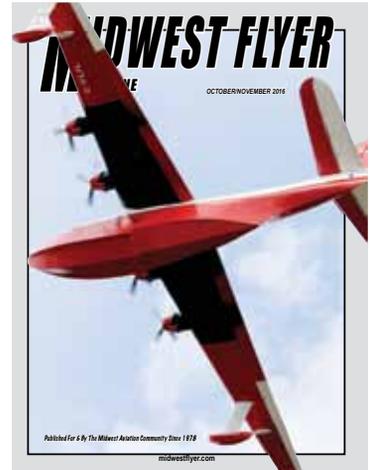
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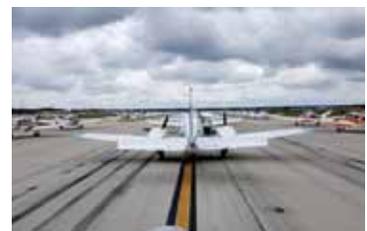
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## Students Go From High School & Cockpit To College

by Dave Weiman

The Central High School Science, Technology, Engineering & Mathematics (STEM) Aviation Program in Westosha, Wis., is proud to announce that two of their students obtained their private pilot certificates on August 25, 2016 in an aircraft they helped build, and are now attending the School of Engineering at the University of Wisconsin in Madison.



(L/R) Olivia Rasmussen and Nicole Jackson with the RV-12 they helped build.

The students are Olivia Rasmussen and Nicole Jackson who passed their flight tests flying “Falcon One,” a Van’s Aircraft RV-12 built by the students as part of the STEM program.

STEM programs emphasize the importance of setting goals, planning, teamwork, and respect for one another as students work on complicated processes and problems that scientists and engineers face on a daily basis.

After an aircraft is built as part of the class project, students may use it free of charge to obtain their private pilot certificate, thereby eliminating a huge financial barrier in learning to fly.

The success at Central High School is a great example of what can be accomplished by students of all races, nationalities and socioeconomic backgrounds when they realize their potential, set goals and are willing to work at completing their education.

Congratulations to these students, and to Central High School Aviation Program instructor, James Senft, for showing them that the opportunities in aviation are limitless! □

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## Ask Pete!

by Pete Schoeninger

**B**efore I start answering questions, I wanted to take a minute to thank Mark Baker (AOPA) and Jack Pelton (EAA) and their respective staffs and members for keeping the heat on Congress for years until the recent medical reform was passed. And, shame on the FAA for not being more cooperative!



Pete Schoeninger

**Q:** Last winter at our small airport, the guy in charge of snow removal waited until the snow had ended before plowing the runway. I asked him why, and he said freezing rain was forecast in the next hour and he wanted to wait until the freezing rain came and left. Pete, you removed snow for many years as an airport operator... Why do you think the guy declined to promptly plow us out?

**A:** My guess is, had he plowed the runway clean just before freezing rain occurred, your runway could (if runway temperature was below freezing) be covered with a clear sheet

of ice. (Remember, freezing rain is rain falling into air that is below 32 degrees.) Ice on a runway is dangerous and hard to remove, but if the freezing rain falls into the top of say 3 inches of snow, the whole mess usually can easily be removed with plows and possibly a snow blower.

**Q:** When snow arrives (I live in northern Minnesota), I remove the wheels on my Cessna 170B and put on skis. A friend said I really should amend the weight and balance info to reflect this change of equipment, and have new weight and balance computed as well. I don't believe I legally could do the computations, although they would be easy to do, so would I have to have my mechanic sign off each change, in other words, twice a year?

**A:** What some mechanics will do is make an entry in the weight and balance paperwork to specify the empty weight and center of gravity (CG) on wheels, and when equipped with (name and model) skis.

**Q:** You answered my question about the prop pitch (Numbers 7653 mean 76 inches in diameter and 53 inches forward travel per one revolution, if no slippage) on my C-172L in the August/September 2016 issue of *Midwest Flyer*





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*Magazine.* Now answer this please.... Why, when I am approaching to land, with my throttle pulled fully back, does the engine idle at about 1000 RPMs, yet when stopped on the ground, the idle is at about 700 RPMs? Why the difference?

**A:** Your prop, with a 53-inch pitch, if 100% efficient, and if not attached to anything (in other words, in theory only), would move forward about 36 mph. (700 RPM X 53 inches/12 = 3100 feet per minute, or about .6 of

a mile, or 36 mph). So when you are traveling at faster than 36 mph and your engine throttle control is set at idle, the prop is not pulling air; it is being pushed to a higher RPM by air approaching from the front (relative wind.)

**Q:** A friend and I are both certified flight instructors and we are thinking of starting a small FBO at our local airport to replace the current FBO who is leaving. Are FBOs good moneymakers?

**A:** In my experience, a small FBO is not going to make much money doing a small amount of everything, like the usual stuff... flight instruction, fuel sales, and maintenance. The folks that seem to be doing okay right now often have a specialty, such as lots of maintenance from based customers and customers from surrounding airports, jets to base with them which will buy a lot of fuel, or some other unique specialty.



## PEOPLE IN THE NEWS

# Wisconsin Native Named AOPA Great Lakes Ambassador

**T**he Aircraft Owners and Pilots Association (AOPA) has named Andy Miller of Appleton, Wis., its new Great Lakes Ambassador. A nationally recognized aviation educator, Miller will be based in Appleton and work with flying clubs, flight schools, secondary schools and aviation organizations to increase the number of active pilots. He will also travel to events and meetings around the Great Lakes in one of AOPA's "Reimagined Cessna 152s" as part of AOPA's "You Can Fly" initiative.

Miller, an FAA Certified Flight Instructor, was associated with the

AOPA Foundation's Air Safety Institute for more than a decade teaching AOPA Safety Seminars and Flight Instructor Refresher Courses. He is an aircraft owner, and a lead representative in the FAA Safety Program FAASTeam. Miller regularly flies Young Eagles and Angel Flight missions and is the AOPA Airport Support Network Volunteer for Appleton International Airport (KATW). He is also the IMC Club Leader for EAA Chapter 252 in Oshkosh, and a member of the National Association of Flight Instructors and the Society of Aviation and Flight Educators.



Andy Miller of Appleton, Wis., is AOPA's new Great Lakes Ambassador. In the background is one of AOPA's "Reimagined Cessna 152s" which Miller will be flying as part of AOPA's "You Can Fly" initiative. *Dave Weiman Photo*



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Earlier in his career Miller worked in health care and higher education management. He holds a bachelor's degree from Ripon College in Wisconsin, and has done graduate studies at Embry-Riddle Aeronautical University in Florida, and the University of Wisconsin – Stout. He and his wife, Cheri, have two adult children.



# FAA's New Compliance Philosophy: So Far, So Good.

by Gregory J. Reigel

Attorney At Law

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**T**his year at EAA AirVenture



Greg Reigel

Oshkosh, I was fortunate enough to be able to attend a continuing legal education (CLE) program generously presented by EAA's Legal Advisory Council. The program hosted a number of FAA personnel to discuss the FAA's new compliance philosophy, which was announced in June 2015, and actually went into effect October 1, 2015. The FAA representatives included John Duncan, Director of Flight Standards; James Tagmeier, Great Lakes Regional Counsel and Manager of the Midwest Enforcement Team; Jeffrey Klang, Senior Counsel – International; and Mark Bury, Deputy Chief Counsel – Enforcement & Regulations.

To provide you with some background, in June 2015, the FAA issued Order 8000.373 to explain a new philosophy it was implementing with respect to regulatory compliance. As the FAA explained it, this new policy contained its “strategic safety oversight approach to meet the challenges of today’s rapidly changing aerospace system.” What does that mean?

Well, as the regulator of the aviation and aerospace communities, the FAA is charged with establishing regulatory standards to ensure that operations in the National Airspace System are conducted safely. And as we all know, compliance with those regulatory standards is mandatory. However, not only does the FAA expect us to comply with the regulations, but it also believes that we have “a duty to develop and use processes and procedures that will prevent deviation from regulatory

standards.” Thus, we are required to conduct ourselves in a way that not only complies with the regulations, but will also ensure that deviations are prevented. Sounds great, until something (e.g. a deviation) happens. Then what?

Prior to this new compliance philosophy, the result was typically unpleasant. But with this new philosophy, the FAA has shifted away from that approach.

According to the FAA's new philosophy, “[W]hen deviations from regulatory standards do occur, the FAA's goal is to use the most effective means to return an individual or entity that holds an FAA certificate, approval,

authorization, permit or license to full compliance and to prevent recurrence.” When the new policy was issued, it appeared to be a shift from the FAA's past compliance philosophy. At least from my perspective, before the new philosophy, the FAA's response to violations had leaned heavily toward enforcement and punitive action (e.g. certificate suspensions and revocations). And that approach never made sense to me.

If we truly want to encourage compliance and ensure that a certificate holder is safe, why would we want that certificate holder to be sitting on the ramp and out of the system for 30-180 days or longer with a suspended certificate?

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Wouldn't it make more sense to educate certificate holders and do what may be necessary to get them back into compliance and in a position where future compliance is more likely?

Well, after significant discussions and consideration within the agency, the FAA apparently arrived at the same conclusion.

According to the FAA's current policy, the FAA recognizes that some deviations arise from factors such as flawed procedures, simple mistakes, lack of understanding, or diminished skills. The Agency believes that deviations of this nature can most effectively be corrected through root cause analysis and training, education or other appropriate improvements to procedures or training programs for regulated entities, which are documented and verified to ensure effectiveness.

At the time, and as it turned out to be the case, the FAA is talking about counseling and remedial training. I think that's a good thing. The Order also notes that "[M]atters involving competence or qualification of certificate, license or permit holders, will be addressed with appropriate remedial measures, which might include retraining or enforcement." Here again, the concept of retraining rather than enforcement (which was typically

revocation in cases involving alleged incompetence or lack of qualification) appears to more appropriately address the situation in a more positive and productive manner. Maybe not in all cases, but my hope was that it would be more cases than in the past. The FAA refers to this type of a resolution as a "compliance action," as opposed to a legal enforcement action that results in certificate suspension/revocation or assessment of a civil penalty.

Of course, the new compliance philosophy did not eliminate certificate and civil penalty actions. If a certificate holder fails or refuses to take steps to remediate deviations or is involved in repeated deviations, then enforcement may result. That makes sense. Additionally, in those situations where a certificate holder's conduct was intentional or reckless, the FAA indicates that it will pursue "strong enforcement." Also not a surprise.

When it was issued, this new policy appeared to be a positive shift in the FAA's philosophy/national policy. But the rubber really hits the runway with the inspectors at the Flight Standards District Office (FSDO) level. So, my concern was whether this philosophy would actually trickle down to the FAA inspectors and whether this philosophy would apply to all divisions within the FAA. Which brings us to the CLE

program nearly one year later.

According to John Duncan, the new compliance philosophy has been implemented agency-wide. That is, all divisions within the FAA are required to apply the new compliance philosophy. Although he did note that some divisions, such as the drug abatement and the security divisions, may not be implementing the philosophy as aggressively as others, such as flight standards. While this is good to know, from my perspective, it does not appear to me that those divisions of the FAA have truly embraced or implemented the new philosophy. But it is good to know that they are supposed to be applying the new philosophy.

Both John Duncan and James Tagmeier emphasized that the philosophy is being applied to those certificate holders who are both "willing and able" to comply with the goals of returning the certificate holder to compliance and ensuring future compliance. In the event that the certificate holder is either unwilling or unable to be "rehabilitated," then the philosophy dictates that the certificate holder be removed from the National Airspace System (NAS) (e.g. via certificate suspension or revocation).

What does this mean for FAA inspectors? John Duncan indicated that in all cases the FAA's priorities are to (1) deal with the risk posed or created by the certificate holder and, only then, (2) determine if a violation has occurred. According to John, inspectors who are initially investigating a situation will assume that a compliance action will be used. Legal enforcement action will only be considered after the investigation reveals that a compliance action is not appropriate.

What does this mean for certificate holders? Generally, it means that the risk of a legal enforcement action has been significantly reduced. According to John Duncan, as of April 2016, the FAA had process approximately 2,200 compliance actions. In the absence of the new philosophy, I suspect a significant number of those cases would have resulted in certificate actions.

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But, here is the catch: In order to take advantage of this new philosophy, the FAA inspectors require that a certificate holder talk to them to discuss the “how” and “why” the risk was created, as well as options for making sure it doesn’t happen again. Without that information, it makes it difficult for the inspectors to determine whether the situation can be resolved with a compliance action.

From my perspective as an aviation attorney who defends certificate holders against FAA legal enforcement action, this approach raises concerns that the certificate holder will provide the inspector with information that could later be used against the certificate holder in an enforcement action. In the past, my typical advice to certificate

holders was to either not speak with the inspector or to at least not volunteer any information that could later come back to bite the certificate holder. Under the new philosophy, that isn’t necessarily the best advice.

Now a certificate holder must carefully analyze the situation to try and determine whether the situation will qualify for a compliance action before the certificate holder starts to volunteer information to the inspector. While resolution of the case through a compliance action is definitely preferable, the certificate holder should try and avoid disclosing information that could preclude a compliance action or that would put the certificate holder in a more difficult position if the FAA pursues legal enforcement

action. Discussing the matter with a knowledgeable aviation attorney before you speak with the inspector can certainly assist in making this decision.

The FAA’s new compliance philosophy is definitely a step in the right direction. It is benefiting both certificate holders and the safety of the NAS. As with any change, it does raise some concerns and issues that will yet need to be worked out. However, after nearly a year, the new policy seems to be working.

*EDITOR’S NOTE:* Greg Reigel is an attorney with Shackelford, Melton, McKinley & Norton, LLP, and represents clients throughout the country in aviation and business law matters. For assistance, call 214-780-1482, email greigel@shackelfordlaw.net, or Twitter @ReigelLaw. □

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# Real Instrument Pilots Do Not Need Autopilots or Glass Panels

by Michael J. "Mick" Kaufman



Michael Kaufman

**W**hen you read the title of this article, I am sure it threw up a flag and got your attention, but please read on. I also have some more information on ADS-B that I researched in the previous issue.

Oh how things have changed since I got my instrument rating some 45 years ago. No, we did not have autopilots, and glass panels were not even in the comic books or science fiction journals, yet. It made us better pilots, and we had to acquire skills that are often overlooked by many flight instructors teaching the instrument rating today. I cannot say, however, that not having these tools available to us made instrument flight safer back then. In talking with some old-time airline pilots, I found out that some of them did not have autopilots, either. With aviation today, I cannot imagine hand flying a jet airliner at high altitudes, close to the "coffin corner," without one. What I am saying is that many pilots whom we see in our recurrent instrument training programs would die if they lost their autopilots in hard IMC (Instrument Meteorological Conditions). Few pilots today could properly enter and fly a holding pattern without an autopilot or flight director, including professional pilots.

A number of years ago an airline pilot came to me for some dual in a Cessna 310 to learn how to fly a holding pattern. He indicated that the automated system and flight director in the Boeing 747 he flew did holding patterns for him, and he had not done one manually for many years. He was correct that he did not know what to do and proved it by flying the pattern backwards. All missed approach holding patterns are stored in the database of the Garmin 430/530, and both the Avidyne 540 and Garmin 480 allow you to custom design a holding pattern of any size and that can be flown at any location as programmed by the pilot.

So how does the title in this issue apply? Pilots who learn to fly without an autopilot develop a skill for flying that they cannot acquire if they had the autopilot and used it as a crutch. A pilot's brain is somewhat

like a computer in that it has limits on how much data it can process; however, the more times it does a task, the less brainpower that is required to do that task.

It is very important to develop a good instrument scan, thus it requires less brainpower to do that task and by using memory joggers and learning how to prioritize tasks, it makes flying without an autopilot doable.

You are being vectored for an ILS approach and you are hand flying the approach. ATC gives you a call with your approach clearance: *"Bonanza 36 Victor, turn left 040, maintain three thousand five hundred till established on a segment of the approach. You are cleared for the ILS 36 approach to Madison."*

As you gasp and swallow, and you try to read back this clearance as given, the aircraft banks right, the nose drops, you are way off your heading and altitude, and as you recover, you see that you are way below the assigned altitude and heading 120 degrees, and realize you have messed up the read-back, as well.

This is not a fictional example; I see it all of the time in flight training and recurrent training. Many of us who talk on our cell phone while driving to a place we have been before, have realized that we missed a turn back there somewhere, but in a case where the route is very common, you make all of the correct turns without thinking. The pilot in this case who has not developed a good instrument scan, does not have the additional brain-power to read back the clearance, has a brain overload, and loses control of the airplane.

It is important to prioritize tasks, and as I was writing my column for this issue, the telephone rang. It was from an

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**INSTRUMENT**

Fig. 1

instructor friend of mine. He wanted to tell me the story of a pilot who was taxiing for take off while programming his route into his iPad, and ran off the taxiway, went down into a ditch, collapsed his nose wheel, and damaged the prop. This was a \$50K mistake, and it goes to show the importance of prioritizing tasks.

Back to the basics was one of my topics in the last issue of *Midwest Flyer Magazine*, and there are many little secrets that can help you.

First, it is necessary to develop a good instrument scan, and it needs to be practiced. In the practical test standards, there used to be only one suggested method of doing this, and that was the “Primary & Secondary Concept,” however, the practical test standards have been revised to include a second method, “Control & Performance Concept” (Fig. 1). I have been teaching the “Control & Performance Concept” since the early 1990s with great success. We will discuss this method and its benefits in future issues of *Midwest Flyer Magazine*.

There are many memory joggers used in flying, and the one most familiar to the instrument pilot are the “5Ts.”

**Turn**  
**Time**  
**Twist/Track**  
**Throttle**  
**Talk**

By using these memory joggers, it allows pilots to have a logical order for performing tasks in the instrument flight environment.

Before leaving this topic, I would like to relate an experience from some years ago when I went with an



Brandon Baker

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## Do I Need Or Want A Glass Panel?

**A NTSB Study Revealed That Glass Panel Equipped Aircraft Were NOT SAFER Than Those Equipped With Conventional Round Instruments!**



Fig. 2

instrument student to take his flight test. As we were walking into the examiner's office, I reminded my applicant of the importance of using the "5Ts." A moment later, the examiner walked in the door with a pilot who had just completed his flight test. We both caught the conversation with the pilot examiner saying, "If you had remembered to use the 5Ts, I would be giving you a white slip today instead of a pink one." This made quite an impression on my student, and he did remember them and passed the checkride.

Speaking of passing one's checkride, I would like to congratulate Brandon Baker of Minneapolis, Minnesota on becoming an instrument rated pilot on September 2, 2016, and he did so without a glass panel, GPS, flight director or autopilot. Not only did he pass the flight test, he rivaled the best autopilot as I observed four (4) perfect approaches in a row with not more than one dot deviation on the localizer or glide-slope. Brandon is the nephew of AOPA President & CEO Mark Baker, and he will do great in his aviation career.

In a study that was done by the National Transportation Safety Board (NTSB) several years ago, they addressed the higher fatal accident record of aircraft equipped with glass panels verses the "six pack" (Fig. 2). In following the recommendation of the NTSB, I would be interested to see if a more recent study has been done to show a reversal in this trend following their recommendations. I will report any new findings in the next issue of *Midwest Flyer Magazine*.

Since my comments on ADS-B surfaced in the last issue, questioning if the system is truly ready, I have had a chance to talk with numerous pilots and a very recently retired air traffic controller and several avionics shop owners on the

subject. I also had a chance to do some research on my own as to the success of the current ADS-B program, and you may find this interesting. What I found in my research even before the last issue went to press was that there is a "Generation Three" ADS-B under development and operational. It is called "ALAS," which stands for ADS-B Link Augmentation System, and I found it by accident. It is an all-satellite based system as my caller described, as noted in my last column. Why many of us, including myself, have not heard of it earlier is amazing, as it seems someone wants to keep it quiet. Those interested may go to a YouTube for a short video on how it works and why it works better than the system that is being required by the year 2020. Visit <https://www.youtube.com/watch?v=Fj5EAK8ltTA>.

In talking with pilots who have already installed ADS-B equipment, many of them have indicated that they, too, have seen ghost images and traffic that disappears for a short time, then reappeared or never shows up again. We all agree that ADS-B weather is quite useable, but not nearly as good as "XM Satellite Weather." It makes sense that if using satellites for traffic is as good as XM Satellite Weather is for weather, that using satellite technology is the way to go for traffic as well. If this is the case, those who have purchased expensive ADS-B equipment will have a dinosaur in a few years, as it would not be the first time a government agency made a mistake.

I can sight Loran C, Traffic Information Service, Microwave Landing System, Transponder Landing System and Obama Care, as a few examples. At this point it is pretty much the consensus of most of the people I have talked to that there is a problem and the FAA is working on a fix.

*Till the next issue, fly safe!*

**EDITOR'S NOTE:** Michael J. "Mick" Kaufman is a Certified Instrument Flight Instructor (CFII) and the program manager of flight operations with the "Bonanza/Baron Pilot Training" organization. Kaufman conducts pilot clinics and specialized instruction throughout the U.S. in a variety of aircraft, which are equipped with a variety of avionics, although he is based in Lone Rock (KLNK) and Eagle River (KEGV), 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. □

# Getting Pilot Proficient At EAA AirVenture Oshkosh

by Harold Green

**T**his year I decided to look at EAA AirVenture Oshkosh as a source of educational opportunities and attempt to gain some insight into the reactions of people in attendance.

First, I volunteered for the Pilot Proficiency Center. The center, sponsored in part by the Experimental Aircraft Association, provides simulator training to attendees at no cost.

The National Association of Flight Instructors (NAFI), Society of Aviation & Flight Educators (SAFE), and the Experimental Aircraft Association (EAA), with the help of Redbird Flight Simulations, Inc., put the effort together. Seventy-eight (78) flight instructors and 14 simulators were involved. There were also three simulator wranglers, a CFI onsite manager, and a center leader.

Several people said they encountered wait times of close to an hour and had to forego participation. Thirty-one (31) scenarios, complete with lesson plans, had been prepared.



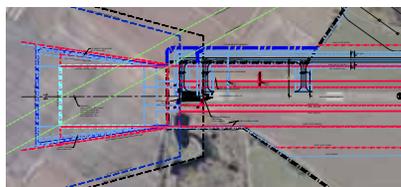
Harold Green



Simulator flight training at the Pilot Proficiency Center, EAA AirVenture Oshkosh. *Redbird Photo*

Each participant was able to select up to three scenarios, either VFR or IFR or a combination thereof, from a bound booklet providing a summary of the scenario and its objectives. Everything from take off from a short, mountain-surrounded airstrip, to an instrument approach to minimums, was covered.

The scenarios were very realistic and well thought out. Each participant worked with an instructor who played the role of an air traffic controller when required.



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Simulators included specific crosswind simulators and standard Redbird simulators, some of which were configured with G1000 avionics and some with six packs. All aircraft were Cessna 172s.

One of the interesting things was the attitude of the instructors. Many were not as familiar with G1000 avionics as they would like. Therefore, many instructors took advantage of the opportunity to become more familiar with the G1000 system during the training sessions, which was a win-win for both students and instructors.

In summary, the Pilot Proficiency Center at EAA AirVenture Oshkosh was worthwhile for everyone involved. Many hours went into this great attraction by the four organizations involved, and they are to be commended for it. At a minimum, participants gained insight into the value of using flight simulators. Perhaps even a few came away hoping to increase their proficiency as pilots.

The reactions of people attending AirVenture was interesting. The first people I talked with were a husband and wife team from North Dakota. He is a retired aerial applicator and today owns a single-engine aircraft for pleasure. Unfortunately, his age and a medical condition caught up with him and he had to retire. When active, he not only flew, but also at times had to make field repairs on his aircraft.

The husband only had one accident in his career and that did not injure him, but did cause some damage to his plane. He made a temporary fix in the field and flew the aircraft home for more extensive repairs. The couple still comes to AirVenture and live in their camper for the week. Their love for aviation and fellow aviators is real.

I was fortunate enough to talk to a flight instructor from

the East Coast, who has a seaplane rating and about 600 hours, but has not flown in years. He is semi-retired from his business, but still retains his Coast Guard rating as a ship captain. He, too, is limited by medical conditions, but would like to become involved with aviation again – perhaps as a flight simulator instructor.

He had never been to AirVenture before, so the event was quite an eye opener for him. He tried his hand at the Boeing simulator at the Boeing exhibit.

His reactions to AirVenture were of particular interest and came down to this: a) “This is bigger than I thought it would be.” b) “I didn’t really believe the 10,000 airplane number until I got here. WOW!” c) “The people in the Midwest are so friendly, I can’t get over it.” d) “I haven’t walked this much in years. My feet hurt.”

I suspect he will come back, like we all do!

Paraphrasing the response of other attendees: “I come to Oshkosh because it’s fun... I get to look at cool airplanes and I meet a lot of very nice people.”

I am sure that many people attend AirVenture with a specific objective in mind, but having fun is just fine with me!

*EDITOR’S NOTE:* Harold Green is an Instrument and Multi-Engine Flight Instructor (CFII, MEII) at Morey Airplane Company in Middleton, Wisconsin (C29). A flight instructor since 1976, Green was named “Flight Instructor of the Year” by the Federal Aviation Administration in 2011, and is a recipient of the “Wright Brothers Master Pilot Award.” Questions, comments and suggestions for future topics are welcomed via email at harlgren@aol.com, or by telephone at 608-836-1711 (www.MoreyAirport.com).



## WASHINGTON

# President Signs FAA Extension & Third Class Medical Reform Legislation

WASHINGTON, D.C. – Following the President signing into law an FAA Authorization extension, including Third Class Medical Reform, Aircraft Owners and Pilots Association (AOPA) President & CEO Mark Baker told members, “We did it together! Medical reforms are now the law, and that’s a big win for general aviation.”

Baker continued: “It has taken years of commitment and hard work to make these reforms a reality. AOPA and EAA started the current reform effort back in 2012 when we petitioned the FAA for a medical exemption, but the terms of that petition were much more limited than what pilots will get under the new reform law. This is something our entire community can get excited about.”

Although the extension only keeps the FAA running through September 2017, the medical reforms are permanent, and the FAA now has one year to develop and enact rules that align with the reforms. Pilots will not be allowed to fly under the reforms until the FAA has completed its rulemaking or



(L/R FAA Administrator Michael Huerta with EAA President Jack Pelton at the “Meet The Administrator” forum at EAA AirVenture Oshkosh, July 28, 2016.

the one-year time limit has elapsed, whichever comes first. The FAA has not yet said when it will begin the rulemaking process or what form that process will take, although at the “Meet The Administrator” forum during EAA AirVenture Oshkosh, July 28, 2016, FAA Administrator Michael P. Huerta said that he thought the process would go quickly, because his staff had already completed much of the work.

“The reforms are now law and that means we’re in the home stretch when it comes to getting more pilots flying without compelling them to repeatedly go through the expensive and burdensome medical certification process,” said Baker. “But there’s more work to do to ensure that the law is translated into regulations that make sense and work in the real world.”

Under the reforms, pilots who have held a valid medical certificate any time in the decade prior to July 15, 2016, may not need to take another FAA medical exam. The 10-year look-back period applies to both regular and special issuance medicals. Pilots whose most recent medical certificate was revoked, suspended, withdrawn, or denied will need to obtain a new medical certificate before they can operate under the reforms. Pilots who have never held an FAA medical certificate, including student pilots, will need to go through the process one time only.

After meeting the initial requirements to fly under the reforms, pilots will need to visit a state-licensed physician at least once every four years and take a free online course on aeromedical factors every two years.

“This is a moment to celebrate what we’ve achieved together,” said Baker. “But we know our work isn’t done. The legislation lays out a clear path forward, but many additional details will be worked out during the regulatory process over the coming months. AOPA will be watching closely and working with the FAA to ensure that the regulations reflect the intent of the legislation and the real-world needs of pilots.”

“We have fought long and hard for medical reforms and thanks to the support of GA supporters in both the House and Senate, those reforms are now the law. We are very pleased that pilots will soon reap the benefits, but the devil is always in the details, and some of those details will be worked out in the rulemaking process,” said Jim Coon, AOPA senior vice president of government affairs. “That’s why our team will be closely monitoring the FAA’s next steps and providing input and the pilots’ perspective at every opportunity.”

For additional information, read “High On Health” by Dr. Bill Blank on page 18. □

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## How The Pilot's Bill of Rights 2 Can Affect You!

by Dr. Bill Blank, M.D.

**A**s many of you know, on July 15, 2016, President Obama signed into law the "Pilot's Bill of Rights 2." That was the culmination of a long process.



Dr. Bill Blank

In 2004, the FAA authorized pilots to fly Light Sport Aircraft using a driver's license as a medical. There had been a movement to extend the types of aircraft that could be flown with a driver's license medical up to aircraft such as the Cessna 172. Congress became involved in this process and made modifications to the original request. When the process was completed, we did not get a driver's license medical to fly such aircraft. Instead, we got what is called a "comprehensive medical exam," which can be done by any state-licensed physician. We did, however, obtain the right to fly larger and more complex aircraft than the original proposal requested.

To start out, the FAA has 180 days from the signing of the bill to issue and/or revise the regulations in compliance with the new law. If the regulations have not been issued within one year, the law takes effect anyway. Under the new legislation, an airman wishing to fly without a third class medical will be required to have a valid driver's license. That driver's license must be unrestricted. Glasses are acceptable. If your driver's license restricts you from driving at night, you could not use your driver's license to meet the new requirement. In addition, within the past 10 years, you must have passed an FAA medical – that could be any class and even may have been via special

issuance. You cannot have had your last medical denied or you cannot have withdrawn your application.

To remain compliant, every 24 months, you need to complete an online Internet medical education course. The FAA will of course have a record of the course completion and you will be required to print out your completion certificate and retain it in the event the FAA ever requests it.

If you have any medical condition that may impact your ability to fly, you must be under the care and treatment of a physician. Every 48 months, you must undergo a comprehensive medical exam from a state-licensed physician. You will be able to print off the online form to take to your physician, and it will include a checklist of questions that are essentially questions 3-13 and 16-19 from FAA Form 8500-8, which you now complete via Med-X-Press. You and your physician will discuss your answers to these questions. In addition, he will perform a medical exam similar to the one currently performed by your Aviation Medical Examiner (AME). When the physician completes the exam, he or she will discuss and sign the following statement:

*"I certify that I discussed all items on this checklist with the individual during my examination, discussed any medications the individual is taking that could interfere with their ability to safely operate an aircraft or motor vehicle, and performed an examination that included all of the items on this checklist. I certify that I am not aware of any medical condition that, as presently treated, could interfere with the individual's ability to safely operate an aircraft."*

You will be required to keep this form so that it can be presented if ever requested.

Certain medical conditions require a one-time special issuance prior to exercising your right to fly without a

third class medical. Those are certain mental health disorders, neurological disorders, and cardiovascular conditions, such as myocardial infarction, coronary heart disease requiring treatment, valve replacement, and heart transplants. There are no waiting requirements for obtaining these special issuances.

When you have met these requirements, you will be permitted to fly aircraft under visual or instrument flight rules, not above 18,000 feet, at indicated speeds not to exceed 250 knots, with not more than five passengers, and not for compensation or hire. From this you can see that some pilots will still need a third class medical and the third class medical will still exist.

While this legislation turned out differently from what was originally requested, I believe that it is a big step forward. From my point of view, one of the major benefits is the ability to not be required to deal with the FAA aeromedical process, which frequently is time consuming and overkill. If you are interested, I recommend that you read the entire section of legislation. Google S.571 and go to Section 2307, Medical Certification of Certain Small Aircraft Pilots. I think you will find it interesting.

*EDITOR'S NOTE:* William A. Blank is a physician in La Crosse, Wisconsin, and has been an Aviation Medical Examiner (AME) since 1978, and a Senior AME since 1985. Blank is a retired Ophthalmologist, but still gives some of the ophthalmology lectures at AME renewal seminars. Flying-wise, Blank holds an Airline Transport Pilot Certificate and has 5300 hours. He is a Certified Instrument Flight Instructor (CFII), and has given over 1200 hours of aerobatic instruction. In addition, Blank was an airshow performer through the 2014 season, and held a Statement of Aerobatic Competency (SAC) since 1987. □

## Measuring Success

by Mark R. Baker  
President & CEO

Aircraft Owners & Pilots Association

In business, we say you can't manage what you don't measure. That's true no matter the goal.

At AOPA we're working to get people flying and keep them flying through the "You Can Fly" program. And to manage those efforts, we're continually measuring our progress. At mid-year, we took a good hard look at our goals and what we'd accomplished, and I'd like to share some of those achievements with you.

Getting lapsed pilots back into the air is the mission of our "Rusty Pilots" program. In the first half of this year, we held 95 free Rusty Pilots seminars nationwide. Of the 2,700 participants who have been out of the left seat for more than two years, 32 percent have told us they've completed a flight review and are back in the air.



Mark Baker

To give pilots greater access to aircraft at a lower cost, AOPA created a nationwide network of flying clubs. In the first six months of the year, the AOPA Flying Club Network grew 17 percent to 744 clubs, and AOPA's flying club staff and You Can Fly Ambassadors helped start 15 new clubs in seven states, so it's easier than ever to find a club in your area. To help one lucky new club get off the ground, we're giving away a Reimagined Cessna 150 to a startup club in October.

With high schools nationwide embracing STEM (science, technology, engineering, and math) programs, AOPA is introducing high school students to exciting aviation learning and career opportunities. To help get them get going, the "AOPA High School Initiative" is offering 20 flight training scholarships worth \$5,000 each this year. We're also building aviation-related STEM curricula and hosting our second annual High School Symposium in November.

Research has shown that up to 80 percent of people who begin flight training don't finish. Our Flight Training initiative is designed to help

flight schools change that.

This year, we're having an outside firm conduct a new study to identify why some schools are more effective than others. We're also conducting our Flight Training Poll to identify schools that deliver great training experiences. Last year, we received 7,000 responses, and we're on track to meet and perhaps beat that figure in 2016. Schools that get the highest marks will be recognized with AOPA Flight Training Excellence Awards.

Programs like these are effective—the numbers prove it. But they also need to be sustainable. That's why fundraising is an important component of You Can Fly. Earlier this year, one anonymous donor said he would give \$1 million to You Can Fly if we could raise an additional \$1 million within 90 days. And we did—putting You Can Fly in a position to continue what we've started.

We know we're moving the needle when it comes to growing and sustaining the pilot population. As You Can Fly grows, we'll keep measuring our progress. It's the best way we've found to build a stronger future for GA. □

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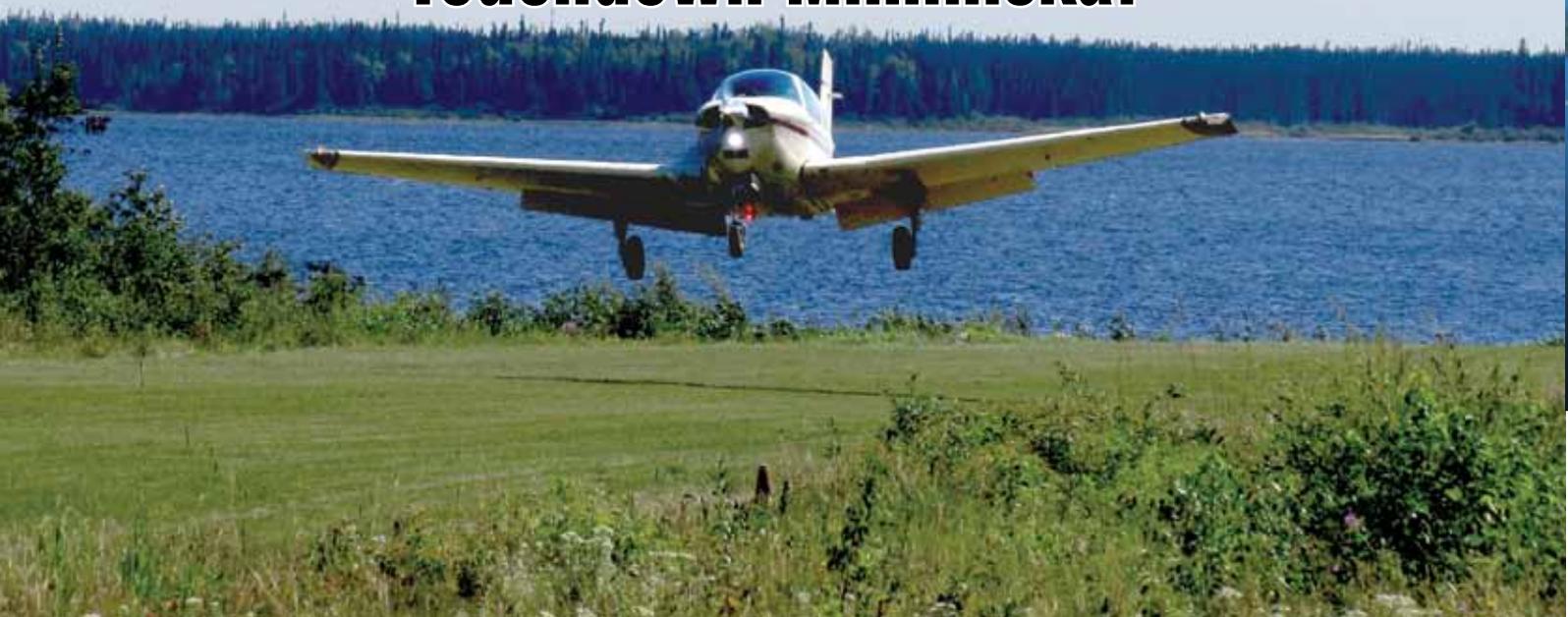
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# Touchdown Miminiska!



by Dave Weiman

Robert Bernstein of Oshkosh, Wisconsin, makes a perfect landing on Runway 27 at Miminiska Lodge, Ontario (CPS5) in his Beechcraft F33A Bonanza.

Dave Weiman Photo

**E**ach year, we get better at flying to Canada and the procedures of flying across the border get easier and easier.

Last year, we had our first Cirrus join us, flown by former U.S. Navy Top Gun pilot, Gary Black of Cirrus Aircraft, Duluth, Minn. *How do you beat that?* By introducing other pilots to the wonders of flying in the Canadian outdoors, that's how.

The trip began on Sunday, August 7, 2016, with a flight to Longville, Minnesota (KXVG), just north of Brainerd, for the airport's annual fly-in breakfast. In part I wanted to prove to myself that I could land and takeoff at Longville on the same day, but I also wanted to show my appreciation for the airport's wonderful hospitality when Peggy and I got stranded with a bad mag en route to Churchill, Manitoba in 2015. Our stop at Longville this year was the beginning of our "First Annual Friendship Tour To Canada."

Downtown Longville is one block from the airport and features a couple of restaurants including Patrick's Fine Dining (218-363-2995). If the airport courtesy car is available, you can drive a few miles east of Longville and enjoy a meal at the Anchorage Inn (218-363-2236). Common Grounds of Longville is a coffee shop (218-363-2292), and Frosty's is the place to go for pizza and ice cream (218-363-2299). Ridgewood Golf Course also has a restaurant (218-363-2444), and there's a casino 25 miles away in Walker.

I urge anyone flying to Longville to call ahead to check on the days and hours each restaurant is open, which can vary depending on the day of the week and season. Also check on the availability of the airport courtesy car by calling or emailing Steve Shallbetter at 218-821-0779 (steveshallbetter@msn.com).

Longville Municipal Airport has a 3549 X 75 ft. paved runway. All proceeds from the fly-in go to support the community through the Longville Chamber of Commerce.

To learn more about the water sports and winter recreation available in Longville, go to [www.longville.com](http://www.longville.com).

Following breakfast, I and fellow pilots Pete, Phil and Mark, departed Longville for Thunder Bay, Ontario (CYQT), where we stayed at the beautiful Valhalla Inn, located adjacent to the airport. By arriving a day early, we could get an early start the next morning to Miminiska Lodge (CPS5), our final destination.

Miminiska Lodge is located 196 nm northeast of Thunder Bay and offers some of the best fishing I have ever experienced in Canada. Its remoteness and private airstrip, 62 miles from any roads, makes Miminiska Lodge especially appealing to aviators and outdoor enthusiasts.

We departed Thunder Bay on Monday, August 8, 2016 with the fastest aircraft in the lead, spacing ourselves 5 to 10



(L/R) Dave Weiman of *Midwest Flyer Magazine* thanked retired Northwest Airlines pilot, Joe Graw of Longville, Minn., for the use of his hangar in 2015, when Weiman's plane broke down en route to Churchill, Manitoba.

Pete Aarsvold Photo



## Miminiska Lodge, Ontario

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

Located on the Albany River Watershed in northwest Ontario, and miles away from the nearest road, Miminiska Lodge offers guests the opportunity to experience the raw beauty of pristine boreal wilderness. Northern Pike and Walleye are caught in abundance.

Miminiska Lodge has a 2400 X 50 ft. turf runway (Rwy 9/27), and is only accessible by air. The airport identifier is CPS5.

miles apart. We stayed in radio contact with one another on 122.75 Mhz, and the weather could not have been better!

Any pilot flying 25 nm beyond their departure point is required by Transport Canada to file a "flight plan," unless a "flight itinerary" is filed with a responsible person who has agreed to notify air search and rescue if their aircraft is overdue.

This year, all pilots in our group called the Wilderness North office in Thunder Bay and filed a flight itinerary with management just prior to departing Thunder Bay, and between the office and the lodge, they kept track of us. Upon our arrival at Miminiska Lodge, the manager notified the Wilderness North office via email that we had arrived safely.

The problem with the flight itinerary is that if we don't show up, Winnipeg Flight Service will not initiate air search and rescue. That responsibility would fall on the shoulders of Wilderness North. So this year we experimented with contacting Winnipeg Flight Service from the air upon our arrival at Miminiska, and found that if we were at least 5000 feet MSL, we could communicate with Winnipeg to cancel our flight plans. Of course the best method to cancel a flight plan is to carry a satellite telephone and cancel on the ground upon your arrival.

The two remote communications outlets in the vicinity of Miminiska Lodge to contact Winnipeg Flight Service are at Pickle Lake (CYPL), 62 nm to the west on 123.475 Mhz, and at Lansdowne House (CYLH), 43 nm to the northeast on 123.375 Mhz. We were able to reach Winnipeg Radio at Pickle Lake, but not at Lansdowne House.

If all else fails, Internet and Skype are also available at the lodge.

After a final check for winds, we made our traffic announcements and touched down at Miminiska Lodge, where we were greeted by their friendly staff that helped us with our gear.

Once settled into our cabins, we had lunch, then rigged our rods for a half-day of fishing, compliments of Miminiska Lodge. Yes, lunch and the first half-day of fishing is part of our special group package!



Mark Peterson of Oregon, Wis., caught the largest Northern Pike at 42 inches in length. *Phil Peterson Photo*

Water levels this year were 18-24 inches lower than usual, but the fishing was the best ever in the 10 years we have been flying there. Mark Peterson of Oregon, Wisconsin caught the largest Northern at 42 inches, and the largest Walleyes were 24 inches in length, caught by both Peterson and Greg Stratz of Fond du Lac, Wisconsin. We are only allowed to keep Northerns under 27 inches in length, and Walleyes under 18 inches, to preserve the quality fishing at Miminiska Lodge. Anything larger is generally not good eating, anyhow.

Miminiska Lodge has 16 ft. Lund boats with 25 hp Yamaha 4-stroke, electric start motors and fish finders. The main lodge has WI-FI Internet, full bar, sauna, billiards, and satellite television. And for those brave enough to go swimming in the brisk, cold waters, I say go ahead!

Meals are professionally prepared and were superb, whether in the lodge or on "Shore Lunch Island."

We woke up each morning with a gentle tap on our cabin door and a fresh pot of coffee. Evening receptions were complimentary!

## Our Flight Home

Those of us who went on the 3-night/2-day trip departed at 9:00 a.m. on Thursday, August 11, 2016 and flew to Pickle Lake, Ontario (CYPL) for fuel – 62 nm west of the lodge.



Pete Aarsvold of Verona, Wisconsin, with one of more than a hundred Walleyes he caught during his stay at Miminiska Lodge.  
*Dave Weiman Photo*



Pilots and their passengers enjoying shore lunch at Shore Lunch Island.  
*Dave Weiman Photo*

Those who chose the 5-night/4-day trip filed IFR via the Internet and flew direct to their chosen U.S. airport of entry on Saturday, August 13.

Upon our arrival at Pickle Lake, which is the largest airport in northern Ontario, and one used extensively by cargo haulers to fly to native Canadian villages throughout the province, we changed our original eAPIS Flight Manifests with U.S. Customs and Border Protection to fly to International Falls,



Walleyes and potatoes cooking on an open fire.  
*Pete Aarsvold Photo*

Minnesota, instead of to Duluth to clear U.S. Customs. The weather in Duluth was reporting ceilings as low as 200 feet and fog and mist on the east end of the airport, and 2000 feet

and good visibility on the west end, while International Falls was reporting scattered clouds, no rain and 10-plus miles visibility.

Prior to departing Pickle Lake, we filed our flight plans with Winnipeg Flight Service, and called U.S. Customs at International Falls to confirm our ETAs. The weather was good enough that we could have flown the 212 nm between Pickle Lake and International Falls VFR, but chose instead to file IFR for greater convenience and advisories. Once we got 170 nm north of International Falls, Winnipeg Center was able to pick us up on radar at 7,000. Again, all aircraft in our group maintained radio contact with one another on 122.75 Mhz.

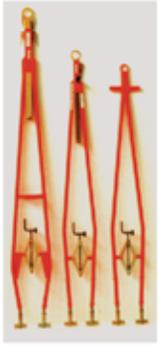
Upon reaching the Canada/U.S. border, Winnipeg Center handed us over to Minneapolis Center, and since we were on instrument flight plans, we already had transponder squawk codes as required to cross the border. Had we flown VFR, we would have had to contact Minneapolis Center or Lockheed Flight Service to get a transponder code prior to crossing the border.

There has been hearsay over the years of pilots who have not contacted either Canada or U.S. Customs at their airport of entry, and others who have not gotten a transponder code before crossing the border. Some may have forgotten... Others have just not followed proper procedures, thinking it does not matter. Especially in these times of post 9-11, and with the highly sophisticated drones flying our nation's borders by Homeland Security, there is no excuse not to follow correct procedures.

Beginning in 2015, U.S. Customs officials at the airports of entry I have used have requested everyone's passports, the aircraft registration certificate, and the pilot's pilot and medical certificates. Prior to this, they never used to request the pilot's medical certificate.

The nice thing about landing at an airport of entry that has a Customs office right on the field is that you can depend on officials always being there, and you are not inconveniencing anyone if you have to change your airport of entry as we did. Otherwise, if you land in Ely, Minnesota, for instance, which is also an official airport of entry, the border agents have to drive from International Falls to meet you. Had we filed to clear at Ely and had to change our airport of entry at the last minute (at least 1 hour notification is required for U.S. Customs, and 2 hours for Canada Customs), a border agent

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Thor Einarson, President of Einarson Flying Service, Falls International Airport - Einarson Field (KINL), International Falls, Minnesota, welcomed participants back to the United States upon their return from Miminiska Lodge, Ontario.  
*Dave Weiman Photo*

would have made the trip for nothing. Both Duluth and International Falls have Customs offices at the airport. To learn more, I encourage you to go on our trip and get a copy of my personal trip-planning checklist.

Thor Einarson and his staff at Einarson Flying Service at Falls International-Einarson Field (KINL) completed our “*First Annual Friendship Tour To Canada*” when they greeted us upon our arrival. We knew we were back in civilization when Thor offered to go to Subway Sandwich and pick up lunch. *Thank you, Thor!*

### Canadian Fishing Fly-Out 2017

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

For 2017, pilots and their passengers will again have their choice of two trips at very reasonable rates: 3-Night/2-Day Trip, August 7 - 10, or 5-Night/4-Day Trip, August 7 - 12.

For special group rates and details, email [info@MidwestFlyer.com](mailto:info@MidwestFlyer.com).

For reservations, contact Lynette Mish at Wilderness North toll free: **1-888-465-3474** ([www.wildernessnorth.com](http://www.wildernessnorth.com)).

The Canadian Fishing Fly-Out To Miminiska Lodge is a service of Wilderness North. Neither *Midwest Flyer Magazine*, Flyer Publications, Inc., nor their staffs and owners, or anyone else affiliated with the magazine, assume any responsibility for the reliance upon the information contained herein or elsewhere, or liability for anyone’s participation on the trips or for the trips themselves. □



Bruce’s Custom Covers were popular this year on the Canadian Fishing Fly-Out To Miminiska Lodge ([www.aircraftcovers.com](http://www.aircraftcovers.com)).

*Dave Weiman Photo*



Miminiska Lodge provides guests with maps showing where each species of fish are located. Guides are optional, but can be helpful.

Miminiska Lodge is located 196 nm northeast of Thunder Bay, Ontario (CYQT) on Miminiska Lake, which is part of the Albany River watershed.





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# Nebraska Nice – The Nebraska Air Trail!

by Yasmina Platt

In the last issue of *Midwest Flyer Magazine*, I talked about developing “air trails” to give pilots (and their passengers) other reasons to fly and bring flying and tourism together. Whether you are a tourist in your own state or traveling out of state on vacation, these air trails offer a great combination of indoor and outdoor activities for all kinds of travelers. Last time we highlighted the Ozarks (in parts



Yasmina Platt

Nebraska is a Midwestern state encompassing the prairies of the Great Plains, the towering dunes of the Sandhills, and the Panhandle’s dramatic rock formations. The “Cornhusker State” is known for its four seasons and friendly, hospitable residents, which is why I titled it “Nebraska Nice.” While the Omaha skyline surprises visitors with its big city feel, part of the real beauty of Nebraska lies in its rural areas (especially while watching a sunset) that spread across the rolling plains.

The proposed route is a circular one to make it easier to follow. We may have identified too many possible stops, but you can start/stop this route from any airport and fly it in any order or direction you prefer. You can also skip and add other stops as you please; these are just suggestions. Fly at your own risk! See attached route map.



Nebraska Air Trail

of Oklahoma, Missouri and Arkansas), and there are air trails available for New Mexico and Texas as well; however, this time, the Nebraska Department of Aeronautics, Nebraska Tourism Commission and I are highlighting Nebraska here.

In its entirety, the state of Nebraska has a far more dynamic topography than one would expect. While it may fit the mark of a “fly-over state” from FL350, it reveals at least four different types of terrain that stand out to those of us at lower altitudes.

The eastern part of the state starts with bluffs along the Missouri River that turn into the rolling hills of the “Bohemian Alps” west of Lincoln. If one flies north or south along the western edge of those hills, you can see where the edge of an ancient glacier once flowed (and flattened the middle part of the state).

The mid-portion of Nebraska is flat plains; however, there are numerous rivers running through the entirety of the state, which are interesting to follow.

The Sandhills’ territory starts about the midway point through the state, with hundreds of bodies of water filled by the Ogallala Aquifer.

The Western portion (Panhandle) has the greatest amount of hills, bluffs, and the beginnings of mountainous terrain. Whether flown from east to west, or west to east, the Panhandle of Nebraska is a striking beginning or end of an enjoyable air tour of this great state.

To read the details of the Nebraska Air Trail or any of the other air trails, visit [www.airtrails.weebly.com](http://www.airtrails.weebly.com). If you decide to fly part or the entire route and use social media, we would love for you to use #NebraskaAirTrail as a hashtag.

Fly safe, fly often, and enjoy the air trails!

*EDITOR’S NOTE: Yasmina Platt is an accomplished pilot and former manager of AOPA’s Central Southwest Region. She now works for AECOM – a global leader in airport infrastructure development providing planning, design, construction, operation, and management support services to a wide range of clients.*

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# International Flying Farmers Names 2016 Scholarship Recipient

SPRINGFIELD, ILL. – Michelle Peterson, 20, of Oregon, Wisconsin, has received the 2016 “International Flying Farmers Memorial Scholarship.” The award was presented at the organization’s 71st Annual Convention, July 17-21, 2016 at the President Abraham Lincoln Hotel in Springfield, Illinois.

The \$4,000 scholarship is given to a member, or daughter or granddaughter of a member, who has completed their sophomore year in college. Peterson will receive \$1,000 per semester for four semesters in her chosen field of study.

Michelle Peterson is a student at the University of Wisconsin in Madison, majoring in nursing with minors in global health and gerontology. Eventually, she hopes to become a nurse practitioner, and continue her education in aviation.



Michelle Peterson

Peterson obtained her Private Pilot Certificate on August 28, 2015. In addition to receiving the scholarship, Peterson received a leather bound bible for being the youngest member to fly to the convention, and an additional \$100 when her name was drawn among pilots who flew to the convention in the “Lucky Pilot Contest.”

Michelle Peterson is the daughter of Mark and Betty Peterson of Oregon, Wisconsin, and the granddaughter of Wisconsin Flying Farmer President Phil Peterson and his wife, Carol, who were recognized for their 25 years of membership in the International Flying Farmers.

The Petersons are fifth generation farmers, and fly their 1996 Piper Archer PA-28-181 throughout North America, the Bahamas, Mexico and Costa Rica from their own airstrip in southern Wisconsin. □

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# Cirrus NOW Presentation In The Twin Cities – Informative & Action-Packed



(L/R) Al Waterloo, Cirrus Regional Sales Director, Chicago Territory, with Cirrus Great Plains Regional Sales Director, Gary Black, and one of several SR22s on the ramp at Key Air, Anoka County – Blaine Airport, Blaine, Minn. *Dave Weiman Photo*



The new Cirrus Vision SF50® personal jet made a grand entrance at the “Cirrus NOW” event, August 28, 2016, at Anoka County – Blaine Airport, Blaine, Minn. *Dave Weiman Photo*

*by Dave Weiman*

BLAINE, MINN. – Cirrus Aircraft chose Key Air at Anoka County – Blaine Airport, Blaine, Minn., for the site of its Twin Cities “Cirrus NOW” presentation, August 28, 2016. Cirrus sponsors these special presentations to showcase their lineup of aircraft including its SR22 piston aircraft and their new Vision SF50® personal jet, soon to be certified. Also on display were a 2017 “Lotus” automobile by Tesla, and the all-electric run-about by Symphony Boats, designed and manufactured in Duluth, Minn.

Music, combined with an informative and entertaining video presentation, demonstrated the excitement, speed, safety and ease of operating Cirrus aircraft to prospective customers.

Cirrus cofounder and CEO Dale Klapmeier made a special appearance, as did one of the Vision SF50® single-engine personal jets undergoing flight tests. The first production Vision SF50® jet completed its inaugural flight in Duluth, Minnesota on May 5, 2016. This flight demonstrated the readiness of the SF50 for FAA certification and subsequent customer deliveries.



Cirrus cofounder and CEO Dale Klapmeier. *Dave Weiman Photo*

There was a full-scale mockup of the jet for guests to climb into and experience. The cabin entrance, located on the left side of the aircraft and directly behind the cockpit, made for easy boarding. The cockpit itself is very roomy.

Speakers included Cirrus Great Plains Regional Sales Director, Gary Black; and Cirrus Vice President of Marketing, Ben Kowalski, who gave an overview of the SR22 and SF50, and the new “Cirrus Vision Center” under construction at McGhee Tyson Airport in Knoxville, Tennessee.

The Vision Center will be the flagship location for all Cirrus Aircraft pilot, owner and customer activities including training, service, support, sales, marketing, delivery, personalization, and fixed base



Cirrus Vice President of Marketing, Ben Kowalski, gave guests an overview of the SR22 and SF50, and described the new “Cirrus Vision Center” under construction at McGhee Tyson Airport in Knoxville, Tennessee. *Dave Weiman Photo*

operations. Customer activities at the Vision Center will encompass all Cirrus Aircraft airplanes, products and services including both the SR series of aircraft and the Vision SF50® jet. Research and development, along with manufacturing operations, will continue to take place in both Duluth, Minn. and Grand Forks, N.D.

Knoxville was selected for its warm weather and central location in the United States. Factory Service Center operations at the Vision Center recently opened, while the remaining customer activities are targeted to commence later this year.

Kowalski noted that Cirrus was founded not only on providing customers an aircraft with designs and comforts equal to some of the finest automobiles in the world, but also with “safety” in mind.

To date, Cirrus owners have deployed the aircraft's ballistic parachute 68 times, allowing 138 people to go home at the end of the day. In recognition of this unique safety record, Cirrus Aircraft was awarded the "Joseph T. Nall Safety Award" in 2016.

Kowalski identified hundreds of updates to the SR models since inception, including the "Level Button," and "Synthetic Vision."



Cirrus owner Pat Kluempke of Minneapolis described his experiences flying his Cirrus SR22 with his wife and fellow pilot, Tracy Lovness. *Dave Weiman Photo*



Duluth hotel owner and entrepreneur, Seth Oliver, uses his Cirrus SR22T to crisscross the country to buy and sell properties. *Dave Weiman Photo*

Other speakers included Cirrus owner Pat Kluempke of Minneapolis who described his experiences flying his Cirrus SR22 with his wife and fellow pilot, Tracy Lovness, and Duluth hotel owner and entrepreneur, Seth Oliver, who uses his Cirrus SR22T to crisscross the country to buy and sell properties.

Among some of Cirrus Aircraft's two largest customers are the Dubai-based "Emirates" airlines, and the U.S. Air Force Academy in Colorado Springs. Both organizations use their Cirrus SR22 and SR20, respectively, for initial flight training.



Minnesota State Highway Patrol officers arrived during the program, landing one of their Bell helicopters on the ramp. The state patrol will soon take delivery of a specially equipped SR22 "Cirrus Perception" to supplement its current fleet consisting of two Bell helicopters and three Cessna 182 Skylanes.

The state patrol has worked with Cirrus Aircraft to install much of the same equipment that is currently installed on the department's helicopters for search and rescue, and traffic and law enforcement, including a thermal imaging camera with an overlay mapping system and recording capability. Microwave downlink equipment, capable of transmitting live video from the aircraft to a receiver site, may be added at a future date.

Pilot/Chief Warrant Officer Jim Englin expects that the cost to operate the Cirrus SR22 will be a fraction of the cost to operate a helicopter, but their helicopters will continue to play an important role in the department.

For more information about the Cirrus SR22 or Vision SF50<sup>®</sup> personal jet, contact Gary Black at 612-810-4712 or email [gblack@cirrusaircraft.com](mailto:gblack@cirrusaircraft.com). □

## AI Waterloo Joins Cirrus Aircraft To Cover Wisconsin & Chicago

DULUTH, MINN. – Cirrus Aircraft has recently named Al Waterloo of Oak Park, Illinois, as its sales manager covering Chicago, Illinois and Wisconsin.

Waterloo started flying at the age of 16 paying his own way for his private pilot certificate. After 4 years of college and flying at the Institute of Aviation at the University of Illinois, Waterloo gained valuable experience flying for the airlines and for a corporation out of Chicago. That experience brought him back into teaching full time and to the Cirrus Aircraft family.

Waterloo first became an independent Cirrus flight instructor, using his own SR20 and starting a flight school. He went on to start a live aviation radio show on the Internet in 2012 called "SimpleFlight Radio" ([www.simpleflight.net](http://www.simpleflight.net)) that features guests who are doing great things in aviation. For additional information, email Al Waterloo at [awaterloo@cirrusaircraft.com](mailto:awaterloo@cirrusaircraft.com). □



Al Waterloo

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# Piper M600 Fast, Furious & Luxurious



Piper M600  
Piper Aircraft Photo

*by Dave Weiman & Mick Kaufman*

APPLETON, WIS. – Piper Aircraft’s newest flagship, the single-engine turboprop M600, was type certified in June 2016. The aircraft was featured at EAA AirVenture Oshkosh in July, when we had the opportunity to take it on a demonstration flight to see firsthand why the M600 is a step up from the M500.

The demonstration flight took place at Platinum Flight Center, Appleton International Airport, Appleton, Wisconsin, which is a reliever airport for Wittman Regional Airport during EAA AirVenture Oshkosh.

We flew with Piper test pilot, Craig Masters, in conforming aircraft #3, which is the last test aircraft flown before the aircraft was certified. Masters is a graduate from Embry Riddle University in Daytona Beach, Fla. He gave us a thorough preflight briefing, pointing out some of the unique features of the M600, like the “clean sheet” wing design, and the tail, fuselage and engine mount that have been beefed up. Another unique feature of the M600 is a “turning vane” on the tail to help in spin recovery.

Masters said that Piper had to perform 1,000 spins during flight-testing to prove that the aircraft could recover satisfactorily. There are thousands of other test points involved in getting an aircraft certified. Spin testing is just one of them.

Boarding the M600 is a breeze, and passenger comfort is superb. It does take a little getting used to climbing into the cockpit, because the M series is built for speed.

The aircraft features the Garmin G3000 – the most sophisticated general aviation avionics suite available from Garmin, along with dual Garmin GTC 570 touch screen controllers. Once this technology is mastered, flying the M600 is a piece of cake!

The M600 seats six and is powered by a Pratt & Whitney PT6A-42A turbo prop engine flat rated at 600 shp.

The M600’s maximum range, originally expected to be 1200 nm with NBAA IFR reserves and 260 gallons of useable fuel, has been increased to 1,484 nm. Additionally, the

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The Piper M600 features the Garmin G3000 – the most sophisticated general aviation avionics suite available from Garmin – along with dual Garmin GTC 570 touch screen controllers. *Dave Weiman Photo*



*Midwest Flyer Magazine* Contributing Editor Mick Kaufman behind the controls of the Piper M600. *Dave Weiman Photo*

planned maximum cruise speed objective of 260 ktas has been extended to 274 ktas. The M600 also boasts a max payload of 1,120 lbs, and weighs less than anticipated at 3730 lbs empty, and 6000 lbs for maximum takeoff.

The M600 is perfect for a family plane, or small to medium size corporation, and can be the perfect complement to any large corporate flight department with jets.

The closest competitor of the M600 is the TBM 900, which costs approximately \$1 million more than the M600. The M600 is also competing with the Cessna Citation Mustang market. Masters says that Cirrus and Beechcraft Baron owners will look at the M600 as a step up.

So how does the M600 handle? Very smooth! We flew right seat from Appleton to Clintonville, Wisconsin to practice our landings. No need to climb to its maximum ceiling of 30,000 feet for the demo flight.

We made our approaches at 110 kts with approach flaps, and over the fence at 85 kts with full flaps. The landing distance over a 50 ft. obstacle is 2125 feet. The rate of climb at sea level is 1539 fpm.

The M600 has enhanced safety features including Emergency Descent Mode, Electronic Stability Protection, Level Mode and Underspeed/Overspeed Protection.

A unique feature of the autopilot is a “Jesus Button” that will command the autopilot to engage and return the aircraft to level flight if steep banks or excessive pitch is detected for more than a few seconds.

Additional standard equipment includes Flight Into Known Icing (FIKI), PiperAire air conditioning, yaw damper system (integrated with GFC 700), hardwired cockpit Bose A20 Headsets, and six USB charging ports (two cockpit, four cabin). The aircraft comes with a 5-year warranty on the avionics, and 7-year/2500-hour warranty on the powerplant. The 2016 M600 is listed at \$2.853 million.

The aesthetics, ergonomics and technologies of the new Piper M600 features newly styled seats, which have been

optimized for comfort, as well as enhanced side panels with improved passenger interface. Additionally, three new color palettes have been created with the customer in mind. Some of the M600’s features most appreciated by customers include USB charging ports, executive folding tables, and folding seats.

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The aesthetics, ergonomics and technologies of the new Piper M600 features newly styled seats, which have been optimized for comfort, as well as enhanced side panels with improved passenger interface. Additionally, three new color palettes are available.

*Piper Aircraft Photo*



One of the unique features of the Piper M600 is the “clean sheet” wing design.

*Dave Weiman Photo*

Piper Aircraft is ramping up to build one M600 every week, and every aircraft has been presold for the next year.

The single-engine M-Class series – the M600, M500, M350 and Matrix – offers businesses and individuals elegant performance and value. The Twin Class Seneca V and Seminole balance proven performance, efficiency and simplicity in twin-engine aircraft. The Trainer Class Warrior, Archer TX, Archer DX, Arrow, Seminole and Seneca V form the most complete technically-advanced line of pilot training aircraft in the world. All Piper



airplanes feature advanced Garmin avionics.

Service and support is offered through a network of 38 dealers and nearly 100 service centers worldwide. Des Moines Flying Service and Chicago Piper serve customers in the Midwest. For additional information, and sales and service call 800-622-8311. For parts call 800-247-2560.

Piper Aircraft Inc. is headquartered in Vero Beach, Fla. Simon Caldecott, President and CEO ([www.dmfs.com](http://www.dmfs.com)). □

The Piper M600 has a “turning vane” on the tail to help in spin recovery. The aircraft had to endure 1,000 spins during flight testing to prove that the aircraft could recover satisfactory.

*Dave Weiman Photo*

## More Updates At ForeFlight

The latest version of ForeFlight Mobile is now available for download at the App Store. This update – the second of the year – brings a more powerful mapping system with track up and north up orientations. Maps now fly on newer hardware and even perform better on the original iPad. ForeFlight also refreshed the iPhone app, providing pilots a choice between two menu styles: a “Slider” style, for those who prefer a way to quickly switch between views; and a “Grid” style, for those who prefer the Classic ForeFlight menu style.

Other recent ForeFlight news include the release of its Military Flight Bay extension for military aviators, and ForeFlight’s inclusion in Frontier Airlines Electronic Flight Bag program ([www.foreflight.com](http://www.foreflight.com)). □



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## Illinois Congressman Hosts Roundtable On GA

PEORIA, ILL. – Illinois Congressman Darin LaHood hosted a General Aviation Roundtable, August 23, 2016, at Mount Hawley Auxiliary Airport in Peoria, Illinois, to bring together general aviation stakeholders and pilots to discuss the transportation issues facing small airports, rural areas, and the GA community. LaHood



Illinois Congressman Darin LaHood

partnered with the Aircraft Owners & Pilots Association (AOPA), which represents 9,000 aircraft owners and pilots across Illinois, 750 of whom reside in LaHood's 18th District.

"General aviation allows businesses to efficiently transport people, goods, and products across the nation, and is therefore responsible for \$219 billion in total economic output in the United States and \$37 million in the 18th District of Illinois. These pilots and the airports and facilities they utilize connect rural communities with larger hubs of transportation, improving access to medical care and expedited travel," stated Rep. LaHood. "Today's tour and forum provided an important opportunity for me to learn how federal government can support the industry as its members facilitate economic growth and job creation. As Congress continues to debate a long-term extension of the Federal Aviation Administration, it is invaluable for me to hear directly from local general aviation pilots to represent their perspective in Washington. Thank you to all who came out to participate."

In attendance was AOPA Senior Director of Legislative Affairs Scott Verstandig, who shared, "General aviation supports 42,400 jobs and contributes more than \$9 billion in output to the Illinois economy, and as a member of the general aviation caucus, Congressman Darin LaHood understands this well. We appreciate Rep. LaHood for taking the time to meet with AOPA members to discuss what can be done to protect and promote general aviation and all its benefits in Illinois."

Gene Olson, Director of Airports for the Metropolitan Airport Authority of Peoria, also shared his perspective on the importance of the event stating, "I am very pleased and excited that Rep. LaHood met with Central Illinois pilots at the Mt. Hawley Airport today. It shows his interest and

support of general aviation and his understanding of the importance of Mt. Hawley to the development and economic health of the Peoria area. Mt. Hawley supports all of the aspects of general aviation activity, including corporate, business, law enforcement, medical, pipe line and power line patrol, flight training, and also recreational flying. With nearly two-thirds of airline pilots coming from the ranks of general aviation, airports like Mt. Hawley are important for economic growth and for the future of tomorrow's pilots. We extend a hearty thanks to Congressman LaHood and to the Aircraft Owners and Pilots Association for hosting the event, taking the time to visit the airport, and providing an opportunity for area pilots to provide him with input and feedback."

Congressman Darin LaHood serves 710,000 constituents across 19 counties throughout Central and West-Central Illinois' 18th Congressional District. □



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# Bonanzas To Oshkosh XXVII – The Super Bowl 27 In The Sky!



Beechcraft Bonanzas and Barons line up for takeoff at Rockford International Airport, Rockford, Ill. (KRFD).

*Laura Jones Photo*

ROCKFORD, ILL. – Each year in late July about 100 Beechcraft Bonanzas and Barons assemble in Rockford, Illinois (KRFD) and fly in the world’s largest formation of civilian aircraft to the world’s greatest celebration of aviation – EAA AirVenture Oshkosh, Wittman Regional Airport (KOSH), Oshkosh, Wisconsin.

Bonanzas to Oshkosh (B2OSH) began in 1990 when Wayne Collins and a few friends decided the only way to ensure camping together was to arrive together in formation.

Wayne Collins led Bonanzas to Oshkosh until 2001 when Elliott Schiffman took over the reins. During Elliott’s tenure, B2OSH established a nationwide network of regional training sessions. Organized practices led to ever-improving B2OSH flights and added a wonderful layer to the social fabric. In 2007, Larry Gaines slid into the left seat.

Today, their focus remains firmly fixed: pilots flying the best general aviation airplane, camping together in friendship and camaraderie. The formation arrival is their means of accomplishment.

Their requirements are membership in the American Bonanza Society (ABS) and Experimental Aircraft Association (EAA), and demonstration of basic formation competence in the preceding six months. They cannot stress too strongly that this event focuses on friendship, camaraderie and a grassroots structure. First-timers are encouraged to walk up to any cluster of pilots and friends, introduce themselves, and join in. Organizers say that this is how friendships are made. Everyone has a common interest.

The camaraderie of the Bonanzas to Oshkosh crowd has led to other same-type mass arrivals. B2OSH supports the efforts of the Mooney Caravan, Cessnas to Oshkosh, and Cherokees to Oshkosh, making the “North 40” a truly special place to be in late July each year. This year’s event took place

on July 23, 2016.

Members of Bonanzas to Oshkosh participate in clinics nationwide, where Bonanza & Baron pilots can get free training.

The clinics have become another layer in a network of friendship and camaraderie. Their annual gathering has put together people who have become lifelong friends.

The B2OSH group gathers in Rockford, Illinois the day before the flight. They have a hangar party that evening the night before AirVenture opens.

There were 115 Bonanzas and Barons that participated this year. One aircraft flew ahead as a weather scout, and there were two mechanical aborts, reducing the number to 112 aircraft in the formation. Upon their arrival, the group partied again with endless pizzas and margaritas, courtesy of Kevin O’Halloran. A total of 150 pizzas were delivered this year, and 30 gallons of margaritas were consumed. On Sunday, the group had a bigger party with a catered buffet.

“The formation flight is very tame,” says B2OSH leader, Larry Gaines. “We take off three abreast, then separate to about five wingspans out for the en route segments. Each element’s leader and left wingman land on their own side of the 150-ft. wide Runway 36 Left at Wittman Regional Airport. It’s the same as if each pilot is landing on his own 75-foot wide runway. Our guys have pride, so we train to accomplish nice-looking element landings, but if they’re not airshow perfect, they are safe regardless. The right wingman lands single ship on 36 Right.”

For additional information email [larryg@b2osh.org](mailto:larryg@b2osh.org), or see the B2OSH website: [www.b2osh.org](http://www.b2osh.org).

*EDITOR’S NOTE:* Thanks to Greg Stratz, Larry Gaines, Pete Farrell, Matt Mullahy, Rob Hardcopf, and Laura Jones for the information and photo used for this article. □

# Snowbirds At Oshkosh 2016

*Photos by Chris Bildilli*



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# Martin Mars Makes Massive Impression On The Masses At EAA AirVenture Oshkosh 2016



The Martin Mars at the EAA Seaplane Base on Lake Winnebago.  
*EAA Photo*

**T**he military demonstration teams usually command the most attention at airshows, and rightfully so. To take a group of jet fighters and perform precision formation aerobatics is simply amazing! But there have been a few civilian acts that have rivaled the teams, like the late airshow performer Jimmy Franklin and his jet-powered Waco. Jimmy's act had uniqueness, unbelievable maneuverability, and the sounds of both a vintage biplane and jet fighter. He was definitely one of the great all-time performers in the history of the airshow entertainment industry, and his acts caught the attention of millions of spectators for decades.

This year the 64th annual Experimental Aircraft Association fly-in convention in Oshkosh, Wisconsin, July 25-31, 2016, featured the Canadian Snowbirds, numerous and impressive modern military jet fighters, and an outstanding warbird display. But it was the gigantic "Martin Mars" water bomber that captured the attention of spectators the most for its uniqueness and massive appearance.

The Martin Mars is the largest flying boat ever flown operationally, with a height of 38 feet, a length of 120 feet, and a wingspan of 200 feet (approximately the wingspan of a Boeing 747). Only six of the massive aircraft were built, with Coulson Flying Tankers of Port Alberni, British Columbia, owning the two remaining examples since 2007. Coulson has put the aircraft to work as a water bomber fighting forest fires throughout the western United States, Canada, and Mexico.



Inside the cockpit of the Martin Mars. The avionics have been upgraded to equal those of a modern transport.  
*EAA Photo*

"Among flying boats, only the legendary Spruce Goose is bigger, but the Martin Mars is the largest ever to be operational on a regular basis," said Rick Larsen, EAA's vice president of communities and member programs who coordinates features and attractions at AirVenture.

The Martin Mars first flew in 1942 and was originally built as a long-range U.S. Navy troop and freight transport to fly between the continental U.S. and Hawaii. The conversion to water bombers gave the aircraft the ability to carry as much as 7200 gallons of water, enough to cover 4 acres of land in a single pass. When picking up water, the Martin Mars can ingest more than a ton of water per second as it skims across a waterway.



Inside the Martin Mars.  
EAA Photo

“This is the last flying Mars in the world and the largest warbird ever built,” said Wayne Coulson, chief executive officer for Coulson Flying Tankers, who recognized the importance of AirVenture as a great venue to showcase the aircraft.

This was the Martin Mars’ first trip to Oshkosh, and because the aircraft is a true flying boat, it could not land at Wittman Regional Airport. Instead, it landed at nearby Lake Winnebago and parked near the EAA Seaplane Base. Visitors could go to the lake in hopes of witnessing its operations there, and see it moored in the bay, and watch it perform water-bombing demonstrations during the daily airshow at Wittman Field.

What aircraft can attract more attention than that? Let’s see what EAA comes up with next year. □



The Martin Mars performs a water bombing demonstration at EAA AirVenture Oshkosh 2016.  
Chris Bildilli Photo



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*Story & Photos by  
Jim LaMalfa*

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Douglas A-210 Havoc "Silver Dragon."

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Russian MiG-17



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Amid the night airshows, rock bands and fireworks at EAA AirVenture Oshkosh 2016, July 25-31, there sounded a serious note that should not be ignored; the contributions that our American industry and military have made to allow us to remain the home of the free and the brave, especially the aircraft designed and built since World War I. There were plenty of reminders at this year's fly-in at Wittman Regional Airport (Wittman Field), Oshkosh, Wisconsin, the airport named in honor of airport manager, fixed base operator, aircraft designer, famed air racer, and EAA Young Eagles volunteer pilot, Steve Wittman, at the event founded by his friend, EAA founder, Paul Poberezny.

The fact that by FAA rules, we can build our own aircraft from scratch, kits or restore a certified aircraft, including warbirds, is due to the efforts of Paul who started the organization in his basement in 1953 with a little help from his friends.

When I visited Wittman Field in July, I was reminded of our precious heritage of freedom as I chatted with people from all walks of life, including members of the U.S. Navy who had served in the submarine corps, and one man who had served in World War II aboard the aircraft carrier USS CVB-42 Franklin D. Roosevelt. Reminders of the role of aircraft in defense of our country were everywhere, including personally-owned warbirds, private collections and those owned by the Commemorative Air Force (CAF) and EAA.

If you were able to visit the seaplane base on Lake Winnebago, you would have seen the "Martin Mars" flying boat moored down in the bay. The aircraft also performed flybys and water bombing demonstrations each day during the airshow.

The Martin Mars did yeoman duty during World War II in the Pacific as a cargo plane, and was used in the search and rescue of downed carrier pilots. The huge four-engine aircraft is not amphibious, so it could not land at the airport. Only six were built and two have survived, which have been used as water bombers to fight forest fires. Four 3000 hp Pratt & Whitney R-4360 engines power the aircraft.

One of the popular events at the weekend airshow was the "Tora, Tora, Tora" simulated Japanese attack on Pearl Harbor, December 7, 1941. The U.S. Navy aircraft flown in the reenactment – Vought F4U Corsairs, Grumman TBMs and Curtiss SBC Helldiver torpedo biplanes – are all genuine, but the Japanese aircraft are remnants of the 1970 motion picture,

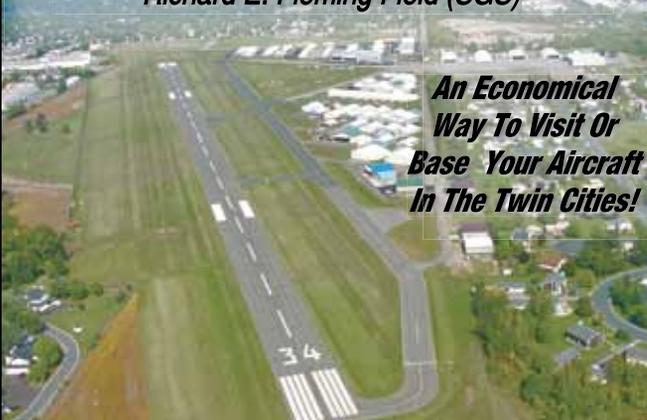


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“Tora, Tora, Tora” (Tora means “tiger” in Japanese). AT6 North American Texans, Convair BT-15s and Vultee BT-13 trainers were modified to resemble the original Japanese aircraft.

There were a number of World War I warbird replicas on display midfield by the Red Barn, as were two-third-scale replicas. The engines were run up and one could smell the castor oil component of the fuel as rotary engines required mixed fuel and lubricant like model airplane engines do today. A number of liaison and observation light aircraft were on display, such as the Piper L4, Stinson L1 and Taylorcraft L2. I had the pleasure of flying the Piper L4 when I was a member of Civil Air Patrol before the Air Force replaced the aircraft with the military version of the Cessna 172, the C41.

Although chilly in cold weather, the Piper L-4 “Grasshopper” had excellent visibility. During World War II, their pilots would fly over the battlefield armed only with a Colt 45 semi automatic handgun, strapped to their hip. Ground troops learned not to fire on the Grasshopper as they would immediately call in artillery strikes. They were also able to take off and land on a platform attached to a military truck when the vehicle could match the takeoff speed of the aircraft – a stunt that is sometimes demonstrated at airshows today with Piper Cubs.

The weather was ideal – not too warm – and the humidity was lower than the previous week. Weather in Wisconsin can change suddenly, as pilots in the dairy state are well aware of.

### Certified GA Aircraft



Diamond DA42

Near the main entrance to Wittman Field’s display area, I encountered a Diamond DA42 twin-engine piston aircraft on a pole. The Diamond DA42 is powered by two turbo charged AE300 Mercedes Benz diesel engines, rated at 168 hp, that burn Jet A fuel. The seven-place twin is a carbon



AE300 Mercedes Benz turbo-charged engine.

fiber composite, and comes with a full Garmin glass cockpit. Performance is Vne 188 kias, high-speed cruise is 190 kts, and range is 1273 nm at 50 percent power. The DA42 has a certified ceiling of 18,000 feet, and it climbs at 1169 fpm at 92 percent power.

The DA62 has higher performance based on its two 180 hp Austro AE330 turbo charged diesel engines. The DA62 will cruise at 205 kias, and has a ceiling of 20,000 feet. Diamond Aircraft is based in London, Ontario, Canada.

Cessna/Hawker/Beech-Textron, a corporate conglomerate made up of legacy aircraft manufacturers, displayed various Beech twins and Cessna Citations. I chatted with Nikki



Cessna Citation

Rieman about the Citation M2, which cruises at 404 kts at 41,000 feet, has a maximum range of 1550 nm, and can carry seven passengers.

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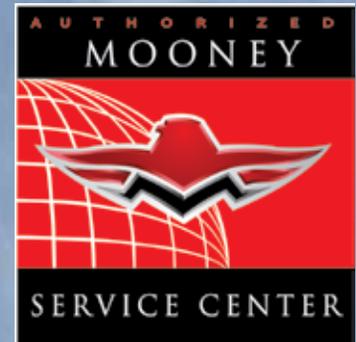
The Cessna 206 Turbo Stationair features six-place seating, a full-glass cockpit, a large cargo pod under the cabin, a 310 hp Lycoming TIO-540 engine, cruises at 164 kts, and has a range of 703 nm at 26,000 feet. Also on display was a model

of the new Cessna Denali, a high-performance single-engine propjet, plus a mockup of the cabin, which got a lot of attention.



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Cirrus SF50 Vision Jet



Cirrus SR22

I spoke to Matt Bergwell of Cirrus Aircraft and he pointed out that the company already has 600 orders for the Vision SF50<sup>®</sup> personal jet, which is expected to be certified in the not-too-distant future.

Cirrus is headquartered in Duluth, Minn., with another factory in Grand Forks, North Dakota, and a new sales and service center nearing completion in Knoxville, Tenn. *Way to go, Cirrus!*

### International Aerobatic Club

The International Aerobatic Club (IAC) building is situated midfield along the walkway parallel to Runway 18/36. On display there was an Extra 330LX, which is flown by aerobatic champion and airshow performer, Patty Wagstaff.

### Homebuilt & Light Sport Aircraft

If you can't afford a North American P-51 Mustang, you can build a two-third scale "kit version" for a fraction of the cost called "Blue Thunder."

In the section of Wittman Field reserved for kit built and Light Sport Aircraft is Zenith Aircraft, which claims you can build their quick-build aircraft in two weeks. Okay, I took five years to rebuild a Piper PA22 Tri-Pacer, but Zenith kits contain jigs and predrilled and cut sheet metal, plus the Cleco clamps needed for shooting rivets, and Zenith just might throw in two weeks of training. So yes, a beginner MIGHT be able to build a kit in two weeks. That was Zenith's claim

for their CH 750 Cruiser. ICP was offering a basic VFR "Savannah S" SLSA kit for the fly-in special price of \$71,950 complete! Not bad, but you can buy a number of used certified legacy aircraft that will carry four people for the same amount of money, and they are ready to fly!

Fischer Flying Products, Ontario, Canada, displayed their kit-built ultralight fuselage and wing from Horizon. This is an all-wood aircraft that looks like a giant model aircraft.

If you ever had the opportunity to visit the Bellanca Aircraft plant in Alexandria, Minnesota and toured their assembly line, you would have seen wings made just like Fisher's, but skinned with fine veneer. Very strong, but you might not want to tie the aircraft down in the rain if you own a Triple Tail Cruisemaster or Viking.

Sonex of Oshkosh, Wis., is still going strong with their Sonex-B and Waiex-B kits, and their SubSonex quick-build mini jet for \$42,000.

Thus ends our tour of AirVenture for 2016. Bear in mind that there were literally thousands of booths and almost 800 show planes, plus 10,000 general aviation aircraft that flew into Wittman Field, so relax, take off a week, camp or try to find a motel that isn't booked 10 years ahead, and make plans now to attend EAA AirVenture Oshkosh 2017, July 24-30 ([www.eaa.org/en/airventure](http://www.eaa.org/en/airventure)).



Patty Wagstaff's Extra 330LX



The replica P-51 Mustang "Blue Thunder."



Zenith CH 750 Cruiser



Sonex-B



EAA Seaplane Base - Oshkosh, Wisconsin  
Peggy Weiman Photo

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## Log Cabin Airport Fly-In Raises Money For St. Jude Children's Research Hospital... Midwest Flyer Magazine Challenges Others To Do Likewise!



Judie Ohm and Doug Ward display the book "Turret Tales," and the issue of *Midwest Flyer Magazine* in which they were featured on the cover.

by Dave Weiman  
Photos by Phil Peterson

MONDOVI, WIS. – Doug Ward and Judie Ohm – owners of Log Cabin Airport (WS69) in Mondovi, Wisconsin – were featured on the cover of the August/September 2016 issue of *Midwest Flyer Magazine*. Ward was a ball turret gunner on a B-17 Flying Fortress during World War II. Ohm is the author of the book "Turret Tales," which describes Ward's experiences. Together, they hosted the 30th anniversary of

the Log Cabin Airport Fly-In, September 4, 2016 – an all-day event that drew hundreds of pilots and local citizens.

In addition to autographing their book, Ward and Ohm autographed 100 copies of *Midwest Flyer Magazine* and suggested a \$10.00 donation to **St. Jude Children's Research Hospital**. The magazines were numbered 1 thru 100 to make them more of a keepsake! St. Jude Children's Hospital provides free medical care for children with cancer and other life-threatening diseases. The hospital, which was founded by entertainer Danny Thomas in 1962, is also a leading research hospital for childhood diseases.



Visitors enjoyed hotdogs and all the fixings.



The buildings at Log Cabin Airport resemble an old country town and include a barber shop and general store.

If you were not able to attend the Log Cabin Airport Fly-In and make a donation there, you are encouraged to donate to the hospital by phone by calling **800-805-5856** or online at [www.stjude.org](http://www.stjude.org), or by mailing a check or money order to **St. Jude Children's Research Hospital, 501 St. Jude Place, Memphis, TN 38105 USA.**

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*Midwest Flyer Magazine* will cooperate with any airport, business, flying club or aviation organization that wishes to raise money for St. Jude Children's Research Hospital, through publicity and donations of magazines when appropriate.

For additional information email [info@midwestflyer.com](mailto:info@midwestflyer.com) or call 608-772-1776.

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## Thunderbird Aviation Hosts Minnesota Trades Annual Membership Meeting

EDEN PRAIRIE, MINN. – Thunderbird Aviation at Flying Cloud Airport in Eden Prairie, Minn., hosted the annual meeting of the Minnesota Aviation Trades Association (MATA), August 18, 2016. MATA Treasurer Nancy Grazzini-Olson, President & CEO of Thunderbird Aviation and Academy College, welcomed members and invited guests. MATA Secretary Dave Weiman of *Midwest Flyer Magazine* chaired the meeting on behalf of MATA President Greg Reigel who was unable to attend. Other board members present included MATA Vice President Alison Wynne of Hays Companies, Minneapolis, Minn.; Dick Cross of Cirrus FBO, Anoka County – Blaine Airport, Blaine, Minn.; Butch Detjen of Airways Aviation Center, Grand Rapids, Minn.; and Doug Evink of Tanis Aircraft Products, Blaine, Minn.

Special guests included Cassandra Isackson, Rick Braunig and Kathy Vesely of the Minnesota Department of Transportation Office of Aeronautics; Gary Schmidt and other officials of the Metropolitan Airports Commission; and Gordon Hoff of the Minnesota Business Aviation Association.

Association accomplishments over the past year included holding bimonthly board meetings via teleconferencing, which has enabled all directors to participate, regardless of their location and business schedules.

The MATA Advocacy Committee has worked at both the state and federal levels in a joint effort with the Minnesota Business Aviation Association (MBAA) and Minnesota Council of Airports (MCOA). Such efforts included a delegation that traveled to Washington, D.C. on February 2-3, 2016, to discuss current issues facing general aviation with members of Congress. The three organizations then led a statewide effort to meet with state legislators at “*Minnesota Aviation Day At The Capitol*” on March 16 to brief them on issues facing general aviation closer to home. Further advocacy efforts included quarterly meetings with representatives of the Metropolitan Airports Commission (MAC) to learn of MAC initiatives and address MATA member concerns.

Other MATA initiatives during the past year have included redesigning the MATA website and Facebook Page, promotion of MATA’s scholarship program, and supporting FAA Authorization and the Pilots Bill of Rights II.

Alison Wynne, chairman of the MATA Scholarship Committee, presented this year’s \$2,000.00 scholarship to Andrew Schmidt of Grand Rapids, Minn. Schmidt has been working as a wildland firefighter for multiple state and federal agencies across the U.S. He has been inspired by the work being done by firefighter and emergency search and rescue pilots, and plans to pursue a career as a flight instructor to encourage young people to pursue those professions.

While in high school and as an exchange student in Norway, Schmidt volunteered with the Norwegian Red Cross as an avalanche patroller, and upon returning to the U.S., volunteered with a local first responder group.

Schmidt holds a degree in Forestry Management from the University

of Wisconsin-Stevens Point, and has now become an Emergency Medical Technician (EMT), and a first aid and Cardiopulmonary Resuscitation (CPR) instructor.

“As an EMT, ski patroller, and member of a search and rescue team, I have witnessed how emergency personnel can be repelled from a helicopter, and how patients can be flown from rugged, remote locations to hospitals for treatment,” said Schmidt. “I have also seen how fixed-wing aircraft are used as air ambulances in rural communities.” Schmidt has recently returned to Minnesota and continues to work as a wildland firefighter, and member of the Civil Air Patrol.

Dave Weiman presented MATA’s “Meritorious Service Award” to Darrell Eugene Bolduc of Bolduc Aviation Specialized Services, and acknowledged his contributions to MATA as a past officer and board member, and to the aviation community. Bolduc and his wife, Devra, have recently sold the business, located at Anoka County – Blaine Airport in the Twin Cities, to long-time employees, Kevin Dunrud and Tim Hied.

Weiman said that the name “Bolduc” resonates throughout the aviation community as a quality aircraft engine rebuilding company, and will for many years to come, thanks to the expertise of technicians Bolduc has mentored.

Bolduc has been in business for 37 years beginning in 1979 when he purchased an aircraft engine rebuilding business from Jack Sandberg, which at the time was located near Minneapolis-Crystal Airport. After four years, Bolduc



L/R) MATA Scholarship recipient, Andrew Schmidt of Grand Rapids, Minn., with Devra and Darrell Bolduc of Bolduc Aviation Specialized Services, located at Anoka County – Blaine Airport, Blaine, Minn. Darrell Bolduc received MATA’s “Meritorious Service Award” for his service to the aviation community. *Dave Weiman Photo*

moved to his present location at Anoka County – Blaine Airport in 1983.

Bolduc Aviation Specialized Services include, but are not limited to, engine rebuilding and repair to factory zero-time specifications; precision electronic crankshaft balancing; cylinder overhaul and repair; Continental starter adapter overhaul; cleaning of all engine parts; engine balancing; cylinder grinding (.010, .015); rebush and line boring of counterweight bushing; rebush and boring of connecting rods and rocker arms; overhaul of magnetos, starters, float-type carburetors and turbo controllers; magnaflux and zyglro inspection of parts; and ultrasonic inspection of Continental crankshafts ([www.bolducaviation.com](http://www.bolducaviation.com)).

Gordon Hoff of the Minnesota Business Aviation Association emphasized the importance of “*Aviation Day At The State Capitol*,” even at a time when there are no pressing issues.

Hoff noted that 10 percent of the legislature will be new in 2017, and it is important to remind new members of the role general aviation plays in the state.

Hoff also discussed the need for a GA Caucus in Minnesota, and stressed the importance of all three professional state aviation organizations to show unity and to speak as one voice.

Other speakers at the annual meeting included Cassandra Isackson of the MNDOT Office of Aeronautics, and Gary

Schmidt of the Metropolitan Airports Commission (MAC). Isackson said that her office has returned to EAA AirVenture Oshkosh with a booth and forum presentation, and welcomed the participation of airport managers from throughout the state to help man the booth.

When asked if there would be any MAC reliever airports available to aircraft not equipped with ADS-B out after 2020 when the FAA equipment mandate goes into effect, Schmidt believed that both Airlake and Lake Elmo airports would be available, but hoped that the mandate will not be a problem for aircraft owners and aviation businesses at MAC airports.

The MATA Nomination Committee chaired by Olson presented a slate of three candidates to fill three board positions including Mike Beard, Greg Reigel and Dave Weiman. A voice vote was taken, and all nominees were unanimously elected for three-year terms.

Doug Evink moved to adjourn the meeting. Seconded by Bill Mavencamp. Motion carried.

MATA strives to be the voice of the Minnesota aviation industry. Through its nine-member board of directors, MATA assists members in building ethical, strong, and competitive aviation businesses. MATA scholarships help create tomorrow’s aviation professionals. Above all else, MATA works to grow general aviation - locally, statewide, and nationally ([www.mata-online.org](http://www.mata-online.org)). □

## MATA – Investing In The Future!

**One goal of the Minnesota Aviation Trades Association (MATA) is to invest in future aviation professionals through “MATA’s Scholarship Program.”**

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**Greg Reigel**  
President  
MATA



**Caitlyn Brady**  
MN State Univ-Mankato  
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Recipient

**MATA – The Choice & Voice of Aviation Businesses Since 1945**

# Aeronautics Report

Wisconsin Bureau of Aeronautics  
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## Best Ways To Prevent Runway Incursions

by Zach Schabla

Chief Pilot & Aviation Safety/Pilot Training Manager  
WisDOT Bureau of Aeronautics



Zach Schabla

Each year general aviation pilots account for the vast majority of runway incursions. Results can be disastrous when airplanes, vehicles, or people are in the wrong place at the wrong time. Pilots are responsible for their safety and the safety of their passengers.

Before keying the microphone, listen and allow yourself to develop an awareness of the current traffic conditions. Plan ahead and anticipate the clearance you will receive from air traffic control (ATC). If the clearance is different than expected, make sure you understand it clearly. Ensure the clearance doesn't pose a traffic threat. Controllers are highly skilled, but not superhuman. If you're unsure of your position or clearance, don't move the airplane.

We all know there are inherent risks when taking to the sky. Our duty in the cockpit is nothing more than recognizing these risks and mitigating them to the best of our ability. Here are the top ways to prevent runway incursions:

### See "The Big Picture"

Safely getting in and out of airports can feel like an intricate dance, coordinated by ATC, involving pilot, aircraft and an ever-changing environment. The goal is to not step on any toes and to ensure your toes don't get stepped on. As pilots, not only do we need to keep our eyes outside the aircraft for potential traffic threats, it is imperative to listen to truly understand the whole story. Monitor both ground and tower communications when possible and visualize what you hear over the radio on your airport diagram.

In the age of ForeFlight and numerous other electronic flight bags (EFB), there's really no excuse for not having a current airport diagram within reach. However, these devices can be distracting and can dangerously shift our attention inside the cockpit for long periods. Prior to use in the airplane, sufficient time should be spent getting familiar with

the operation of your EFB at home.

Seeing the big picture becomes clearer through effective resource management. Whether you are a single pilot or flying with another qualified pilot in the right seat, managing the high workload during taxi, takeoff and landing can be a challenge. Be familiar with the operation of radios and EFBs; listen and look carefully to enhance your situational awareness. Ask your fellow pilot or passengers to help you search for traffic hazards and query ATC if you are unsure of instructions or something just doesn't sound right. With the big picture in mind, you'll be far better equipped to anticipate hazards and avoid incursions.

### Transmit Clearly & Copy Clearances

Clear communication is essential to avoiding runway incursions. At towered airports, always write down clearances and instructions as they can change frequently. Make your read back complete and easy to understand. Being clear and concise not only keeps you and ATC on the same page, but also aids other pilots in their situational awareness and ability to anticipate your movement around the airport.

If your radio is garbled, try switching radios and check that there are no large obstructions between you and the control tower that may cause interference. If a malfunctioning radio persists, delay the flight until maintenance can be done. Pushing your luck with an unreliable radio greatly increases the potential for miscommunication.

At non-towered airports stick to the phraseology recommended by the Aeronautical Information Manual (AIM) to reduce frequency congestion and remember that some aircraft may not be equipped with a radio. In these environments it is vital to scan the traffic pattern and final approach path for traffic prior to crossing the hold markings onto a runway. Do not assume traffic is not there just because you don't hear it.

### Listen Carefully & Maintain A Sterile Cockpit

It's easy to let radio chatter slip into the background when we are running checklists and briefing passengers. If you find

this is occurring, turn up the volume or pause your briefing until you've taken note of traffic movement around you.

Certain aspects of piloting require reacting immediately and automatically from muscle memory. Reading back and executing a clearance should never be done in this way. The assumption that you will receive the "same old instructions" from the controller is an attitude of complacency and it can be deadly.

Maintaining a sterile cockpit during all taxi, takeoff and landing operations will allow for clear communication between pilot and controller. The airlines make thousands of flights each day to and from the nation's busiest airports, yet they are responsible for far fewer runway incursions than GA. This can largely be attributed to the airlines' strict adherence to procedures and sterile rules.

### **Maintain Situational Awareness & Admit When Lost**

In Fayette County, Kentucky on the morning of August 27, 2006, Comair Flight 5191 was assigned runway 22 for departure from Blue Grass Airport. The crew lost situational awareness during taxi and the regional jet attempted to depart Runway 26 instead. Runway 26 was too short for a safe takeoff. The aircraft overran the runway before becoming airborne and crashed, killing all 47 passengers and two of the three crewmembers.

The National Transportation Safety Board (NTSB) indicated that the pilots ignored clues that they were on the wrong runway, failed to confirm their position on the runway, and were carrying on a conversation during taxi in violation of "sterile cockpit" procedures. In the aftermath of this tragedy, a procedure was adopted by many airlines to verify the magnetic heading of the runway with the compass prior to takeoff.

Within the airport environment there are many elements vying for our attention that need to be accurately perceived and interpreted in order to maintain situational awareness. It's easy to become task saturated, especially when operating at an unfamiliar airport. Throw in challenging weather or night operations and you may lose your bearings.

Situational awareness is a moving target and it's okay to stop and catch your breath. Stop the airplane and ask for progressive taxi instructions or consult your airport diagram and take time to review any hot spots. If you are unsure, ditch the aviation talk and ask ATC in plain English! Bruising your ego is much better than bruising yourself or your airplane.

### **Understand Signs, Lights & Markings**

Understanding the significance of all airport signage, markings and lighting is crucial to runway incursion



avoidance. If it has been a while since you last reviewed this information, seek some time with a certified flight instructor and have them go over signs, markings and lighting with you. There are also free runway safety courses available through FAA.gov for you to test your knowledge. The AIM contains a chapter dedicated to airport signs, markings and aeronautical lighting.

Even for the experienced pilot, signage significance and runway markings can be confusing. Maybe you do most of your flying out of a Class D airport. Chances are airport signage, markings and lighting will be very different when venturing into a Class C or B airport.

Maintaining familiarity with all signs and markings is the best practice to avoid incursions. Remember that taxiway lights are blue or green, runway edge lights are white except on instrument runways where yellow lights exist on the last 2,000 feet and finally become red. Also, you need only hold short of an ILS critical area when the ceiling is less than 800 feet, visibility is less than 2 miles or when ATC instructs you to hold short.

### **Follow Procedures & Never Assume**

There is a fine line between anticipation and assumption. The difference is that anticipation is an active process whereas assumption is passive and can lead you down the road to complacency. Anticipating ATC instructions and patterns of traffic flow at an airport will assist you in maintaining situational awareness and an overall safe flight. If you anticipate a clearance to cross a runway and it doesn't come, you adjust, hold short and ask ATC. Maybe they simply meant to issue a clearance and forgot. To assume clearance across a runway is to invite disaster.

No matter how hard we try, no pilot is exempt from the occasional slip into human error. Our attention span and ability to process information is limited, however, there are ways to mitigate this hazard:

- Establishing or adopting a set of procedures for yourself and sticking to them can go a long way toward the avoidance

of runway incursions.

- Maintaining a sterile cockpit by only discussing topics pertinent to the flight with your passengers and fellow pilots when taxiing, taking off or landing. You might also extend your sterile rule to include operations below a certain altitude or within certain lateral limits of an airport.

- Always utilizing a current airport diagram, identifying any hot spots prior to flight. Before taxi, perform a radio check to assure a clear transmission and response.

- Writing down ATC instructions and challenging yourself to scan and verbalize “clear left” or “clear right” before every turn on the ground or in the air. Prior to takeoff, confirm with the compass that you are on the correct runway.

- Coming up with a policy for operating your aircraft’s lights. It is recommended to turn all lights on when crossing or operating on a runway and use of the landing light is encouraged within 10 nm of an airport.

- Developing strategies to deal with long waits. If you find yourself waiting an extended period of time for a new clearance or permission to cross a runway, put your watch on the opposite hand or a sticky note on the instrument panel, as a reminder not to move until clearance is received. Runway incursion avoidance is every pilot’s responsibility and integrating these practices into your flying will help you do your part. □

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## Meet Brenda Hanson!

*Airport GIS Program Manager  
WisDOT Bureau of Aeronautics*

**B**renda Hanson is the new Airports Geographic Information Systems (AGIS) Program Manager with the Wisconsin Department of Transportation’s Bureau of Aeronautics (BOA). Brenda is responsible for the development and administration of the BOA’s AGIS program. One goal of the program is to create and maintain products that will aid in



Brenda Hanson

statewide airport system analysis and maintenance needs. The AGIS data and applications are used by BOA staff, as well as airport managers and consultants to enhance strategic airport planning processes.

Brenda earned a Bachelor of Science degree in Geography with an emphasis in GIS from the University of Wisconsin-La Crosse in 2003. Prior to joining WisDOT, she spent almost a decade developing her GIS skill set at CoreLogic, a large property information solutions company. At CoreLogic, Brenda was GIS Manager and responsible for a team of GIS analysts who developed and maintained nationwide natural hazard and risk datasets, as well as nationwide taxing jurisdiction data.

Brenda holds a private pilot certificate and her love for GIS and aviation played a major role in her decision to join the BOA. Off hours, Brenda enjoys spending time with her family outdoors and working out at a local CrossFit gym. □

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## Flight Instructor Refresher Course (FIRC)

*What Are The New Topics?*

**T**he next Wisconsin Flight Instructor Refresher Course (FIRC) is scheduled for November 5th & 6th at the Vette Theater in Oshkosh, Wis. The course will be updated with new topics in addition to the course core topics that include:

- *Ethics & Professionalism.*
  - *How To Give An Effective Flight Review.*
  - *Pilot Deviations: Their Causes.*
  - *How To Teach Effectively & Creating A Culture of Safety.*
- The course is open to Certified Flight Instructors whose

certificates expire in November and December 2016 or January and February of 2017. Other pilots may audit the course at a reduced fee and receive a certificate of completion. Speakers at the FIRC will include several Designated Pilot Examiners (DPEs) who always provide an insightful perspective on flight training.

For more information, visit the WisDOT website at: <http://wisconsindot.gov/Pages/doing-bus/aeronautics/trng-evnts/firc.aspx>. □

# Wisconsin Aeronautics Director & AOPA President Selected For National Drone Advisory Committee

WASHINGTON, D.C. – Members of the newly established Drone Advisory Committee (DAC) were announced August 31, 2016, by the Radio Technical Commission for Aeronautics (RTCA), a not-for-profit organization that functions as an advisory body to the Federal Aviation Administration (FAA). Among those selected for the committee are David M. Greene, Director of the Wisconsin Bureau of Aeronautics, who will represent state aeronautics offices, and Mark R. Baker, President and CEO of the Aircraft Owners & Pilots Association (AOPA), who will represent general aviation pilots and aircraft owners.



David M. Greene



Mark R. Baker

Among the other 33 members of DAC are representatives from Garmin, American Airlines, Amazon Prime Air, United Parcel Service, Rockwell Collins, Lockheed Martin, Stanford University, and the National Air Traffic Controllers Association, Air Line Pilots Association, and Academy of Model Aeronautics.

The purpose of the committee is to help integrate Unmanned Aircraft Systems (UAS) into the National Airspace System (NAS), and is modeled after the highly successful NextGen Advisory Committee. The committee will conduct more detailed business through a subcommittee and various task groups that will help the FAA prioritize its activities, including the development of future regulations and policies.

RTCA is a private, not-for-profit association, founded in 1935. RTCA is the premier public-private partnership venue for developing consensus among diverse, competing interests on critical aviation modernization issues in an increasingly global enterprise.

RTCA has provided the foundation for virtually every modern technical advancement in aviation. Its products serve as the basis for government certification of equipment used by the tens of thousands of aircraft flying daily throughout the world's airspace.

Utilized as a federal advisory committee, RTCA works in response to requests from the Federal Aviation Administration (FAA) to develop comprehensive, industry-vetted and endorsed recommendations for the federal government on issues ranging from technical performance standards to operational concepts for air transportation. Its deliberations are open to the public, and aviation community volunteers, functioning in a consensus-based, collaborative, peer-reviewed environment, develop their products. □

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**Cassandra Isackson, Director**

**Dan McDowell, Editor**

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## Participation At EAA AirVenture Oshkosh Reaps Many Rewards

by *Cassandra Isackson*

*Director, Minnesota DOT Office of Aeronautics*

**W**e are looking toward the end of another great year of safe flying, airport improvements, and learning. Clearly we can see where progress has been made and where we all need to continue putting forth a focused effort to keep aviation safe, viable, and growing.

In fact your Minnesota Office of Aeronautics has begun working on new and better ways to share information with the aviation family across the board. We have asked many of you for your input and we have listened to your thoughts and ideas. This is helping us to not only design and implement improved methods for what we do and how we reach out to everyone, but is also helping us to be prepared to better meet your needs in the near future. We appreciate your input and we are excited about the potential for enhancing what we do and provide for our clientele.

*Did you know that the Office of Aeronautics was back at EAA AirVenture Oshkosh 2016?* It was a great experience and we received many positive comments from old and new friends alike. With more than 10,000 aircraft and 525,000 people in attendance, the excitement and energy level could not have been much higher! All in all, it was great!

If you haven't been to EAA AirVenture Oshkosh at Wittman Regional Airport in Oshkosh, Wisconsin, you have to check it out at least once to experience all things aviation, all in one grand location! It is amazing and inspirational. We hope to see you there in 2017.

We had a booth featuring the theme **#fly.MN!** We encouraged the hundreds of visitors each day to visit Minnesota's airports, and to get their photo taken with "Paul Bunyan" and "Babe" (see photo). In addition, several airport managers from Minnesota volunteered to be at the booth with us and spoke to visitors about the recreational opportunities



Cassandra Isackson

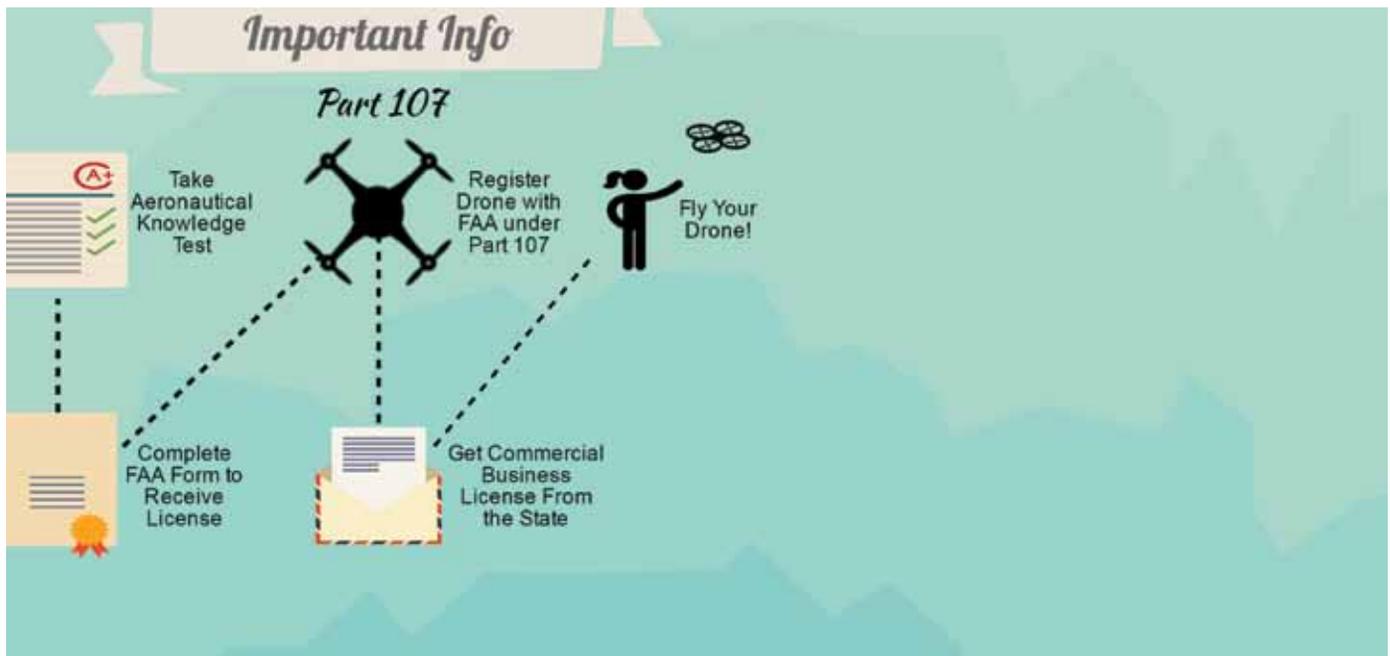
available in their areas. One airport staffer later reported that several pilots stopped by an adjacent town to buy fuel or spend the night on the way home from the fly-in as a result of visiting our booth.



(L/R) Darlene Dahlseide and Cassandra Isackson of the Minnesota Office of Aeronautics demonstrated for visitors how to have their photo taken with "Paul Bunyan" and his blue ox, "Babe," at MnDOT's booth at EAA AirVenture Oshkosh 2016. Photo by Mary McFarland Brooks

In addition to hosting a booth, the Aeronautics staff participated in technical forums on a wide array of aviation issues. Staff also recruited new businesses to exhibit and speak at the annual spring aviation maintenance conference MnDOT hosts in partnership with the Association for Women in Aviation Maintenance.

Kathy Vesely, assistant director, and I were part of a panel where we discussed *"Airport Funding 101 – The Minnesota Experience."* We also met with the staffs of other state aeronautics offices and Federal Aviation Administration officials to discuss the FAA Reauthorization Bill, as well as the hot topic of the day, "drones." Overall, we had a very successful event. □



## Using A Drone For Business? Here's What You Need To Know Under FAA's New Drone Regulations

by Tara Kalar

Associate Legal Counsel - MnDOT Office of Chief Counsel

and Jonathan Estes

Aviation Policy Analyst - MnDOT Office of Aeronautics

If you are an aerial applicator, aerial photographer, or just someone who bought a drone, you might be wondering how to incorporate a drone into your business model now that the Federal Aviation Administration (FAA) has made its first attempt at regulating drones. As of August 29, 2016, commercial drone operations are regulated under Part 107 of the Federal Aviation Regulations (FARs), freeing many operators from the Section 333 exemption process that, for most commercial operators, took months to complete.

Part 107 is ushering in a new era of innovation. The FAA was mandated by Congress in the FAA Modernization and Reform Act of 2012 to safely integrate drones into the National Airspace System (NAS). The FAA's focus in rolling out Part 107 is safety. Department of Transportation Secretary Anthony Foxx reiterated the role of Part 107 as, "part of an effort to strike the right balance between safety and innovation as we undergo one of the most dramatic periods in the history of transportation."

The commercial drone industry has the potential to generate over \$82 billion in the U.S. economy and by 2025 could be supporting as many as 100,000 new jobs. The FAA is estimating that as many as 600,000 new commercial drone businesses will crop up within the first year of the Part 107 effective date.

- If you are considering using a drone for commercial purposes, Part 107 requires an operator to take an

aeronautical knowledge test in order to become a Remote Pilot. To qualify for the test, you must be:

- At least 16 years old.
- Able to read, speak, write and understand English.
- A U.S. Citizen.
- In physical and mental condition to operate a small UAS.
- Able to pass a TSA background check.

However, starting a commercial drone business is not as easy as passing the Remote Pilot test. There are many additional considerations that factor into the decision to use a drone in your business:

**STATE REQUIREMENTS:** After passing the test, you are required to register your drone with the FAA and the state, if applicable. In Minnesota, aircraft registration is required by state law and is generally a \$100 annual registration tax. You may also require a commercial operations license under Minnesota State law if you are operating for a profit. Aircraft insurance is required in Minnesota, as well.

**SAFETY:** First, consider how you would like to use the drone. If the problem you are attempting to solve requires flying the drone at night, over crowds of people, or beyond your visual line of sight, it may be difficult to operate under Part 107 and your operation may require a waiver. A prudent operator would outline a safety plan prior to undertaking the operation.

**LOCATION:** The FAA continues to restrict the areas that can be flown under Part 107. You are required to give notice

to any airports and air traffic control, including hospital heliports and seaplane bases, located within a five-mile radius of your operation. In Minnesota, there are over 135 listed airports, leaving very small pockets where notification is not required. The FAA has produced an app called “B4UFLY” that helps users visualize their location in relation to airports and identify any flight restrictions. Airport operators can object to the operation if the activity would endanger the safety of the airspace. However, an airport operator objection would not restrict the operation, but it could be held against the drone operator if something were to happen.

There are two other notable restrictions that could put a wrench in your commercial drone plans. The FAA restricts flights within three (3) miles of stadiums that hold more than 30,000 people. The restriction takes effect one hour before the scheduled sporting event and concludes one hour after the event. Also, the National Park Service prohibits drones from launching, landing or operating within its bounds.

**RISK:** Minnesota State law provides for strict liability over any operation that causes injury or damage to persons or property. That means that an aggrieved party would only need to prove that you were operating the aircraft to prove that you were at fault in a civil case, regardless of intent. State law may also prohibit your actions if you attempt to do something that is otherwise illegal, like spying on your neighbor, trespassing, nuisance, or operating carelessly.

Part 107 requires an operator to self-report accidents within 10 days that cause more than \$500 of property damage or result in serious bodily injury. In addition, the FAA has hefty fines associated with non-compliance, in some cases as

high as \$250,000 and/or three years in prison. Given the risk associated with operating commercial drones, it may be wise to assess the risk and test the waters before diving in.

Minnesota is unique in that state law requires proof of insurance on aircraft. This requirement cannot be satisfied by homeowner’s insurance and drones are not generally covered in a standard aircraft policy. Some risk can be managed by having a good insurance policy and knowing what is covered. Regardless of where you come out when you assess all the factors of a commercial drone business, all commercial operations under Part 107 follow the same operating rules:

- Operate in Class G airspace.
- Must keep drone in Visual Line of Sight.
- Must fly during the day.
- Must fly at or below 100 mph.
- Must fly at or below 400 feet.
- Must yield right of way to manned aircraft.
- Must NOT fly over people.
- Must NOT fly from a moving vehicle.

Waivers from these operating rules are available, however, flights that deviate from the standard are not exempt from liability if something goes wrong with the operation. There are countless benefits to using drones in business and their use will continue to grow. The new FAA rules will help spur that growth by providing a much simpler process for flying commercial drones legally and safely. This is an exciting time in which thousands of drones will take to the skies. If you are contemplating using a drone for your business, remember to get any registrations and licenses necessary, follow the Part 107 rules, and above all have fun flying! □

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## Clear Communications... A Key To Safe Flight

by Dan McDowell

**F**lying solo is like dancing. It requires some specific movements, but also allows a certain amount of freedom of expression. We see this at any airshow where top aerobatic performers like Julie Clark or Gene Soucy fling their rugged craft through seemingly impossible gyrations, sometimes tumbling on the edge of the control envelope. Yet, each movement is planned and flows beautifully into the next, as if dancing in the air.

When a partner is added (in another aircraft for instance), one element of the dance becomes more important than almost all the others. That is the element of “clear communications.”

Think for a moment how vitally important it is for the flight leaders of the premier jet aerobatic teams to quickly, and *clearly*, communicate information, or instructions to their team. We all know the result when communication is unclear and things are happening very quickly. It can often end in disaster.

It is important to think before you speak so that when you do say something, you can say it clearly and concisely.

Imagine a conversation with a student pilot that is full of “um’s” and “ah’s.” The student is hesitant and uncertain. It is as if he/she doesn’t know what to say or has “mic-fright.” In fact all those things and more may be at work in that scenario. But you can imagine how long it seemed to take the individual to say something. You can also imagine how difficult it would be to know what he/she wanted or needed. It makes one wonder how controllers figure out radio transmissions so quickly, and they *have to be right* when they respond!

So when you fly, plan ahead. Think about where and when you will most likely have to communicate! Practice in your mind what you will likely say. Then ask yourself, is it clear? Can I clarify with better wording or fewer words, what I really mean? Can I improve my communications? The answers are probably ‘yes’ for most pilots. Clear communications *is* an important key to safe flight. □

# Special Moments At EAA AirVenture Oshkosh, July 25-31, 2016



(L/R) Craig R. Sincock, President & CEO of Avfuel, a leading independent global supplier of aviation fuel and services headquartered in Ann Arbor, Michigan, with Jeff Baum, President and CEO of Wisconsin Aviation. Wisconsin Aviation has locations in Madison, Juneau and Watertown, Wis. Sincock and Baum are seen here at the Wisconsin Aviation booth at EAA AirVenture Oshkosh 2016. *Dave Weiman Photo*



Alyssa Connell of "Runway Three-Six" and the aviation marketing firm, "Connell Aviation Group," during EAA AirVenture Oshkosh 2016 ([www.ConnellAviationGroup.com](http://www.ConnellAviationGroup.com)). *Dave Weiman Photo*



Minnesota Aeronautics Director Cassandra Isackson and Dave Weiman of Midwest Flyer Magazine go for a spin in the "#fly.MN" biplane at the Minnesota DOT Office of Aeronautics booth at EAA AirVenture Oshkosh 2016.



(L/R) Representing the Wag Aero Group of products and services were Mary Pat Henningfield, Bill Read, and Mary Myers. [www.wagaero.com](http://www.wagaero.com) *Dave Weiman Photo*



State aviation official, Scott Brummond, greeted pilots at the Wisconsin DOT Bureau of Aeronautics booth during EAA AirVenture Oshkosh. *Dave Weiman Photo*

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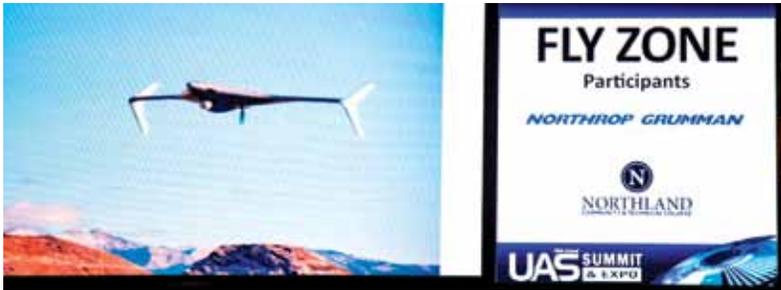
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# Northland Community & Technical College Announces Collaboration Agreement With Northrop Grumman



equipment. The new facility located at Thief River Falls Airport will serve as a state-of-the-art training facility for aerospace specific trades. Included in the facility are new labs focused on non-metallic structure and composites, electronics and avionics, and a new hangar, which has been designed with specialized considerations for housing and operating unmanned aircraft systems like the equipment NCTC will receive through this collaboration agreement.

The program trains students on the maintenance and repair of the components of unmanned aircraft systems to include: unmanned aerial vehicles (UAVs), ground control stations (GCSs), understanding the function of data links or the communication/guidance system between vehicle and satellites (line of sight), and a basic understanding of computer networks and their relationships within UAS. Collaborations like this one with Northrop Grumman allow students access to the technology needed to prepare them for this rapidly evolving workforce.

“Northrop Grumman has been a friend and partner to NCTC since we started working in the UAS industry,” said Curtis Zoller, associate dean of aerospace and agriculture. “The Bat UAS collaboration represents another firm example of ongoing commitments to find innovative solutions to training today’s workforce. Northland Aerospace will integrate the system into our current training programs in order to offer the most advanced training possible to our students. Investments made by NCTC and partners like Northrop Grumman in infrastructure and technology over the past years have all been focused on advanced student education. It is all about the students.”

“Northrop Grumman is pleased to make the Bat system and its support equipment available to enhance UAS training

THIEF RIVER FALLS, MINN. – Northland Community & Technical College (NCTC) of Thief River Falls, Minn., announced August 23, 2016, a collaboration agreement with Northrop Grumman Corporation as part of the continuing support of unmanned aircraft systems (UAS) efforts in the Red River Valley area of North Dakota and Minnesota. Northrop



(L/R) David Hambleton, Manager of Advanced Systems for Northrop’s Autonomous Systems Division, and Dr. Dennis Bona, President of Northland Community and Technical College.

Grumman Corporation will donate the use of equipment related to the “Bat” unmanned aircraft system. The Bat is a medium altitude, multi-mission unmanned aircraft system that is runway-independent and fully autonomous. It is designed to launch from a pneumatic/hydraulic rail launcher and recover into a net recovery system.

The announcement was made at the UAS Summit in Grand Forks, North Dakota. The equipment, including the aircraft, flight control and launch and recovery elements, will be used by NCTC at the aerospace site in its UAS maintenance and training program.

NCTC recently completed an 18,760 sq. ft. remodeling project at the aerospace site that will house the new

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### Rex Hammarback

Executive Director, Northland Aerospace Foundation  
rex.hammarback@northlandaerospace.com  
218.399.3939



Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the National Science Foundation.

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at Northland Community & Technical College,” said Rick Crooks, director, advanced systems, Northrop Grumman Autonomous Systems. “NCTC is a leader in producing aviation mechanics and technicians, and we’ve already hired several of their graduates. Our collaboration reflects the commitment we made in 2013 to this area and to the advancement of UAS technologies through the Red River Valley Strategic Alliance Agreement. The Red River Valley is fast becoming a key center for unmanned aircraft systems and we’re proud to support its growth.”

Northrop Grumman is building a new 36,000 square foot facility at Grand Sky Unmanned Aerial Systems

(UAS) Business and Aviation Park near Grand Forks, N.D. The facility will support research and development, aircrew and maintenance training, operations and mission analysis, and aircraft maintenance in the local region.

Northland Community & Technical College is a comprehensive college with campuses in East Grand Forks, Minn. and Thief River Falls, Minn. One- and two-year degrees, transfer programs and diploma certification are available in a variety of majors, as well as workforce training and continuing education programs. NCTC is a member of the Minnesota State Colleges and Universities system, and accredited by the Higher Learning Commission of

the North Central Association. Visit the college at [www.northlandcollege.edu](http://www.northlandcollege.edu).

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## AVIONICS

# AOPA & Garmin Team Up To Lower The Cost of Avionics For Certified Aircraft

OSHKOSH, WIS. – The Aircraft Owners and Pilots Association (AOPA) and Garmin announced July 25, 2016, the availability of an FAA Supplemental Type Certificate (STC) of the G5 electronic attitude indicator for hundreds of makes and models of aircraft. Garmin supplied a G5 that is installed in the panel of AOPA’s Sweepstakes 172, which was on display throughout EAA AirVenture Oshkosh at the AOPA Campus at Wittman Regional Airport, Oshkosh, Wis.

“We are pleased to see this collaboration between government and industry to pave the way for installing in certified airplanes these modern, highly capable systems common in experimental airplanes,” said AOPA President Mark Baker. “These cost-effective new products will bring new vibrancy, safety, and reliability to the GA fleet. This is just the beginning. We expect other companies to bring forth other non-TSO’d equipment that will improve the fleet.”

AOPA has worked closely with the FAA, Garmin, and others in the industry to demonstrate the need for



affordable avionics and other safety systems for older airplanes.

The solid-state G5 electronic flight instrument can be installed in type-certificated fixed-wing general aviation aircraft using a supplemental type certificate (STC) in 562 aircraft models. The compact and cost-effective G5 is a standalone primary source for aircraft attitude or turn coordination information, while also displaying

secondary information such as airspeed, altitude and more.

The G5 costs \$2,149, which includes the install kit, back-up battery and STC, and \$2,499 with an optional GPS antenna. Deliveries for new orders are expected to begin in September.

The G5 forms the heart of the upgraded panel on the Cessna 172, which is being remanufactured by Yingling Aviation in Wichita.

In its effort to continue focusing attention on the need for lower cost, safety-enhancing equipment for the legacy fleet, AOPA

hopes to install a new-generation digital autopilot in the airplane and other gear, including an upgraded engine and airbag seatbelts, before the aircraft is given away as part of AOPA’s membership sweepstakes, which closes May 31, 2017. Anyone with an active AOPA membership at that point is eligible to win the revitalized Skyhawk. See the official sweepstakes rules on the AOPA website ([www.aopa.org](http://www.aopa.org)). □

## NASAO Awards First “Henry O” Scholarship

MCLEAN, VA. – A student attending the University of North Dakota has been selected to receive the first Henry Ogradzinski (“Henry O”) Scholarship Award established by the National Association of State Aviation Officials (NASAO). The \$1,000 scholarship was presented to Jordan Aritt of Chanhassen, Minnesota, who will major in Unmanned Aircraft Systems.



Henry Ogradzinski

The NASAO scholarship program was created and named after Ogradzinski, who was president of NASAO from 1996 –

2014. Prior to being named president of NASAO, Ogradzinski was president of the Dayton International Airshow, president of the General Aviation Manufacturers Association, an executive with Gulfstream Aerospace, and director of communications with the Experimental Aircraft Association (EAA).

“I want to congratulate Jordan for receiving this prestigious scholarship and wish him the very best as he pursues a career in Unmanned Aircraft Systems,” said Kyle Wanner, Director for the North Dakota Aeronautics Commission and himself a graduate of UND.

For more information on the Henry Ogradzinski Scholarship, visit [www.nasao.org/about/scholarships/](http://www.nasao.org/about/scholarships/). □

## Principato Named President of National Aeronautic Association

WASHINGTON, DC – The Board of Directors of the National Aeronautic Association (NAA) has named Greg Principato the organization’s next President and CEO.

Principato has served in numerous executive positions within the aviation and aerospace industry including President and CEO of the National Association of State Aviation Officials, President and CEO of Airports Council International, and Executive Director of the National Commission to Ensure a Strong Competitive Airline Industry.

Principato will start his new position on October 20, 2016, becoming the 32nd chief executive of the 111-year-old

organization, replacing Jonathan Gaffney, who has served NAA since 2007.

The National Aeronautic Association is a non-profit membership organization devoted to fostering opportunities to participate fully in aviation activities and promoting public understanding of the importance of aviation and space flight to the United States. NAA is the caretaker of some of the most important aviation awards in the world, and certifies all world and national aviation records set in the United States ([www.naa.aero](http://www.naa.aero)). □

## Ohio Moves To Open Waters For Seaplanes

**A**fter working with the Aircraft Owners and Pilots Association (AOPA) and the Seaplane Pilots Association (SPA), Ohio officials have announced that the state will take steps to open more bodies of water to seaplanes.

The Ohio Department of Natural Resources (ODNR) plans to proceed with rulemaking to allow seaplane landings in the coming months on Buckeye Lake, Indian Lake, Long

Lake, and Salt Fork Reservoir, and even more in the future.

In December 2015, AOPA and SPA held meetings in Columbus with members of the Ohio legislature, as well as officials from Gov. John Kasich’s administration to discuss how to go about making Ohio more friendly to seaplanes. AOPA believes protecting the freedom to fly means protecting the freedom to fly from the water, said AOPA President Mark Baker who also serves on the board of SPA. □

## Snow Removal Equipment Building Receives Honors

MADISON, WIS. – Mead & Hunt has received national recognition from the American Council of Engineering Companies (ACEC), and a Best of State Finalist Engineering Excellence Award from ACEC Wisconsin for its work on the Dane County Regional Airport snow removal equipment (SRE) facility in Madison, Wis. The new 58,800-square-foot structure better centralizes operations for tandem snowplows. The facility has earned LEED Gold certification due to several sustainable design features outperforming expectations.

Mead & Hunt designed the facility’s initial phase to meet the current budget, while also allowing for a future expansion of 45,000 square feet to the north. Despite poor

soil conditions and tight site constraints, the building is solid with 1,000 helical pilings supporting the structure and the floor slab. Precast sandwich panels also provide insulation and structural support for the roof.

The roof of this building houses the state’s largest municipal solar array, which provides approximately half of its energy. This led to the unique opportunity for Mead & Hunt to assist the FAA in establishing standards of design. Realizing the potential for the panels to reflect sunlight that would interfere with crew sight lines, the FAA required studies for safety. The FAA then used the study results from this project to develop the standards of design. □

# CALENDAR

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

## OCTOBER 2016

- 1 **PRESCOTT (PRC), ARIZ.** - Regional AOPA Fly-In at Earnest A. Love Field. [www.aopa.org/Community-and-Events/AOPA-Fly-In/2016](http://www.aopa.org/Community-and-Events/AOPA-Fly-In/2016)
- 11 **INDEPENDENCE (KIB), IOWA** - Tuesday Night Grill-Out at the Airport 5-8pm. 319-334-4000.
- 15\* **SOUTH ST PAUL (KSGS), MINN.** - Planes and Paws Pet Expo at Fleming Field - CAF Commemorative Air Force 10am-2pm. 651-306-1456
- 20 **WATERTOWN (KRYV), Wis.** - **Flying Hamburger Social 5-7pm.**
- 20-21 **OTTUMWA, IOWA** - Midwest Aviation Invitational Maintenance Competition at the Indian Hills Community College Airport Campus. 641-683-4252 (Terry Dunkin). [www.midwestaviationinvitational.com](http://www.midwestaviationinvitational.com)
- 29 **ST. CHARLES COUNTY, Mo.** - Airport Open House & Pumpkin Drop 9am-5pm. 636-949-1893.

## FEBRUARY 2017

- 21-23\* **EAST LANSING, MICH.** - 2017 Michigan Airport Conference at the Kellogg Hotel & Conference Center.

## APRIL 2017

- 12-14\* **MANKATO, MINN.** - 2017 Minnesota Airports Conference at Verizon Wireless Center. <http://www.airtap.umn.edu/events/airportsconference/2017/presentations/index.html> or contact Mindy Carlson at 612-625-1813 or [carlson@umn.edu](mailto:carlson@umn.edu).
- 24-27\* **WAUKESHA, Wis.** - 2017 Wisconsin Aviation Conference. [wiama.org](http://wiama.org). 815-757-2869

## JULY 2017

- 24-30\* **OSHKOSH, Wis.** - EAA AirVenture Oshkosh 2017. [www.eaa.org/en/airventure](http://www.eaa.org/en/airventure)

## AUGUST 2017

- 21\* **PERRYVILLE (KO2), Mo.** - Great American Eclipse Fly-In. 573-517-2069

FOR MORE LISTINGS, INFORMATION & UPDATES  
GO TO [WWW.MIDWESTFLYER.COM](http://WWW.MIDWESTFLYER.COM) (CALENDAR OF EVENTS)

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|---|------------|--------------------------------------|--|
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| Price County Airport, Phillips, Wis.            | KPBH       | Harbor View Pub & Eatery             | <a href="http://www.harborviewonline.com">www.harborviewonline.com</a>       |
| Tri County Regional Airport, Spring Green, Wis. | KLNR       | Picadilly Lilly Airport Diner        | <a href="http://www.picadillylillydiner.com">www.picadillylillydiner.com</a> |

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**T-HANGAR FOR SALE** – Dane County Regional Airport, South Ramp. 44 foot, 8 inch door, 14 foot clearance, 1450 square foot: \$40,000. Call 608-516-4100 or Email [pfahey1191@aol.com](mailto:pfahey1191@aol.com).

**T-HANGAR RENTALS** – La Crosse Regional Airport (LSE), La Crosse, Wisconsin. To check on availability, go to <http://www.lseairport.com/hangar-rentals.php>. For additional information, including rates, call the airport manager's office at 608-789-7464 or email [gilletjt@lseairport.com](mailto:gilletjt@lseairport.com)

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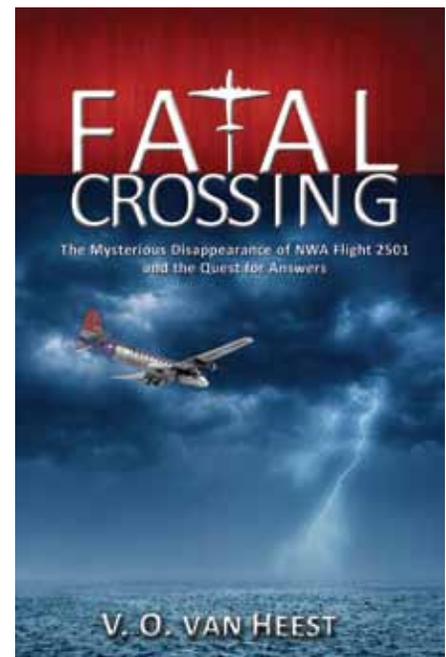
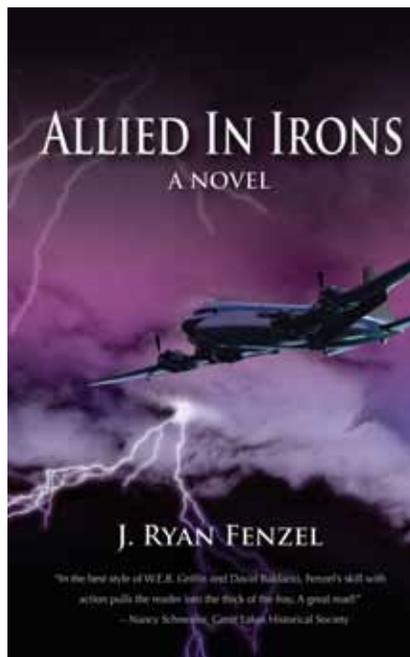
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## The Disappearance Of Northwest Airlines Flight 2501



Northwest Airlines Douglas DC-4



Michigan's greatest aviation mystery has been lying in wait of discovery at the bottom of Lake Michigan for 66 years.

For more than a decade, Michigan Shipwreck Research Associates (MSRA) has set aside its normal spring expeditions to find broken hulls and twisted rigging and have focused instead on searching for pieces of fuselage and airframe. With support from bestselling author Clive Cussler's marine group, the National Underwater and Marine Agency (NUMA), this maritime research organization has been searching for the lost wreckage of Northwest Airlines Flight 2501.

Flight 2501 was a Douglas DC-4 piston airliner that took off from LaGuardia Airport, June 23, 1950, bound for Seattle, Washington. While flying over Lake Michigan in an air corridor known to commercial aviators as RED 57, Flight 2501 encountered a squall line of severe thunderstorms and disappeared. The flight never made it to Seattle. It never emerged from the storm. Fifty-eight (58) lives were lost. At the time, it was the worst commercial aviation disaster the nation had ever experienced. And the wreckage was never found.

MSRA directors Valerie and Jack Van Heest surmise that their previous attempts to find the aircraft have gotten them closer and closer to it. By the process of elimination, they have crossed off several sections of their search area, which, based on the aircraft's flight path and information gleaned from the last radio contacts with the pilot, is several miles off the southwest coast of Michigan, somewhere between St. Joseph and South Haven. As is the case with search operations, knowing where the plane isn't is just as useful as having a good idea of where it is.

Flight 2501's elusive debris field and the absence of a definitive explanation for its disappearance after all these years have fueled talk of conspiracy along the way. The degree to which most Michigan residents have forgot this significant and tragic event has led some to whisper of a cover-up. Indeed, reports have actually surfaced in which witnesses describe seeing a tail section of an airplane being secretly brought to shore soon after the crash. Intrigued with the unsolved mystery, Michigan author J. Ryan Fenzel has penned a contemporary thriller revolving around a high-stakes search for the wreckage of Flight 2501. Titled "**Allied In Irons**" (Ironcrafter 2012), the story mixes elements of conspiracy and terrorism with a state-of-the-art hunt for the missing airliner.

Speculation and fiction aside, Valerie Van Heest has written her own non-fiction book on the subject. "**Fatal Crossing**" (In-depth Editions 2013) chronicles MSRA's efforts to locate the wreckage of the aircraft. In it, Van Heest aims to bring closure to the tragic event that took 58 souls more than six decades ago. Van Heest believes her book will provide the answers that family members of those on Flight 2501 have been waiting to hear. After compiling her extensive research of the events surrounding the crash, which includes in-depth interviews with family and professional associates of Flight 2501 Captain Robert C. Lind, Van Heest has pieced together a very plausible theory as to what happened to the ill-fated aircraft, and why.

Information Links: [www.valerievanheest.com/](http://www.valerievanheest.com/) and [michiganshipwrecks.org/](http://michiganshipwrecks.org/)

Allied In Irons on Amazon: [www.amazon.com/Allied-In-Irons-Ryan-Fenzel/dp/0977168824](http://www.amazon.com/Allied-In-Irons-Ryan-Fenzel/dp/0977168824). □



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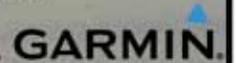
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