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# A Day on the Hill

At AOPA, we have an extremely professional and talented team of government affairs experts. They deal with regulators and legislators on a daily basis—and they're very good at what they do.

But I think it's important to be personally involved in our advocacy efforts. That's why I recently spent a full day on Capitol Hill, meeting with key lawmakers and discussing big issues like third-class medical reform, FAA reauthorization, and the FAA's ADS-B Out mandate.

Thanks to our government affairs team, when I meet with senators and members of Congress they know I'm representing hundreds of thousands of general aviation pilots nationwide—including many in their home states and districts. And that's important, because lawmakers care about what matters to their constituents.



During my most recent visit to the Hill, I met with Sen. John Boozman (R-Arkansas), who co-chairs the Senate GA Caucus, has consistently taken a leadership role on third-class medical reform, and is an original cosponsor of the Pilot's Bill of Rights 2 (PBR2). I also met with Sen. John Thune (R-South Dakota), chairman of the powerful Senate Commerce Committee.

On the House side, I spent time with Rep. Richard Hanna (R-New York), a pilot, AOPA member, and cosponsor of PBR2; Rep. Rick Larsen (D-Washington), the ranking member of the House Aviation Subcommittee; Rep. Collin Peterson (Democratic-Farmer-Labor Party-Minnesota), a pilot and original cosponsor of PBR2; and Rep. Marc Veasey (D-Texas), who co-chairs the House GA Caucus.

I even had a chance to present a prestigious award to Rep. Bill Shuster, chairman of the House Transportation and Infrastructure Committee. Each year AOPA presents the Joseph B. Hartranft Award to an elected or appointed government official who has made significant contributions to the advancement of general aviation, and Rep. Shuster is our current honoree.

Face-to-face visits like these are an effective way to keep our concerns in front of Congress, especially when we have so many significant issues on the table. It would be easy for general aviation to get lost among the debates over the national budget, immigration, healthcare, and foreign policy. But when we spend time meeting in person with the lawmakers who play a key role in determining GA's future, they recognize that these issues matter to the aviation community—and the aviation community matters to them.

Mark R. Baker President & CEO, AOPA

ISSN: 0194-5068

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**ON THE COVER:** A B-52H Stratofortress from the 307th Bomb Wing, Barksdale Air Force Base, La., banks away from a KC-135 Stratotanker from McConnell Air Force Base, Kan., after completing aerial refueling. The B-52H is a long-range strategic bomber that has been flown by the U.S. Air Force since 1955. EAA AirVenture Oshkosh will feature the aircraft, July 20-26, 2015, Oshkosh, Wis. (www.airventure.org). Headline story beginning on page 30.

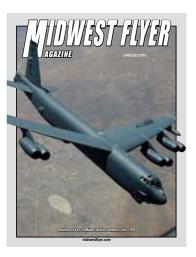
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# **Getting & Staying Engaged With Our Elected Officials**

by Dave Weiman

n this issue, you will read about the president of the Aircraft Owners & Pilots Association (AOPA), Mark Baker, who met with our elected officials on Capitol Hill recently to lobby on behalf of GA. Mark brought forth our concerns over the cost of equipment to comply with the ADS-B-out 2020 mandate...the delay in third class medical reform...and the

importance of FAA reauthorization to ensure uninterrupted funding of the air traffic control system and airport projects.

Mark felt that his time was well spent, and so do we.

Also in this issue, you will read about representatives of the three largest aviation organizations in Minnesota who flew to Washington and met with their congressional delegates. They, too, felt that their time was well spent, and plan to return.

If you are a representative or member of an aviation organization – regardless of its size and scope – we encourage you to likewise take the time and meet with your state and congressional representatives from time to time to share your concerns and to offer your assistance as a resource on aviation matters. Remember, as constituents, we carry a lot of clout.

But before you go, be sure to check with our national organizations and get briefed on the issues.



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#### EDITOR/PUBLISHER

**Dave Weiman** 

#### **PRODUCTION DIRECTOR**

**Peggy Weiman** 

**PHOTO JOURNALISTS** 

Don Winkler, Geoff Sobering, Mike Nightengale

#### CONTRIBUTING EDITORS & PHOTOGRAPHERS

Mark Baker Cassandra Isackson Dr. John Beasley Michael Kaufman Jim Bildilli **Ed Leineweber** Dr. Bill Blank **Woody Minar Rachel Obermoller** Richard Braunig **Craig Petersen Bryan Budds Hal Davis** Yasmina Platt Rvan Dembroski Paul H. Poberezny Harold Green Greg Reigel James Hanson Pete Schoeninger **Brad Thornberg Judy Harding** 

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July 1	August - September
September 1	October - November

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#### From Our Readers

#### Lake in the Hills Airport



#### Dave:

Thank you for the magazine. (I) look forward to getting it. Maybe someday *Midwest Flyer Magazine* will adopt South Dakota!

Perry Hofer Doland Aerial Spraying Doland, South Dakota

Well, Perry, South Dakota is one of 12 states within the *Midwest Flyer Magazine* region, and we love the state! Be sure to help keep us informed on South Dakota news and information so we can share it with our readers.

(Dave)

#### Dave:

Great magazine! Thank you!

Joel Navickas North Oaks, Minnesota

#### To The Editor:

I don't know who sent me your magazine, but I enjoy reading of the Piper world today. Much change. We were in business for 40 years and flew and sold and repaired Pipers, raised four (4) flying sons...lots of stories to tell.

Wisconsin is our (my husband and I) home state. He passed (away) in 01. Enclosing a check for a year's subscription to your magazine. No longer Engels Aircraft, Inc. Just me!

Arlene E. Engels Fairbury, Nebraska

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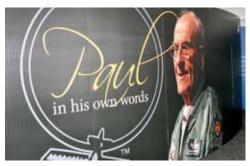


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# **Paulisms by Paul Poberezny**

(September 14, 1921 – August 22, 2013)



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

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

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# Ask Pete!

by Pete Schoeninger

#### Email your questions to Pete@Flymilwaukee.com

Q: I'm considering buying an airplane with a buddy. This would cut purchase price in half, along with hangar rental and insurance costs. What (if



Pete Schoeninger

any) are the downsides of an airplane partnership?

A. Sharing ownership with a friend allows you to buy and fly "twice" the airplane. But the biggest problem I've seen is when one partner wants out for a variety of reasons, which sooner or later is going to happen. People get job transfers, get divorced, have financial calamities, lose a medical, etc. So if nothing else, you should have in writing how to end the partnership. I can recommend the attorneys that write and advertise for this magazine. Additionally, AOPA, and possibly other groups, have information on creating a partnership agreement, so you won't have to reinvent the wheel. As a last resort, I can give you some more ideas. Email me at pete@flymilwaukee.com.

**Q:** I heard you express admiration for the designer of the Spirit of St Louis. I have never heard of him. Please tell me more.

**A.** At the age of 27, Donald A. Hall designed, and the Ryan factory built, 60 days from start to finish, the Spirit of St Louis, which had a gross weight of 5300 pounds, a range of 4000 miles, and could take off in 2000 feet, powered by a 220 hp engine. Few airplanes even today can do that. In my opinion Donald Hall never received the recognition he should have.

An interesting fact is that Charles Lindbergh did not finish college, and Donald Hall did not finish Army Flight training. But in their respective roles (Lindbergh as a pilot, and Hall as an aeronautical engineer), they made one of the most famous flights of the last century.

If you are interested in long distance flight, do a search on the Internet for "Technical Preparation of the Airplane Spirit of St. Louis" by Donald Hall. That paper, presented to the National Advisory Committee for Aeronautics (Paper #257), has astonishing calculations and graphs. For instance, the best economical cruising speed was calculated at 95 mph when heavy, but by the end of the trip that had changed to 75 mph.

**Q:** Within a 75-mile radius of my home airport, the price of 100LL varies from under \$4 to over \$7 per gallon.

Why such a spread?

A: Many factors, such as 1) When did the seller buy their last load of fuel? If the fuel retailer (FBO) bought a tanker full (8000 gal plus) of 100LL just before gas prices took a dive a few months ago, he may have paid a dollar a gallon more than his competitor 30 miles away. 2) Is the fuel self service or delivered to you via truck and line person? A halfway decent used truck is a substantial amount of money (\$25K?), and so is insurance, maintenance, employee wages, etc. 3) Is the fuel government subsidized? At some locations tax money is used to build a facility, and the gas is then sold by the municipality, just to provide a service, without looking to make a profit or pay off debt or overhead? 4) At some locations a fuel retailer has to pay dearly to be on the field in the form of a lease or rent for office space and a local flowage fee. This all adds up, and affects the price you pay at the pump.

**Q:** My airplane is approved for – and I use – car gas without any noticeable problems. Now I am going to take it out of service for about 3 to 4 months and I'm worried about car gas deteriorating in my fuel lines, carburetor, and tanks. Any ideas?

**A:** Some car gas users in my area begin using 100LL avgas in the fall for winter operations, because they feel 100LL has better storage properties.

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

**A:** Not much change... piston twins continue to slowly decline in value. Overall, others are about holding even.

Q: Last night on the Internet, I saw a guy make a wheel landing in a Super Cub, and as the airplane slowed and the tail started to drop, he added lots of power and some braking to stop with the tail still in the air. He then turned the airplane 180 degrees with the tail still off the ground, and took off. The tail wheel never touched the ground! You used to own and fly a Super Cub. Did you ever try that?



A: I never tried it because a screw up (nose over with prop smacking the ground) means a new prop, engine tear down or more to the expense of at least \$20,000.

Q: Occasionally, I land my Cessna 182 Skylane at a large airport that has substantial corporate jet traffic. I am allowed to unload my passengers at the main terminal, but the linemen there will not let me park in the row of transient jets next to the terminal. Instead, they make me park much further down the ramp. Are they discriminating against me because I am a very minor customer in their greedy eyes?

A: I used to get that gripe when I managed a large flight center. In truth, you don't want to park near jets. When the jets depart their parking spots, they

have to apply quite a bit of power to get started rolling, and then usually turn sharply. That jet blast could blow your airplane into another airplane, or flip it over, or otherwise ruin your day.

**Q:** Why don't we see many lowwing airplanes on floats?

**A:** Most floatplane docking is done at piers, and most high-wings go over the piers. So an experienced seaplane pilot can get his high-wing floatplane right next to a pier, so he only has to step out of his plane onto a float, and one more step onto a pier.

Q: Like many aircraft owners, I started with a two-place airplane, then went to a low-powered four-place, and kept moving up the food chain for power and avionics. As a baby-boomer, I am now trying to decide if I can

afford to keep what I got, or if I should downsize to a two-place airplane again, or throw in the towel.

**A:** To fly as affordably as possibly, it is hard to beat renting if a suitable airplane is available near you and you fly under 100 hours a year. If you would like to continue owning something, I sure would favor a basic four-seat metal (Cessna 172 or Piper Warrior) over any two-seat aircraft. Cubs and Champs are wonderful classics, but they MUST be hangared, and have very limited range, poor heaters, and usually no electric systems, and cost nearly as much to buy as an old four-seat metal airplane.

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



# **Can You Buy Replacement Aircraft Data Plates On The Internet?**

by Greg Reigel Attorney At Law

¶he Internet can be a wonderful thing. From the convenience of your computer you can buy most things aviation. Whether you are looking for pilot supplies, aviation paraphernalia or even an aircraft, it is quite likely that you can locate, and complete, your purchase via the Internet.



Greg Reigel

But, the convenience of buying through the Internet doesn't always mean that you are really receiving the item for which you paid, or that you will be able to actually use the item as anticipated. A recent Legal Interpretation issued by the FAA's Office of the Chief Counsel illustrates this point.

This particular Legal Interpretation responded to a request from an individual regarding an advertisement on an Internet auction site promoting the sale of "high quality reproduction aircraft identification plates." Specifically, the individual wanted to know how to determine "whether a reproduction plate is 'eligible for installation on a type certificated product."

The Interpretation initially notes 14 C.F.R. § 21.8 states that a part which must be approved by the FAA, such as an aircraft data plate, must be approved for production under a parts manufacturing authority (PMA), a type supplemental order (TSO), in conjunction with type certification procedures, or the catchall: "in any other manner approved by the FAA." It goes on to observe that, not surprisingly, when it comes to installation of data plates on aircraft, the FAA usually relies upon the original aircraft manufacturer to install the data plates on its aircraft.

According to the FAA Chief Counsel, the FAA views the aircraft manufacturer's installation of data plates as a declaration or representation that the aircraft conforms to its type design. If for some reason the aircraft manufacturer refuses to issue or install data plates, the FAA assumes (yes, the Legal Interpretation actually uses the word "assumes") the

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aircraft does not conform to its type design.

With that background, the Interpretation then addressed several situations in which the aircraft owner may not have original identification plates issued by the aircraft manufacturer.

First, if the data plate is lost, stolen or damaged during maintenance operations, the Interpretation states that the aircraft owner should "seek a replacement from the aircraft's original manufacturer." Unfortunately, since product liability exposure is always a concern for manufacturers, they are reluctant to issue a new data plate and expose themselves to additional potential liability for an aircraft whose condition they have been unable or unwilling to verify. As a result, that option is seldom successful.

Next, the Interpretation addressed the situation in which "the aircraft's original manufacturer is no longer in business or is otherwise unable or unwilling to produce a replacement plate for reasons unrelated to the condition of the aircraft. It observed that FAA Advisory Circular 45-2D, Identification and Registration Marking, provides a means of compliance.

Referencing Section 6(i)(3) of AC 45-2D, the Interpretation states than an owner or operator may only buy data plates from an approved source after "going through the process" of contacting the local Flight Standards District Office (FSDO) or Manufacturing Inspection District Office (MIDO) for assistance and approval in obtaining a replacement. Unfortunately, neither the Interpretation nor AC 45-2D provide any explanation for what this "process" involves or requires from the aircraft owner or operator, nor does it state what the FSDO or MIDO is obligated to do in assisting or providing approval of a replacement data plate. As a result, it is unclear whether this is truly a practical or viable option.

Finally, in addressing the specific request before it, the Interpretation concludes that "[a] reproduction identification plate sold on an online auction website would presumably be produced by neither the manufacturer nor an FAA-approved alternative source (such as a PMA holder for the article), and therefore it could not indicate to the FAA that an aircraft conforms to its type design." And without an approved data plate to "prove" conformity with the type design, the aircraft would be ineligible for a standard airworthiness certificate.

So, the moral of the story: Simply because you can buy replacement data plates on the Internet (or anything else for that matter), that doesn't mean you can use them. At least the individual in this case asked the question before, rather than after, spending good money on "reproduction" data plates. But, as with most purchases, some degree of "caveat emptor" is almost always a good thing.

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

For assistance, call (952) 238-1060 or Twitter: @ReigelLaw (www.aerolegalservices.com)

# **Lowering The Cost of ADS-B**

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

f you've been following the discussions around the FAA's 2020 mandate for aircraft to equip with ADS-B Out, then you know that AOPA has made lowering the cost to comply a top priority.



Mark Baker

For tens of thousands of aircraft owners, particularly those who may own older airplanes valued at \$40,000 or less, the price to equip has been a major sticking point. Many of these aircraft owners simply can't justify spending 15 percent or more of the value of their airplane to install ADS-B Out equipment just so they can continue to use the airspace where they already fly. I've heard from many of these owners and AOPA members who tell me they'll have to sell or ground their aircraft if we can't come up with a more cost-effective way for them to participate in ADS-B.

We've raised the issue with the FAA and with equipment manufacturers in public forums. We've made it a key discussion point at Equip 2020 meetings where the aviation community and the FAA are working collaboratively to address obstacles to meeting the mandate. We joined forces with 13 other aviation organizations to lay our concerns before the FAA administrator. We've held individual meetings with manufacturers to discuss the barriers and opportunities for more affordable solutions. And we hosted a meeting of equipment manufacturers at Sun 'n Fun to find even more ways we can work together to lower costs.

The good news is that both the FAA and manufacturers have heard

our concerns, and the first significantly lower cost ADS-B Out package has been announced at a price about *half* that of the lowest cost solution previously available. I've also spoken with several other manufacturers who say they've got lower cost offerings in the works, too.

I'm pleased that our efforts are getting results, and that equipment manufacturers have been so responsive to the needs of their customers.

And there may be other ways to help keep costs down, too. A&P mechanics can install ADS-B equipment with the proper training and an inspection

authorization (IA) signoff. That has the potential to be a real money saver for owners, especially if it's done during an annual inspection.

We'll also be installing a variety of ADS-B solutions in our own AOPA aircraft in the coming months, and we'll share those experiences, including information about the cost and installation complexity, so you can learn right along with us.

ADS-B is here to stay, and we want everyone to benefit. That's why we'll keep doing everything in our power to make sure every segment of the GA fleet can participate.

2015

JUNE 6 FREDERICK (FDK), Md. - AOPA Homecoming Fly-In.

AUGUST 22 BLAINE (ANE), MINN, - AOPA Flv-In at Minneapolis Anoka

**County-Blaine Airport** 

SEPTEMBER 26 COLORADO SPRINGS (COS), COLO. - AOPA Fly-In at Colorado

Springs Municipal Airport.

October 10 Tullahoma (THA), Tenn. - AOPA Fly-In at Tullahoma Regional

Airport.

To read more about the AOPA Fly-In, go to www.midwestflyer.com/?p=8264. **When Attending - RSVP By Going To** 

www.aopa.org/Community-and-Events/AOPA-Fly-In/2015/About



# **State Legislative Issues Continue As Summer Takes Off For GA**

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

> by Bryan Budds Manager, AOPA Great Lakes Region

an you believe we are already halfway through the year? For most of my regional manager colleagues at AOPA, that means much of their state legislative work comes to a close. However with many of the nation's full-time state legislatures located right here in the Great Lakes, state legislative bodies in Michigan, Ohio, Illinois and Wisconsin are also approaching their



Brvan Budds

halfway points and things get 'interesting' and keep all of us here at AOPA very busy.

Coincidentally, most of these states are debating funding provisions that will have a significant impact on funding of your local airport, and on the tax rate you pay at the avgas pump.

In Michigan, a pair of bills will significantly increase funding for the state's airports. These bills would dedicate a portion of the sales tax already collected on aviation fuel to the airport fund and result in more than \$10 million being made available for state grants to airports and to secure federal airport improvement dollars. Further south, Ohio is considering a variety of methods to increase the State's ability to support its robust system of airports.

Two pieces of legislation – one eliminating the sales tax on aviation fuel and imposing a lesser dedicated-to-airports excise tax and a standalone budget appropriation – are being debated in Columbus. Similarly, the Illinois General Assembly is considering a bill that would mimic fuel tax reform achieved in Indiana just a few years ago. This legislation

would eliminate the sales tax on aviation fuel and impose a flat \$0.10 per gallon excise tax with all of the revenue gained from the new tax dedicated to the airport fund.

In each of these states, AOPA tries to walk the fine line of ensuring that airports are adequately funded, while tax rates remain fair and competitive with regional neighbors. The last thing we want to see is a mass exodus of aircraft searching for a more favorable tax environment outside of any of the Great Lakes states and we have had great discussions with legislators, tax policy advisors, and members of the aviation community on ways to strengthen the region through these and other tax reforms.

Alright. Enough tax talk! Now that summer is here, it is time to talk flying events!

First off, I wanted to personally invite you to the AOPA Regional Fly-In being held this year at the incredible Golden Wings Museum located at Anoka County – Blaine Airport in Blaine, Minnesota, just north of Minneapolis on August 22nd. Having been to this museum many times, I can tell you that the great collection aircraft on display will not disappoint you. Also, while the fly-in officially starts on Saturday, August 22nd, some great events will be going on the evening of Friday, August 21st. Check out www.aopa.org/fly-in to find all the details.

You will also find me at a variety of smaller events across the region.

Right now, I'm still working on a finalized schedule, but I will likely be attending EAA Chapter 55's Young Eagles Days on June 13, July 11, and August 8 at Mason Jewett Airport in Mason, Michigan. I am also excited to visit Wood County Regional Airport's Air Fair, August 15, in Bowling Green, Ohio, and a variety of EAA Chapters across the region!

If you have questions on anything covered in this column or want to see an AOPA presence at your local airport event, just let me know.

Email bryan.budds@aopa.org.

In the meantime, have a great summer!

# **AOPA – Working For You In Each & Every State**

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

by Yasmina Platt Manager, AOPA Central Southwest Region

e are approaching the end of most of the legislative sessions in the Central Region and continuing to see a lot of good, pro-general aviation legislation being considered. I will concentrate on Missouri and Iowa here because they currently have the most busy and dynamic legislative sessions, issues, and initiatives.



Yasmina Platt

We have three bills (Senate Bill 377, House Bill 1306 & 517) in Missouri attempting to create a flyaway exemption. Senator Dave Schatz, and Representatives Don Gosen and Galen Higdon, have, respectively, sponsored those bills. This flyaway exemption would exempt out-of-state residents from paying the state's sales tax when purchasing an aircraft in Missouri, thus keeping more aircraft sales, aircraft maintenance, and aircraft upgrade work in Missouri, rather than seeing them go to neighboring states, such as Kansas to the west or Illinois to the east. These bills are all moving pretty well along the legislative process.

We also have two other bills in Missouri (HB 375, HB 263), and we are working on a potential third with identical language, attempting to amend Missouri's existing Recreational Use Statute (RUS) to include "aviation activities."

On March 12, 2015, I testified in favor of SB 377 before the Senate Ways and Means Committee and, on April 14th, I attended Missouri's Aviation Day at the Capitol and visited with several legislators creating additional support for those two initiatives.

In my last article, I mentioned that we were working two specific issues in Iowa: 1) an exemption for flight schools and independent flight instructors from provisions of an anti-fraud law that requires educational entities to obtain a \$50,000 bond and submit documentation to the Iowa College Student Aid Commission, and 2) a bill that would delete existing provisions of the Iowa Airport Zoning Act, create flight-safety hazards around airports, and threaten



AOPA Central Southwest Regional Manager, Yasmina Platt, taught an AOPA Pinch Hitter Course, April 21, 2015, during the Iowa Aviation Conference in West Des Moines.

Iowa airports' ability to obtain FAA funding. We have made progress on both of those issues.

House File 658, the House Education Appropriations Bill, was amended and passed on April 30th. One of the amendments inserted language to exempt flight training providers from the current anti-fraud law discussed above. However, while in the Senate, we will attempt to make a few tweaks to the bill to make the language even better.

While HF 556 would have abolished provisions of the Iowa Airport Zoning Act, the new HF 655 (which replaces HF 556) now has language to protect the Act per our (and the Iowa Public Airports Association's) request.

#### **Aviation Safety Activities**

While our efforts may seem to focus around legislation, especially during the first few months of each year, AOPA regional managers also get to do a variety of other things and, as a flight instructor, I also get to teach safety meetings and other activities.

On April 21st, 23 flying companions attended the Pinch Hitter Course I taught in West Des Moines as part of the Iowa Aviation Conference. This two-hour ground school course covered everything from basic aerodynamics to dealing with emergencies (with and without a capable pilot at the

The attendance and participation was fantastic! I had a great time and the attendees left knowing a lot more and feeling better about flying in small general aviation airplanes. Their task is now to go up with a local flight instructor to

obtain some flight training.

On June 6th, while AOPA headquarters will be having its Homecoming Fly-in in Frederick, I will be participating at the Nebraska State Fly-In in Hebron, and I really hope to see you there!

I will also be speaking at the 2015 National Piper Short Wing Conference in Branson, Missouri on June 30th, and I am planning on flying on the 2015 Fly Kansas Air Tour with another AOPA staffer in late September.

Check your e-mails and voicemails often! You never know when I will show up at your airport, so don't be surprised to get a last-minute note from me announcing that I plan on dropping in.

Our Airport Support Network Volunteers (ASNVs), different local aviation organizations, airport managers and

even flying clubs (like the wonderful Mitchell Flying Club in Lee's Summit, Missouri) are quickly learning that.

Ever since I started getting around the region via general aviation aircraft, I have been able to visit more airports, meet more of our ASNVs, talk with more aviation groups, participate in more local fly-ins, and help more flying clubs. Hope to see you soon!

# @AOPACentralSW yasmina.platt@aopa.org www.aopa.org/fly-in.

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

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

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

#### FLIGHT SAFETY

## **Weekend Refresher Clinics For Bonanza & Baron Pilots**

by Dave Weiman

group of professional flight instructors with a particular love for Beechcraft piston aircraft, founded *Bonanza / Baron Pilot Training, Inc.* (BPT) in 2012.

BPT provides full-immersion pilot proficiency training in the owner's Beechcraft Bonanza or Baron. BPT also provides training in Travel Air, Twin Bonanza, and Duke aircraft. Participants receive up to 4 hours of flight instruction in their aircraft, and ground school on topics ranging from aircraft maintenance, preflight inspections and avionics, to the use of iPads in the cockpit and new regulations.

I had the opportunity to sit in the BPT clinic held May 1-2, 2015 at Waukesha County Airport, Waukesha, Wis. The airport and Atlantic Aviation hosted the event.

At the end of the clinic participants received endorsements for their biennial flight review (BFR) and instrument proficiency check (IPC), providing all qualifications were met, and a course completion certificate satisfying the recurrent flight training requirements of their insurance company. Pilots that complete BPT training receive the highest premium discounts offered by their aircraft insurance company.

A one-day non-pilot companion clinic is available to non-



BPT instructor, Dave Monti, walked the class of Bonanza owners through a preflight inspection of an F35 Bonanza. Dave Weiman Photo

pilot spouses, high school and older children, other family members, and friends.

BPT is an employee-owned company of professional flight instructors who have flight training and commercial or military flying experience. Each instructor is required to complete BPT's standardized flight training program, so there is consistency among all instructors in the training provided.

I attended a Garmin GPS and iPad refresher workshop with CFII Randy Bailey of Fort Collins Colo., and a "walk-around" preflight inspection of a beautiful F35 Bonanza with CFII and IA, Dave Monti of Minden, Nevada. *Midwest Flyer Magazine* columnist, Mick Kaufman, is one of the instructors with BPT, and also participated at the Waukesha clinic.

BPT clinics are held on weekends throughout the country, year round, to limit time and travel for both participants and instructors.

For information on upcoming BPT clinics in your area, call 970-206-0182 and checkout BPT's website: **www.bonanzapt.com.** 

Avemco Insurance, Concorde Battery, Tornado Alley Turbo, Inc., Avidyne and headset manufacturer, Lightspeed Aviation, sponsor the BPT clinics.

# Flying & Evaluating The Avidyne IFD 540 GPS Navigator

by Michael "Mick" Kaufman



Michael Kaufman

n the April/May 2015 issue of Midwest Flyer Magazine, I promised I would write a review of the Avidyne IFD 540 GPS navigator. To give you a better perspective of the Avidyne IFD 540, I have tried to categorize my review as follows to allow for better understanding: Installation, Learning The Box, Architecture, and Features.

When Avidyne started designing the IFD 540 a number of years ago, their goal was to develop a better Garmin 530 and a direct slide in replacement to that unit, thus saving many hours of labor rewiring the aircraft and interfacing all of the devices connected to it. I had the opportunity to get some ground instruction and fly the IFD 540 from Phoenix, Arizona to California, with an instructor who I consider a "Jedi of the Box," Randy Bailey of Fort Collins, Colorado.



Installation: Randy informed me that the upgrade from the Garmin 530 to the IFD 540 was literally a slidein replacement with about an hour or two of labor at the avionics shop to reconfigure and program all of the parameters that tell the IFD 540 what other devices were



#### Instrument Flight

connected to it. These could include nextrad weather, a fuel totalizer, air-data computers, stormscopes, and traffic advisory equipment.

*Learning the Box:* I found that after a short time using the IFD 540, I was quite comfortable with it.

Randy pointed out that most pilots who come from a Garmin 530 box will need 10 to 20 hours to get familiar enough to fly IFR with the IFD 540. The reason for my early adaptation comes from my experience with the Garmin 480, which uses Flight Management System (FMS) architecture.

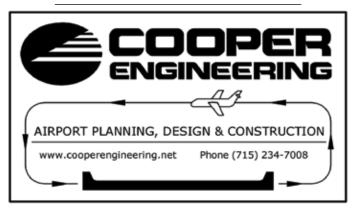
Architecture: To allow you to better understand this review, I will reference and make comparisons to the Garmin 480, Garmin 750 and the gold standard, Garmin 530. To further this review, I would like to point out the two different architectures or formats that most navigators use – the Garmin format and the FMS format, which is used by most airlines and also used in the IFD 540 and the Garmin 480.

Garmin arranges their flight plan in chapters where the FMS uses a continuous waypoint flow. An example of the Garmin chapter format is a chapter for departure, en-route, arrival, approach, and missed approach. It is necessary for you to manually switch from chapter to chapter in most cases unless you use the secret of cheating the system by manually editing and sometimes removing waypoints.

An example of this is to build a flight plan, have a final airport waypoint, then add an approach. The Garmin GPS will then fly you to the destination airport and proceed no farther unless you activate the approach or remove the airport waypoint from the flight plan. When you go missed, you must activate that portion of the flight manually. Using the FMS format, it is not necessary to activate a different chapter, as the airport appears in its proper position in the flight plan sequence and there is a continuous flow from waypoint to waypoint.

Features: Every function of the IFD 540 can be activated with a button and knob combination or using the touch screen. I find this to be one of the strong features of this unit compared to the Garmin 750. In a comparison with the IFD 540 and the touch screen Garmin 750, the Garmin 750 does not support buttons and knobs as an alternate method of programming.

A local King-Air pilot who installed the Garmin 750 found it impossible to reprogram his touch screen navigator



in turbulence and installed an add-on FMS keyboard to it, which solved this issue. In a future firmware release, Avidyne will be supporting a bluetooth keyboard and will be including one with all new units purchased. Rumor has it that all of the owners of previously purchased units will receive one as well.

Randy pointed out that database updates are extremely easy to do with the IFD 540, and it is equally easy to download the new data to a USB stick on a computer. The stick is inserted into a port on the left side of the IFD 540, below the frequency swap button, and when the unit is turned on, it recognizes the stick and asks if you want to do a database update.

Randy claims that you do not need to purchase multiple databases if you have two Avidyne GPS units or an Avidyne display in your aircraft. This is a big money saver!

Another unique feature of the IFD 540 is the ability to use two fingers on the touch screen display similar to using Foreflight on your iPad. This feature is not available on the Garmin 750 touch screen unit at this time.

The IFD 540 has the ability to configure up to four communication frequencies to be displayed on the left side of the screen. There is one active and three standbys, and the pilot may select which frequency he/she wants to use by just touching the displayed frequency. Each frequency has a tag, which is referenced to a database and will name the frequency assigned to in the area you are flying. This can be very useful at times as we can all remember having been given the wrong frequency by a controller or misunderstood a frequency change. If you set in a frequency, 122.7 for example, and flew cross-country, it will continuously update to the nearest airport that uses that frequency as you travel. I understand that Garmin is adding this feature to its 750 navigator in a future firmware update.

I have found that the print on the screen of the IFD 540 is a bit small and it may be difficult to read should your eyes be getting close to needing glasses.

Avidyne has a very powerful de-clutter feature to clear the screen of unwanted data, and it is easy for the pilot to use, and there are multiple customizations for the screen set up should several pilots be flying the airplane with different preferences. When you turn the unit on, it can be set up to display the question as to which one of the pilots you are, and then configure it to your preferences. One of the unique data fields I found in the configuration set up is "GPS height above ground."

When building a flight plan with the IFD 540, you see many similarities with the Garmin 480 GPS navigator. The big difference is that you do not have the ability to save a copy of an active flight plan, then modify it and make it the active flight plan, which is a useful feature for this Jedi. There is a bar on the flight plan screen of the IFD 540, which shows you where the input of a waypoint would go. After tapping on the bar between waypoints, you are then displayed a question asking what you want to do at that point in the flight plan, which could be adding another waypoint, holding, etc. Tapping

on a waypoint allows you to modify it should that be necessary.

The IFD 540 makes great use of color on the flight plan screen, and the waypoint displayed in magenta is the waypoint you are currently navigating to. Unlike the Garmin boxes, you can have multiple airports in the flight plan and you can load an approach to more that one airport at a time. In some cases that could be confusing, especially if coming from one of the Garmin boxes.

The IFD 540 has a unique feature that lets you manually select the missed approach procedure any time after passing the final approach fix, rather than the missed approach waypoint if using one of the Garmin boxes. This is a great feature in case something does not go as planned on the approach and gives the pilot guidance in avoiding terrain while flying the missed approach.

Closing Comments: I find all of the new avionics coming out very intriguing, but I am somewhat a geek and always like challenges. There is a definite money savings for the pilot who wants to replace his Garmin 530 with some newer technology. On the opposite side, you need to have a commitment to devote 10 to 20 hours to learn how to use it before flying in IFR.

It was easy for me to transition to the Avidyne IFD 540 because of my Garmin 480 experience, and I could recommend it to Garmin 480 owners looking for an update. You will find that Avidyne as a company is very supportive of interfaces to other manufacturers' equipment than is Garmin, which is proprietary to their own equipment.

If you have plans to add the brand X ADS-B box, or have one and need a certified GPS to drive it, Avidyne is much more friendly to work with here. I would definitely consider the Avidyne IFD 540 for my own aircraft, but I am a Garmin

I find that the Garmin 750 has a very easy learning curve if you transition from a Garmin 530, and the Garmin 750 has a larger display screen.

Special thanks to Randy Bailey for his instruction and the chance to fly and evaluate the Avidyne IFD 540 on that West Coast flight. There are many other great features that I have not yet discovered with this box, and I am hoping that by the end of the year, I can claim the coveted title of "Jedi of the Box."

Fly safe and never fly in IFR conditions until you have mastered the equipment in your aircraft in VFR conditions.

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 (KLNR) 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 or call 817-988-0174.

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## **Failures In The New World**

by Harold Green

his discussion is a continuation of previous articles dealing with the changes in training and operations brought about by the transition currently underway in general aviation.



Harold Green

The increased capability in avionics and aircraft offer tremendous potential for the future of general aviation. At this time, however, we are still confronted with the need to prepare pilots for safe operations when confronted with the increased workload these advances require.

Since most general aviation operations are conducted with only one pilot, the workload is much higher for the average general aviation pilot than for the airline folks who have the benefit of two or more pilots, plus a staff to help with flight planning. Does that mean we should resist these changes? Not at all. It simply means

that we need to be alert, well trained and knowledgeable.

Following are one instructor's thoughts on the subject. This is not intended to be a complete dissertation, but hopefully it may spark discussion or thought on the part of others. There will probably never be a final discussion on this subject.

There have been some changes in flight training guidelines put forth by the Federal Aviation Administration (FAA): FAA Industry Training Standards (FITS), being one. As often happens with new concepts, when FITS was first introduced, the standards were so focused on the new goal of systems and cross-country training that they downplayed maneuver-based training. Consequently, new pilots were not properly taught this aspect of flying. Now that this has been recognized, and maneuver-based training has been reinstated as a portion of FITS, flight students are receiving a much better balance of training. Part 121 operators also recognized this, and they, too, are re-including "fly the airplane" training.

The point is that any new thing is likely to come up short in some area and will require further fiddling with the system. That's why there are such things as beta tests, etc. Obviously, I believe this applies to human systems as well as hardware.

Let's look at what type of failures can be expected from advanced aircraft avionics.

As we do this, it is wise to remember that in systems as complex as today's avionics, it is virtually impossible to predict all failures and combinations of failures that could occur. With diligent effort the engineers can predict and correct for the vast majority of them, but there is absolutely no guarantee that all have been found. Only time and experience will find the remainder.

For the really advanced system, several pieces of equipment are mounted remotely from the cockpit. This means there is a need for all of these units to communicate with each other. There is an Aeronautical Radio Incorporated (ARINC) standard for accomplishing this. This standard defines the protocol and signal levels. This means more equipment, more software and more connectors. All of these things contribute to an overall potential failure rate, even though system reliability is high.

For a sense of perspective, consider that even 20 years ago the state of electronic development would not support this level of complexity at a failure rate that would be acceptable. The failures will fall into a few limited categories. Total failures of system elements will generally be identified and dealt with automatically. The "dealing with" portion may consist of shutting down the affected elements and informing the pilot. This is what happens when the red Xs show up on the display or, the screen goes blank. (Sometimes referred to as the blue screen of death.) Failures at this level will be quite reliably detected and displayed. However, bear in mind two things: First, there may still be situations, which are not detected by



the system and could lead to problems. Second, this situation can occur at any time and this includes on final to minimums while carrying ice. The pilot had better be ready to react rapidly and accurately.

Some failures create significant deviation from proper indications, but will not be detectable by the system.

Consider the Air France disaster over the Atlantic a few years ago. The situation was created by iced over pitot tubes, which the crew apparently failed to correlate with aircraft performance. The result was disastrous. A different, but similar, situation could occur in any technically advanced aircraft.

Warning the pilot of inconsistent data is possible, but the difficulty in defining inconsistent is extremely high. This is because there are so many possible interactions in the system, and conceiving all possible erroneous situations becomes a virtually impossible task. Once an unpredicted failure occurs and is reported, a correction to the system can eliminate it. The solution here is for the pilot to be aware of possible inconsistencies between the data presented and aircraft performance, and be prepared with the appropriate actions.

The third general type of failure may



It is virtually impossible to predict all failures and combinations of failures that could occur in systems as complex as today's avionics.

using a radio frequency signal. Often these two do not match.

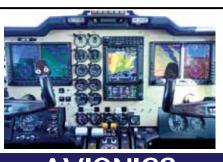
There is one VOR approach to my home base of Middleton (Wis.) Municipal Airport – Morey Field (C29), which presents an arcing VOR path to the runway. Students comparing GPS with the VOR often want to fly the GPS, even though that is not legal since it is a VOR approach. The VOR approach, like most such approaches, is checked periodically by the FAA and found to meet their standards, so unless there is some extraneous interference, this is no reason to substitute the GPS for the VOR.

In short, the process here is to compare two sources of information and select the appropriate one. Since, in this

be considered as a perceived failure, which, in reality, does not exist at all. Typically this occurs when the pilot starts comparing the data presented by different technologies.

A classic case is when executing a VOR approach while monitoring progress on the GPS. The issue here is that the GPS is computing position, while the VOR is measuring position





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#### FLIGHT TRAINING

example, the legal source is the VOR, it should be followed *unless* there is some reason to believe the VOR is in error. In that case the appropriate action is to execute a missed approach, then attempt a different approach not dependent on the VOR.

In order to be prepared to cope with the situations described above, we now need to add to our training tool kit the subtle and sometimes, the not so subtle, failures, which can occur in today's systems. Further, these failures must include failure on the part of the pilot to recognize that there is a problem.

An example of the latter is when the autopilot disconnects and the pilot is unaware of it. But, in all of this it behooves us to make sure that the pilot can still fly the airplane even under stressful conditions.

Now, given all of the crepe hanging



of the foregoing, what is the answer? In the opinion of this instructor, it means that we need to place even more emphasis on system operations, not only during instrument training, but also in primary flight training. From the get-go, the student needs to be made aware that the system can lie, or be misunderstood, and that being Pilot In Command also includes the responsibility to interpret and use all systems on board the aircraft.

In addition to the classic "OOPS! You just lost your engine," and "Where ya goin?" the student should be confronted with the need to identify and react to system failures. This can be a difficult scenario for the instructor to implement, but it can be done with care and knowledge of the system. One way to do this is to place the student in an unfamiliar situation, which requires paying attention to a multitude of items.

A possible VFR scenario is for the instructor to alert the student to traffic, while requiring a change in aircraft heading and/or altitude. For IFR, a change in approach type while talking to a controller works very well. The purpose of this exercise is not to embarrass the student, but rather to aid the student in learning how to prioritize while maintaining system awareness and flying the airplane.

As instructors, we need to find ways to cause simulated failures of individual system elements. Sometimes we can do this simply by stating that a specific system element or function has failed. Of course, when applicable, the tried and true instrument covers still work well. Some aircraft allow access to circuit breakers, which the instructor can pull. Of course it is more important than ever before that the student be completely familiar with operation of the equipment on board the aircraft. This should include the use of the autopilot to reduce workload when things get rough, and a willingness to simply fly the airplane the old fashioned way, manually, when necessary.

Willingness to request, and receive, assistance from controllers

when appropriate will greatly relieve stress, particularly in Instrument Meteorological Conditions (IMC). All too often pilots seem reluctant to ask for help.

Perhaps indicative of this fact is that the Cirrus parachute system has proven to be a tremendous lifesaver, virtually eliminating fatalities when deployed. Yet, in the majority of Cirrus accidents, pilots are reluctant to deploy the chute. This is a failure of the pilots. Cirrus training emphasizes the use of the chute. Insurance companies even say they would rather buy the insured a new airplane than face their survivors in court after the accident. A pilot's reluctance to use the chute, may be an indication of the difficulties we face as instructors, as our world advances around us.

Finally, most have heard the old saw that the three most useless things in aviation are the runway behind you, the altitude above you, and the fuel in the truck. I would add a fourth to this: The equipment in your airplane that you don't know how to use.

As new students come on board. there is a tendency, particularly among the younger ones, to avoid the VOR or anything that requires interpretation. I have had beginning instrument students who have very little capability with the VOR because of their reliance on the GPS. Before those of us with more experience and longer tenure judge too harshly, we need to ask ourselves how we feel about NDB approaches or tracking to an NDB. We need to overcome this tendency in order to maintain the highest level of safety in our flying. In short, if it's in the plane, we should know how to use it. Similarly, if it's in the plane, we should know how to survive without it.

EDITOR'S NOTE: Harold Green is a Certified Instrument Flight Instructor (CFII) at Morey Airplane Company in Middleton, Wisconsin (C29).

Email questions or comments to: harlgren@aol.com or call 608-836-1711 (www.MoreyAirport.com).

# **Obstructive Sleep Apnea (OSA)**

by Bill Blank, M.D.

s many of you know, on March 2, 2015, the Federal Aviation Administration (FAA) initiated a new policy on obstructive sleep apnea (OSA). What is behind this and how will it impact you as a pilot? Here is a little background.

For several years, the National Transportation Safety Board (NTSB) has been concerned about OSA in over the road commercial truckers. There



Dr. Bill Blank

have been several fatal accidents involving truckers who were thought to have had OSA and fell asleep while driving. NTSB reasoned that, if this was a problem among truckers, that it was probably the case with some pilots. Unfortunately, there have been cases (or one case) where flight crews over flew their destinations while both pilots were asleep. In some cases, the undiagnosed sleep apnea of one of the crewmembers probably was a contributing factor. Because of this the FAA decided to try to identify at-risk pilots. In 2013, the then Federal Air Surgeon, Fred Tilton, tried to implement a program requiring Aviation Medical Examiners (AMEs) to calculate the body

mass index (BMI) of pilots. Any pilot with an index of 40 or greater would have been required to have a sleep evaluation by a board certified sleep specialist. Various pilot groups felt that this was expensive overkill and the proposal was withdrawn. Rightfully, the FAA was still concerned about the problem and its potential impact on flight safety. They worked with various groups such as ALPA, AOPA, and EAA to try to develop a more practical, reasonable policy. The March 2 policy change is the result.

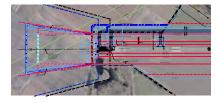
As of March 2, your AME is required to make a risk assessment of sleep apnea on each flight physical. Based on your height and weight, the software associated with the 8500-8 form calculates your BMI. The 8500-8 is the form you fill out via "medxpress" and the AME completes and submits electronically to the FAA. An icon has been added for the AME, which he must click on. He cannot submit the form until he has done so. He has six (6) possible options. He must choose one of them.

#### **Applicant Previously Assessed**

- 1. Has OSA diagnosis and is on Special Issuance. Reports to
- 2. Has OSA diagnosis and is currently being treated OR has previous OSA assessment. NOT on Special Issuance. Reports









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#### **Applicant Not at Risk**

3. Determined to NOT be at risk for OSA at this examination.

#### Applicant at Risk/Severity to be Assessed

- 4. Discuss OSA risk with airman and provide educational materials.
- 5. At risk for OSA. AASM sleep apnea assessment required. Reports to follow.

#### Applicant Risk/Severity High

6. Deferred, Immediate safety risk. AASM sleep apnea assessment required. Reports to follow.

Most of us will be in category 3. The incidence of OSA is 4-7% in middle-aged people. Number 1 is nothing new. This person already has a Special Issuance and will follow the requirements in it. Number 2 has been diagnosed with OSA, but the FAA does not know about it yet. This could happen

if the condition was diagnosed between flight physicals or the pilot (applicant) somehow "forgot" to report it. The FAA is not trying to be punitive. This is an attempt to help you get in compliance without a penalty. You will receive a Special Issuance if qualified. Numbers 4 and 5 are selfexplanatory.

How does the AME decide if the airman is at risk? He will use these tables along with the BMI. A BMI equal to or greater than 40 is considered to be high risk. Between 30 and 40 there is still a significant risk and would

probably require selecting choices 4 or 5.

To comply with choice 4, the AME can give you a brochure on OSA published by the FAA. The FAA emphasizes that in almost all cases, the AME should not defer the medical, but issue it. That brings us to choice 6. In this

case deferral is mandatory. The FAA feels that only a very

Your Pathway To The Airlines While Landing An Education 1-800-DIAL-WSU www.winona.edu (An FAA Airway Science University)

small percentage of airmen would fall in this category.

Obviously, we don't want people falling asleep in the cockpit. There is much more to sleep apnea than aviation safety. It puts us at increased risk for type 2 diabetes, hard to treat hypertension, atrial fibrillation, stroke and many other serious health problems. A contributing factor in the football player Reggie White's untimely death at 43 was sleep apnea. It is estimated that 80% of people with OSA are undiagnosed. In addition, up to 30% have a BMI of less than 30%.

If you are required to provide information to the FAA regarding a sleep evaluation, you have 90 days to do it. Any physician, including an AME, can do it, but he must follow the guidelines of the American Academy of Sleep Medicine. In many cases an evaluation by a sleep specialist won't be required.

Suppose you are diagnosed with sleep apnea. If your treatment is successful (and it usually is), using a CPAP

American Academy of Sleep Medicine Guidance on Obstructive Sleep Apnea http://www.aasmnet.org/Resources/clinicalguidelines/OSHA Adults.pdf

#### **AASM Table 2**

Patients at High Risk for OSA Who Should Be Evaluated for OSHA Symptons:

- Obesity (BMI > 36)
- Congestive heart failure
- Atrial fibrillation
- Treatment refractory hypertension
- Type 2 diabetes
- Nocturnal dyshythmias
- Stroke
- Pulmonary hypertension
- High-risk driving populations Preoperative for bariatric surgery

#### **AASM Table 3**

Questions about OSA that Should Be Included in Routine Health Maintenance **Evaluations:** 

- · Is the patient obese?
- Is the patient retrognathic?
- Does the patient complain of daytime sleepiness?
- Does the patient snore?
- Does the patient have hypertension?

breathing system, the FAA will grant you a Special Issuance. At subsequent flight physicals, your AME will be able to issue your medical, providing you bring him documentation of the effectiveness of the treatment and evidence of compliance. This is an AASI (AME Assisted Special Issuance). The FAA will expect you to use the CPAP for an average of 6 hours per night. There are other options besides CPAP, but I don't have the space to discuss them now. I hope this has been of help. There is much more I could have said, but I didn't want to put you to sleep.

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.

# **Schweiss Doors Introduces A "Build Your Own" Door Package**

HECTOR, MINN. – For those willing to do some work to save some money, Schweiss Doors has developed a Build Your Own Door Kit. Customers willing to weld their own steel doorframes may purchase the company's properly sized major hydraulic door components.

One of the challenges when figuring out the Build Your Own Door Kit was to be able to develop a hinge that comes pre-assembled, pre-welded and is robust in design.

The key is Schweiss' uni-body hinge design that wraps around the steel doorframe members, making it the strongest, most reliable hinge design in the industry. It includes a first-of-its-kind hydraulic hinge with grease zerks located so hinges can be greased from the inside.

The kit includes a complete set of new design heavy duty end and center hinges, strong cylinders, a factory wired Red Power hydraulic unit and all the seals necessary to construct a weathertight door, allowing the owner to manufacture the steel doorframe at a considerable savings.



Schweiss Doors now offers a build-it-yourself hydraulic door kit that comes with all the necessary quality Schweiss door components and detailed instructions from start to finish.

Design software provides door specs, weights and forces, along with specific details for accurate construction and installation. Schweiss Doors will provide an easy-to-read blueprint and complete steel list with steel member lengths and sizes required to get you started.

"It's now easy and simple for customers to manufacture the steel doorframe with these door components, making the door kit user-friendly, thereby allowing

hydraulic doors to be built in your own shop," says Mike Schweiss, owner of Schweiss Doors. The Build Your Own Door Kit saves the customer money in manufacturing and delivery.

Schweiss Doors is the premier manufacturer of hydraulic and bifold lift-strap doors. Doors are custom made to any size for any type of new or existing building for architects and builders determined to do amazing things with their buildings, including the doors. For more information on the Build Your Own Door Kit, visit http://www.bifold.com/build-your-own-door.php

# A COLD WEATHER TIP FROM TANIS

Control Cables: Because of contraction and expansion caused by temperature changes, control cables on your aircraft should be properly adjusted to compensate for those changes. Your airframe and powerplant mechanic should check the tension and make any adjustments needed.

Don't leave your headsets in the plane. The gel in the earpieces will freeze and leak. Not to mention the fact that cold headsets do not make for happy ears.

Remove anything from the plane that can freeze, such as pop cans and water bottles. They make a big mess when they burst open.

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

#### www.aircraftpreheat.com

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





On approach to Rwy 27 at Beaver Island Airport, Beaver Island, Mich. Pegav Weiman Photo

#### by Dave Weiman

ooking for a remote island destination? Then consider flying to Beaver Island, Michigan in northeast Lake Michigan. Thirty miles from shore, the island is served by ferry boats and two airports: Beaver Island-Welke Airport (6Y8), which is privately owned, but open to the public; and the municipal airport, Beaver Island Township Airport (KSJX), which is owned by St. James Township and Peaine Township.

The first air passenger to Beaver Island was a doctor on a flight that took place in 1923. The island began airmail service in 1926.

McPhillips Flying Service was established by Joe and Ane' McPhillips in 1945, flying a Sikorsky Flying Boat. In 1965, the Welkes bought the farm where Beaver Island-Welke *Airport* is located today.

In 1975, the Welkes and their son, Paul, established Welke Aviation with one Piper Apache.

In 1982, they bought their first Britten Norman Islanders,

which are used by Island Airways (a subsidiary of McPhillips Flying Service, Inc) to ferry passengers and cargo between Charlevoix, Michigan on the mainland and Beaver Island. Today, Paul Welke and his wife, Angela "Angel" LeFevre, own McPhillips Flying Service, Inc. and Island Airways.

In 40 years and 32,000 hours of flying, Paul Welke has flown 35,000 trips between Charlevoix and Beaver Island, and carried more than 300,000 passengers. Welke has also flown to 49 states, and throughout most of Canada, Mexico and the Bahamas.

"2015 is an interesting year for us....we are celebrating the 70th anniversary of McPhillips Flying Service," said LeFevre.

"As we researched items for the anniversary, we have found that our United States Air Mail contract is the oldest in the continental United States. All very interesting stuff!"

For additional information, watch this YouTube video: https://www.youtube.com/watch?v=7vMRP1opmxQ), or call (231) 448-2071 (www.islandairways.com).

The other airport on Beaver Island is **Beaver Island** Township Airport (KSJX). Self-serve fuel, aircraft maintenance and car rental are available, and the airport features a new terminal building, ramp and one paved runway (9/27 4299 X 75 ft) and two turf crosswind runways.

Fresh Air Aviation has been operating from Beaver Island Township Airport for the past 9 years with daily flights to and from Charlevoix, Michigan, and air charter (www. freshairaviation.net).

For additional information, contact Rachel Teague at 231-448-2750, 231-237-9482 or 231-675-5391.

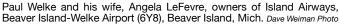
Miles and miles of rural roads make for some good bike trails on the island, there's a par 35 golf course, lighthouses to visit, and of course, charter fishing, kayaking, paddle boards, inland lakes fishing boats, snorkeling and scuba diving in the





tourist info 715-479-7442 or www.erairport.com





pristine waters of Lake Michigan.

While our full-size Montague folding bikes are our favorite mode of transportation when flying our own plane, we got a car from Beaver Island Marina & Car Rental to see more of the island in the short amount of time we had. For reservations call (231) 448-2300.

Beaver Island has been home to various groups including native Americans, Irish immigrants, fishermen, lumberjacks, and a Mormon branch known as the "Strangites," established by James Jesse Strang (March 21, 1813 – July 9, 1856).



For six years, Strang was a self-proclaimed "king" of an ecclesiastical monarchy that he established on Beaver Island, building an organization that eventually rivaled Brigham Young's in Utah. Strang was murdered in 1856, and a group from nearby Mackinac Island toppled his followers shortly thereafter.

The Beaver Island Historical Society has recorded the history of Beaver Island in two museums - the Print Shop Museum and the Marine Museum, and operates two additional historical sites - Heritage Park and the Protar Home.







#### Program Management. Mead & Hunt takes a collaborative and

proactive approach to managing complex programs, helping clients identify funding alternatives and address eligibility criteria. Our staff routinely serves as an extension of airport staff. We apply our management expertise to develop capital improvement plans, schedule projects and coordinate activities. We identify the airport's vision and goals and create a plan to achieve their objectives.





Beaver Island is known for its Lake Michigan fishing charters.

Beaver Island Chamber of Commerce Photo

We stayed at the *Beaver Island Lodge*, which is owned and operated by fellow pilot, Eric Hodgson, and his wife, Dana.

Beaver
Island Lodge
is located just
off the beaten
path, away from
the downtown
district, and
our room had
a view of Lake
Michigan.
For additional
information or



Sunset at Beaver Island Lodge.

Dave Weiman Photo

reservations call (231) 448-2396.

Looking for a cabin or home on Lake Michigan? There's plenty of real estate available on Beaver Island.

For additional information on Beaver Island attractions, accommodations and real estate, refer to the Beaver Island





The harbor at Beaver Island, Mich. Beaver Island Chamber of Commerce Photo



Beaver Head Light Station

Dave Weiman Photo

Chamber of Commerce website at www.BeaverIsland.org or call or email 231-448-2505, Chamber@BeaverIsland.org.

Attention bicyclists: The Beaver Island Bike Festival will be held June 19–21, 2015. This is a fully supported bike ride with rest stops, snacks, lunch at Bill Wagner campground, and a barbecue buffet at the Shamrock. Live entertainment on Friday and Saturday nights. For additional information, refer to the Beaver Island website.

For a complete history of aviation on Beaver Island, go to: www.beaverbeacon.net/beaver-island-history (pages "A Rich History," then "Airplane Tales"). The *Beaver Beacon* has been Beaver Island's magazine since 1955.

EDITOR'S NOTE: Pilots looking for a unique vacation might want to consider doing a **three-island hop** beginning at Washington Island off the tip of Wisconsin's Door County Peninsula (www.VisitWashingtonIsland.com and http://washingtonisland-wi.com), then to Beaver Island, Michigan, eventually ending up on Mackinac Island, Michigan (www.mackinacisland.org).

Each island is located on beautiful Lake Michigan and is accessible by air...each island is unique in its people, landscapes and downtown districts, accommodations, special events and activities...and each island has its own rich histories. Why do it afar, when you can do it right here in the Midwest?

# **Town Board Puts Heavy Restrictions On GA**

WASHINGTON, DC – The National Air Transportation Association (NATA) was joined by the Aircraft Owners and Pilots Association and the National Business Aviation Association in opposing the East Hampton, N.J. town board to restrict aircraft operations at its airport (KHTO), and its related airport infrastructure plan. The town is proposing four restrictions effective May 1st to October 31st with the proposal's impact being reassessed after October 31, 2015.

Proposed is a mandatory nighttime curfew, from 11 p.m. to 7 a.m.; an extended curfew on noisy aircraft, from 8 p.m. to 9 a.m.; a ban on all helicopters on weekends during the summer; and a limit on operations by noisy aircraft of one trip (one arrival and one departure) per week during the summer. The imposition of the proposed restrictions and

investment plan on HTO-based aviation businesses, including full-service fuel providers, flight school services and charter services, will have a negative impact.

East Hampton Airport is part of a national system of airports, and operational restrictions like those under consideration present a threat to the national air transportation system that transcends local communities. This is the primary reason why the FAA requires airports that have received federal funds to adhere to grant assurances requiring, among other things, access to all airports on reasonable conditions and without unjust discrimination. This is a critical element in the survival of our nation's system of airports and one the Town of East Hampton can expect will be vigorously defended.

### **Newly Appointed Director At Milwaukee Mitchell & Timmerman Airports Returns To Dayton**

MILWAUKEE, WIS. – Terrence G. Slaybaugh, who was hired in February 2015 as Director of General Mitchell International and Lawrence J. Timmerman Airports, has resigned to return to his former position as Director of Aviation for the City of Dayton, Ohio, citing family reasons. Slaybaugh had



Terrence Slaybaugh

held his former position beginning in 2011, and the City of Dayton welcomed his return in May.

Milwaukee Director of Transportation, Brian Dranzik, is interim airport director until a permanent replacement can be found.

#### Awards & Recognition

## Pennsylvania Congressman Receives AOPA Hartranft Award

FREDERICK, MD – U.S. Rep. Bill Shuster (R-PA) was recently presented with the 2014 Joseph B. Hartranft Jr. Award – one of the Aircraft Owners and Pilots Association's (AOPA) highest honors for his unparalleled work on behalf of general aviation in the U.S. Congress.

Rep. Shuster is the chairman of the U.S. House of Representatives Committee on Transportation and Infrastructure and a member of the General Aviation Caucus. Under Shuster's stewardship, the Transportation and Infrastructure Committee expedited approval of the Small Airplane Revitalization Act and approved legislation requiring the FAA to go through the rulemaking process before implementing policy changes related to sleep disorders.

Shuster supported the aviation community when the FAA arbitrarily sought to close air traffic control contract towers during the 2013 budget sequestration battle, and he has opposed both the imposition of air traffic control fees at major aviation events and proposed per-flight FAA user fees.

The AOPA award is named after its first president and former chairman of the board, Doc Hartranft.





OSHKOSH, WIS. – The majestic B-52 Stratofortress, the backbone of the U.S. Air Force bomber fleet since 1955, will dominate Boeing Plaza at EAA AirVenture Oshkosh 2015, July 20-26. EAA is recognizing the aircraft's 60th anniversary of active military service.

This will mark the first time a B-52 will be displayed on the ground during the AirVenture, although similar aircraft have done fly-bys on several occasions.

At press time, special preparations were underway to relocate a building near the flight line to accommodate the aircraft's 185 ft. wingspan.

The B-52 has received regular upgrades to modernize its flight equipment and capabilities, with the B-52H models still active at air bases in Barksdale, Louisiana, and Minot, North Dakota.

"EAA AirVenture creates unmatched opportunities for people to see aircraft in one place that they cannot see anywhere else in the world," said Rick Larsen, EAA's vice president of communities and member services, who coordinates AirVenture features and attractions. "It's only fitting that on the B-52's 60th anniversary of

B-52H Stratofortress U.S. Air Force Photo/Airman 1st Class Victor J. Caputo

active military service that it comes to Oshkosh and, for the first time, will be on ground display for the world's aviation enthusiasts to see up-close."

Aerial refueling allows the B-52 to fly a range limited only by crew endurance. In 1996, the airplane flew a 34-hour, 16,000-mile combat mission from Louisiana to Iraq. Without refueling, the aircraft has a range in excess of 8,800 miles with a five-person crew. The aircraft is capable of flying at high subsonic speeds at altitudes up to 50,000 feet.

The 307th Bomb Wing flies and maintains 20 B-52H Stratofortress aircraft, and oversees three squadrons, including the 93rd Bomb Squardon.

The wing has a long and distinguished history, as it was founded as the 307th Bombardment Group with the Army Air Corps in 1942 and saw its first service in the Pacific Theater during World War II. The 307th flew B-17s, B-24s, B-29s, and B-47s prior to flying B-52s.

The 93rd Bomb Group has an even longer history, having been founded in



1917 as the 93rd Aero Squadron that saw service in World War I. In 2009, it became a formal B-52 training unit. The 93rd Bomb Group has also received the Air Force's Curtis LeMay Award as the nation's top bomber squadron twice in the past four years.

For more information on EAA AirVenture Oshkosh, including advance purchase for admission, camping, and parking, visit the AirVenture section of the EAA website: http://www.eaa.org/en/airventure.

# **Pilot/Entertainer Dierks Bentley Highlights EAA AirVenture Oshkosh Opening Day Concert**

OSHKOSH, WIS. - Dierks Bentley, who has rocketed to the top tier of country music's hitmakers, will get EAA AirVenture Oshkosh 2015 week off to a great start when he headlines the fly-in's popular opening night concert on Monday, July 20. The concert, presented by Ford Motor Company with additional support from Cirrus Aircraft, is free to all AirVenture attendees that day and will be held on Boeing Plaza following the afternoon air show. Bentley is a pilot and aircraft owner.

The 63rd annual Experimental Aircraft Association (EAA) fly-in is July 20-26 at Wittman Regional Airport in Oshkosh. Additional EAA AirVenture information, including advance ticket and camping purchases, is available online at www.eaa. org/airventure or by calling 1-800-JOIN-EAA (1-800-564-6322).



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# EAA AirVenture Oshkosh 2015 Welcomes Return of Gary Sinise & The Lt. Dan Band, July 24

OSHKOSH. WIS. - Gary Sinise and The Lt. Dan Band will return to EAA AirVenture Oshkosh in 2015 as the grand finale of a daylong salute to veterans on Friday, July 24. Performing for the fifth time at EAA AirVenture since 2008, the popular band will be hosted by the DAV (Disabled American Veterans) and EAA Warbirds of America at the Boeing Plaza stage.



Gary Sinise

EAA Photo by Julie Wagner

Sinise, best known for his role as Vietnam veteran Lt. Dan Taylor in the classic film "Forrest Gump," and as the star of the hit TV series "CSI: New York," plays bass in The Lt. Dan Band and is a well-known supporter of veterans and active-duty personnel. The concert will be a highlight of AirVenture's own Salute to Veterans Day on July 24 and is included with the day's admission to AirVenture.

Other highlights throughout the day include extended warbird aircraft performances during the afternoon air show, a flight line parade honoring veterans, and other activities to salute those who have served.

EAA AirVenture Oshkosh is "The World's Greatest Aviation Celebration" and EAA's yearly membership convention. Additional EAA AirVenture information, including advance ticket and camping purchases, is available online at **www.eaa.org/airventure**. EAA members receive the lowest prices on admission rates. For more information on EAA and its programs, call 1-800-JOIN-EAA (1-800-564-6322) or visit www.eaa.org. Immediate news is available at www.twitter.com/EAA.

# **EAA AirVenture Oshkosh 2015 NOTAM Now Available For Pilots Flying To Oshkosh**

Oshkosh air traffic procedures are required reading for all aviators flying to AirVenture

OSHKOSH, WIS. - The Federal Aviation Administration has released the EAA AirVenture Oshkosh 2015 Notice To Airmen (NOTAM), featuring arrival and departure procedures for EAA's 63rd annual fly-in convention, July 20-26, at Wittman Regional Airport in Oshkosh.

The NOTAM, which is in effect 6 a.m. CDT on Friday, July 17, until noon CDT on July 27, outlines procedures for the many types of aircraft that fly to Oshkosh for the event, as well as aircraft that land at nearby airports.

The cover of this year's NOTAM features a photo of a ground volunteer directing taxiing aircraft at Wittman Regional Airport. The NOTAM was designed by FAA, in partnership with EAA, to assist pilots in their EAA AirVenture flight planning.

While the overall procedure is similar to past years, there are some changes compared to the 2014 version. Some of those changes include:

- · MOA active in central Wisconsin.
- · TFRs near Milwaukee, July 25-26.
- · Fisk VFR arrival description.
- · Communication frequency updates.
- · IFR departure routings.

The PDF version of the NOTAM can be downloaded (www.eaa.org/~/media/files/airventure/flyingin/2015-notam. pdf) through the EAA AirVenture website or pilots can request a free printed copy by calling EAA Membership Services at 800-564-6322. Printed copies will be mailed after the FAA completes printing the NOTAM, which at press time, was anticipated to be completed in May. Additional hints and tips for pilots arriving at and departing from EAA AirVenture Oshkosh 2015 is available at the AirVenture website: www.eaa.org/airventure.



www.mnpetro.com

E-Mail: sales@mnpetro.com

# **Round-Trip Flight To & From Oshkosh May Be Too Much For One Day**

by Craig Petersen

hat pilot doesn't want to fly into Wittman Regional Airport in Oshkosh, Wisconsin, during EAA AirVenture-Oshkosh? And making the flight

roundtrip in a single day is tempting and doable if you are willing to limit your activities, if the weather is good, and if you don't experience a mechanical with your plane. With a tight schedule at work, it was either fly to Oshkosh and return home in a single day, or skip the event for another year. I chose to go!

It started with my friend, Jim Wieland, asking, "How would you like to fly to the air show at Oshkosh with me and my parents in case the weather

requires us to fly on instruments?" Having just passed the instrument flight checkride a few days prior, I was anxious to log some real time on instruments. "Sure, I'd love to," I quickly replied.

It was July, 1989. The plan was for us to rent a Piper Archer II based at Iowa City, Iowa, fly to Oshkosh on a Saturday morning, view a few exhibits, stay for the air show, and then fly back that evening. Jim was working on his instrument rating at the time, and his parents had offered to help pay for the trip since they, too, wanted to see the show.

Because we read about pilots running out of gas and crashing into Lake Winnebago while waiting to be cleared to land at Oshkosh, we were a little leery of the VFR arrival procedure. We discussed the plan with our flight instructor and decided, based upon his recommendation, to land at Oshkosh IFR. Landing IFR would guarantee we could land without delay. Departing Oshkosh, however, would be a different story.

We chose to depart for Oshkosh VFR so we would have more flexibility in our departure time.

Saturday, the day of the planned flight, arrived. That morning I left for work at 4:30 am. I had requested a day off, but they were short handed so I agreed to work a half-day to help get the store set up. By the time I left work, it was already 9:00 a.m.

The weather was cloudy and cool, but nothing too severe. I met Jim and his parents at the airport. We were excited about our excursion. Jim informed me that the ceiling was about 5,000 feet in Iowa City and closer to 3,000 feet at Oshkosh, but there was no rain in the area. We figured the flight would be mostly VFR, even though we filed IFR. We agreed that Jim would log most of the flight in his logbook,

and I would only log the actual IFR time while we were in clouds.

The two-hour flight out was uneventful, other than being in IFR more than we had initially hoped for. When we arrived at Oshkosh at 11:30 a.m., the ceiling was about 2300 feet.

> We parked the aircraft and had the lineman fill the fuel tanks to the tabs. We calculated we would have enough fuel to return to Iowa City while staying within the legal weight limits of the aircraft.

The air show had not vet started, so the four of us started to enjoy a few vendor displays in the large tents before heading over to the show line. After exiting one of the tents, we noticed it seemed to be getting a little darker and a light mist had

started. The clouds were now definitely lower.

Jim and I started to get a little concerned. We realized our departure could possibly be delayed because we had not



Piper Archer II Photo Courtesy of Piper Aircraft



#### FLIGHT EXPERIENCES

requested an IFR time slot to get out of Oshkosh. I called Flight Service to try and reserve an IFR slot, but was told that no IFR slots would be available until Sunday... 12:00 noon at the earliest.

The latest weather was reported to be 1500 overcast and 3 miles visibility – minimum VFR.

We started to plot out a plan. We figured we could try a VFR flight into the marginal weather conditions and head toward Madison, Wisconsin, 61 nm to the south. From Madison, we were hoping to file a normal IFR plan.

I wasn't really comfortable at the thought of taking off in these conditions, but since I was supposed to be at work the next day, I felt pressure to get back home. As a new instrument-rated pilot, I was naive. We kept assuring ourselves, "If the weather holds off long enough for the air show to take place, it will be good enough for us to take off."

The air show was scheduled to start. Just then, the announcer tells the crowd the Cessna 150 Aerobat is ready to perform a roll shortly after takeoff. Good news!

We started to make our way toward the area of the air show to take in what we could. Before we made it to the flight line, the announcer came on and said, "Everyone needs to stay clear of the area." We knew something had happened. It turned out the Cessna 150 crashed in attempting to roll shortly after takeoff. Luckily, the pilot appeared

to be uninjured. A few moments later the announcer came on again and said the air show was being cancelled for the day.

We made our way toward the FBO again to check the weather, hoping to take off, even if the weather was only marginally acceptable. A pilot walking the other direction mentioned that they were waiving the limited number of IFR flights out that had been set. He also said Flight Service was allowing people to file IFR now, even if they did not have a confirmed IFR time slot. I didn't really believe the pilot, thinking he may be playing a nasty trick on pilots in the area. But I figured I would ask Flight Service, as I had to call to get the latest weather.

The Flight Service Station specialist I spoke with asked me where I was headed and confirmed that I could file an IFR flight plan because the air show had been canceled. After a large sigh of relief, I quickly filed and received a weather briefing.

It sounded like it would be an IFR flight most of the way, back to Iowa City, but that we should be able to get there. The four of us headed for the airplane, a little wet from now a steady rain, but happy to be heading home. We conducted a standard preflight, climbed into the aircraft, completed the remaining checklist, then started the engine. Shortly afterwards, we turned the radio on and began to hear pilots receiving their clearances, then got ours, then turned to ground control for

permission to taxi to the runway.

The controller responded with something we did not want to hear. Due to the volume of aircraft requesting to take off and the closing of the airport to any air traffic after 8:00 p.m., there would be no other aircraft allowed to take off that night unless they were presently taxiing. I asked myself, what would my flight instructor do, and then quickly keyed the mic and said I was taxiing. I was actually surprised to hear the controller come back telling me to proceed to lineup for departure.

About 45 minutes into the wait, we noticed that almost all of the aircraft were departing toward Chicago and east, rather than west as we were headed. We wondered if this was part of the reason we were able to get a clearance out.

At approximately 9:30 p.m., well after the airport was supposed to be closed, our turn finally came to take off and we all breathed a large sigh of relief that we were able to go, as we knew the airport normally closed at 8:00 p.m. The initial take off was uneventful and we climbed to 6,000 feet on a course to Madison, before turning toward Dubuque and home to Iowa City. When we leveled off, we were no more than 50 feet above the top of the clouds and had a beautiful, clear star lit sky above.

The leg past Madison proved uneventful, but somewhere near Dubuque, the engine emitted a large "BANG!" with a sudden decrease in power from 2300 RPMs to 2100 RPMs.

Jim and I were now scrambling to figure out what just happened, but trying not to startle our passengers. I cycled the carburetor heat, thinking the power drop could be ice related as it was cold enough at our altitude and there were clouds just below us with moisture.

The engine seemed to respond with a little more power. I knew the emergency procedure was to check the magnetos using the ignition switch, but my gut told me to do nothing since the engine was still operating. I calmly transmitted to ATC that I did not want



to declare an emergency, but relayed our concern.

The controller advised that Dubuque weather was currently 600 feet overcast and visibility was 1/2-mile, then asked if we wanted to divert to Madison. I knew if the engine failed, there was no chance of gliding for an ILS approach. We would also be taking a crap shot coming out of the clouds and trying to land anywhere off field without hitting anything on the ground. I radioed to the controller that power seemed to be holding and I would prefer to aim for Iowa City. The controller advised us that Iowa City weather was clear at the time with good visibility, so it reaffirmed my desire to continue with the flight. I knew if we could make a visual approach, we could fly the aircraft to a lower altitude without adjusting power.

A few miles past the Dubuque VOR, we noticed the cloud bank we were flying over had a steep bank down and we could actually see the ground to the west. We had the aircraft on a course for the Iowa City VOR and started to think we may make it. The controller handed us off to Cedar Rapids Approach and I noticed that the new controller asked us how the engine was running. The previous controller had obviously briefed him as to the situation.

I then advised the controller that I knew the tower closed at 11:30 p.m., and that it was nearing that time, so I would cancel the IFR and continue to Iowa City VFR. The controller promptly denied my request and informed me the tower would stay open until I called him on the ground at Iowa City to cancel our flight plan. I thanked him and proceeded to focus my attention on landing the airplane at Iowa City. The controller then asked if we wanted to start our decent into Iowa City. I notified the controller that I wanted to stay high for now, as I was skeptical as to what may happen when we pulled back the power.

He asked if I wanted to declare an emergency at this time, and I said no, since we are still running with power. In hindsight, I probably should have declared an emergency, so the local fire department would be ready at the airport as a precaution.

I then told Jim that I would maintain altitude and power in on our approach until we had the runway made. Jim concurred with my decision.

The controller then notified us that Iowa City was 5 miles out. I acknowledged and requested a frequency change to Iowa City unicom.

The approach and landing were fairly uneventful, other than our purposely-planned high approach and extra speed as we dove for the runway.

It was just after midnight when we landed, so we said our goodnights, then headed home.

On Monday morning, I returned to the airport to check on the plane. The aircraft would not start for the person who was scheduled to fly it on Sunday. A mechanic was called in to look at the aircraft to figure out why it would not start. It was discovered that one of the two sets of magnetos had broken during our flight. At that moment, the severity of what could have happened really sunk in.

Had Jim and I proceeded with the emergency checklist, a testing of the magnetos would have taken place. Testing the magnetos involves shutting them off and on one at a time. If we would have tested the magnetos, the engine could very well have stopped and not restarted and we would have had a true emergency on our hands. Jim and I did attend another air show together the next summer in the Quad Cities. This time we drove as it was only an hour away.

EDITOR'S NOTE: Craig Petersen is a finance manager for Works Computing, Inc. in Bloomington, Minnesota. He admits that if he had to make that flight over again, he may have handled the situation differently.

"Landing in Madison would have been smart, but we just didn't quite feel it was critical to land since we thought the engine was getting better when we added carburetor heat," stated Petersen. "Our denial may have been in part due to the fatigue we were fighting at the time, and so our thought was just to get home. The smart thing would have been to land, hindsight being 20/20. I did feel the pressure to get home as I was a student and had a part-time job at the time at a local grocery store, and needed to be back for the Sunday afternoon shift. Hopefully, my flight experience will encourage other pilots to think about how they would handle the situation in case it ever comes up. It may also make pilots see how all of us can get caught up in the sense of needing to get home, rather than take the time to land and make needed repairs."



# **Isackson, Hamiel & Cooper Headline 2015 Minnesota Airports Conference**



The Board of Directors of the Minnesota Council of Airports (L/R): Duane "Doc" Wething (Detroit Lakes), Dave Konshok (Park Rapids), Tom Werner (Duluth), Bill Towle (St. Cloud), Dave Beaver (Owatonna), Mark Hagen (Detroit Lakes), John Young (Hawley), Joe Hedrick (Thief River Falls), John Puckropp (former executive director of MCOA), Kurt Claussen (Rochester), Shaun Germolus (Range Regional/Hibbing), Glenn Burke (Fleming/South St. Paul), and Joe Harris (St. Paul Downtown & Lake Elmo/MAC). Dave Weiman Photo

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

The annual conference was held in conjunction with the Minnesota Council of Airports annual meeting, and included a tour of the Army Aviation Support Facility at St. Cloud Regional Airport (KSTC), updates from the Minnesota DOT Office of Aeronautics and Federal Aviation Administration, and topics ranging from the impact of General Aviation on state and local economies, to how unmanned aircraft systems will affect airport operations.

Among the featured speakers were Cassandra Isackson of the Minnesota DOT Office of Aeronautics, Jeff Hamiel of the Metropolitan Airports Commission, and Barry Cooper of the FAA Great Lakes Regional Office.

Cassandra Isackson emphasized that the Minnesota Office of Aeronautics wishes to assist all airports to reach their full

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potential and welcomes requests, feedback and involvement from the general aviation community.

Jeff Hamiel noted a trend for regional airlines to move to larger aircraft and decrease service to smaller communities. Hamiel is also supportive of the NextGen air traffic control system, and is involved in developing material on the subject, which is useful to airport officials.

Barry Cooper gave a status report on NextGen, stating that it is evolving, and provided a brief discussion on the 2020 ADS-B equipage rule. Cooper also noted what the NextGen Advisory Committee sees as priority focus areas that will provide the most visible benefits to system users in the shortest amount of time.

Cooper mentioned that discussions over FAA Reauthorization are ongoing.

Cooper briefly talked about Unmanned Aerial Systems (UAS) and noted that while the FAA is trying to integrate them into the National Airspace System, the FAA Administrator has clearly and repeatedly stated that system safety will always be priority #1 as the agency addresses and embraces new technologies.



The 2015 Governor's Award for Outstanding Airport was awarded to Park Rapids Municipal Airport/Konshok Field. (L/R) Cassandra Isackson (MNDOT Aeronautics Director), Dave Konshok, Sr., Ryan Mathisrud (City Planner), John McKinney (City Administrator), Dave Konshok, Jr., and Barry Cooper (FAA Great Lakes Region Administrator).

Dave Weiman Photo

A number of airports and people were recognized during the conference, including the following and those featured in the photographs accompanying this article:

**James Oberstar Award** for service to aviation: John Puckropp, recipient.

#### **2014 MCOA Project of the Year Award Recipients**

Category: Key General Aviation Airport

**AIRPORT:** Southwest Minnesota Regional Airport – Ryan Field (Marshall, MN)

PROJECT: East Building Area – Marshall Airpark

**CONSULTANT: TKDA** 

**CONTRACTOR:** R&G Construction

### Category: Key General Aviation Airport

AIRPORT: Park Rapids Regional Airport – Konshok Field

(Park Rapids, MN)

PROJECT: Runway 18/36 Paving and Lighting

**CONSULTANT: TKDA** 

**CONTRACTOR:** Tri-City Paving

**CONTRACTOR:** 

The 2016 Minnesota Airports Conference will be held April 20-22 at Madden's On Gull Lake in Brainerd. (www.mnairports.org).



Intermediate General Aviation Airport of the Year: Glencoe Municipal Airport - Vernon Pershau Field (Glencoe, MN). Runway 13/31 Rehabilitation and LED Lighting project. SEH, consultant. Knife River Contractors, contractor. (L/R) Joe Harris, Shawn McMahon (SEH), (persons unknown), Jeff Wig. Dave Weiman Photo



Business Development/Non Aeronautical Revenue Airport of the Year: Morris Municipal Airport - Charlie Schmidt Field (Morris, MN). 8,800 sq. ft. Hangar, project. TKDA, consultant. Ebert Construction, contractor. (L/R) Joe Harris, John Peterson (TKDA), Dorothy Schneider (Airport Manager), Jeff Wig. Dave Weiman Photo



Accepting the MCOA Award of Excellence for lifelong achievement was Gary Schmidt, longtime Director of Reliever Airports for the Metropolitan Airports Commission. Schmidt is responsible for much of the success of the reliever system in the Twin Cities metropolitan area.

(L/R) Joe Harris, Gary Schmidt, and Jeff Wig. Dave Weiman Photo



Intermediate General Aviation Airport of the Year: Eveleth-Virginia Municipal Airport (Eveleth, MN). Runway 09/27 and 14/32 Rehabilitation and Taxiway A, B & C Relocation project. KLJ, consultant. Ulland Brothers, contractor. (L/R) Joe Harris, (person unknown), Marcus Watson (KLJ), Jeff Wig.



Business Development/Non Aeronautical Revenue Airport of the Year: The Range Regional Airport (Chisholm-Hibbing, MN). 60,000 sq. ft. Business Development Office Space, project. RS&H, consultant. (L/R) Joe Harris, Shaun Germolus (Executive Director), Darren Christopher (RS&H), Barrett Zeimer (Assistant Director), Jeff Wig. Dave Weiman Photo



### **26th Annual Minnesota Aviation Hall of Fame**



(L/R): Minnesota Aviation Hall of Fame inductees and/or their representatives: Tony Diffley, representing his late father, Larry Diffley, recipient; Robert Rishovd, recipient; General Leo Goodrich (recipient); Adeline "Dickie" Voth, widow of John Voth, recipient; Randy Pfutzenreuter, Kristi Rollag-Wangstad and Don Piccard, accepting for Robert Gilruth, recipient. Not pictured, Sandy and David Johnson who accepted for Frank Judd.

BLOOMINGTON, MINN. – The Minnesota Aviation Hall of Fame inducted the following persons, April 25, 2015, at ceremonies held at the Ramada Mall of America Hotel in Bloomington, Minnesota: the co-owner of Bemidji Aviation,



Former Minnesota State Representative Mike Beard greets World War II WASP and 2000 Minnesota Aviation Hall of Fame inductee, Elizabeth Wall Strohfus.

the late Larry A. Diffley; former Director of Human Spaceflight for NASA, Robert R. Gilruth; WWII pilot, and Minnesota Assistant Adjutant General, Air, Brigadier General Leo C. Goodrich; Northwest Airlines Captain and Vice President Frank C. **Judd:** former Viet Nam helicopter pilot, Robert C. Rishovd, who in civilian life, became an early pioneer in medical helicopter services; and WWII and St. Cloud State University flight instructor, Lt. Col. John Voth. The Minnesota Aviation

Hall of Fame encourages pilots and the general public to submit nominations for future induction consideration by going to its website for additional information: www.mnaviationhalloffame.org.

# **Tiffany Brown Named Acting Director of Aviation At KDOT**

iffany Brown of the Kansas Department of Transportation has been named acting Director of Aviation by Kansas Transportation Secretary Mike King.

Brown, who joined KDOT in February 2013 as the State Aviation Engineer, has also served as the agency's Deputy Director of Aviation and managed the Kansas Airport Improvement Program. She assumed her new role April 16, 2015, replacing Jesse Romo who resigned to become Director of Manhattan Regional Airport.



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Tiffany Brown

Before joining KDOT, Brown was a design engineer working on airport master plans and engineering design for Benesch, a Manhattan consulting firm.

"I'm excited to lead the Division of Aviation and to continue KDOT's role as the state aviation expert, innovator and resource for the Kansas aviation community," she said.

Brown will continue to oversee airport planning, the Kansas Airport Development

Program and the Kansas Airport Improvement Program in her new position.

A native of Overland Park, Brown received an engineering degree from the University of Kansas and a master's in business administration from Kansas State University. She is an accredited member of the American Association of Airport Executives and is working toward her commercial pilot certificate. Brown lives in Lawrence.

## **Harbour View Inn Awaits Your Arrival At Mackinac Island**



Harbour View Inn
Dave Weiman Photo

### by Dave Weiman

s soon as you walk through the front door of the Harbour View Inn, you will be immersed in the historic charm that has made Mackinac Island, Michigan, special!

Whether on your honeymoon, a romantic getaway, or spending time with the family or friends, the Harbour View Inn – located at 6860 Main Street (a short walk from downtown Mackinac Island) – will exceed your expectations for excellence!

The Harbour View Inn is comprised of four unique buildings designed for a variety of styles and tastes. The Chateau LaFramboise, the original mansion, is furnished in an elegant blend of French and Victorian décor; the Carriage House and Guest House are secluded behind the mansion, and feature a quaint summer cottage theme; and the Harbour View Bed and Breakfast is as its name implies. All accommodations offer views of either the magnificent harbor, exquisitely manicured courtyard or nearby heritage buildings.

Guests are greeted at the front door of the "Chateau LaFramboise." Property manager, Michelle Dean, or front desk clerk, Larry Wood, or other staff, will check you in.

Like many of the properties on the island, the Harbour View Inn was once a single-family dwelling, owned by Madame Magdelaine LaFramboise, a woman who defied the odds to become one of the most successful fur traders in the territory during the 19th Century.

Madame Magdelaine was also a philanthropist and her good deeds have had a lasting impact on the island. Among her good deeds was donating land to St. Anne Catholic Church located next to her estate. She also dedicated herself to educating the island's children. Madame Magdelaine died in 1846 and was buried at St. Anne.

#### **Transportation To, From & On The Island**

There's only two ways to reach the island in the summer time – by ferryboat or by airplane. Automobiles are not allowed on the island. Either you walk, ride a horse, ride on or drive a horse-drawn carriage, or ride a bicycle once on the island. There are 500 horses on the island during the summer.



For those who have never flown to the island, you will be pleased with the airport (KMCD). The State of Michigan has made the airport one of pride and joy for tourism.

After you land and park your plane, walk into the small terminal building and pay your daily tie-down fee and the park ranger will call for a horse-drawn taxi to your





destination. While we have used the horse-drawn taxis over the years, Peggy and I now travel with our Montague folding bicycles and wear backpacks to haul our gear (http://midwestflyer.com/?s=montague). The Harbour View Inn also has bicycles for rent for your convenience.

#### **Mackinac Island**

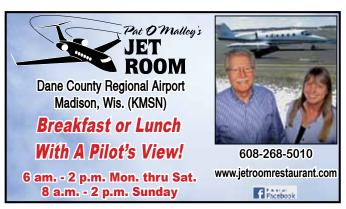
Mackinac (MACK-in-awe) became one of the nation's favored summer resort destinations during the Victorian era. Vacationers arrived in large lake excursion boats from Buffalo, Cleveland, Chicago and Detroit seeking the cooler weather on the island. They danced to Strauss' waltzes at the Grand Hotel, listened to Sousa's stirring marches, dined on whitefish and strolled along the waterfront and boardwalks of the downtown area. Today, visitors can enjoy a vibrate nightlife or relax on the patio at their hotel or along the docks.

A favorite restaurant and pub of ours is Mary's Bistro at the Star Line Ferry, serving fabulous French Bistro for lunch and dinner with a view of the harbor. Mary's Bistro features one of the island's best wine lists and the Draught House with 50 taps of beer. Check Mary's Bistro and The Island House online at www.theislandhouse.com/marys-bistro.

Historic sites to enjoy include Mackinac Island State Park, one of Mother Nature's most awe-inspiring treasures with its natural wonders including soaring limestone bluffs, stunning vistas overlooking clear, but cool, sparkling blue waters; verdant rolling forests; and miles and miles of trails for hiking, biking, horseback riding, cross country skiing, and snowshoe adventures. The park is America's second national park – established three years after Yellowstone – and consists of over 80% of the island's entire landmass. It is open year round, free of charge!

Let your imagination go at "Fort Mackinac," located on a bluff that overlooks the entrancing Straits of Mackinac.

Fort Mackinac was founded during the American



Revolution.
The British
captured the fort
in the very first
engagement on
American soil in
the War of 1812.
The fort features
14 original
buildings, cannon
salutes, bugle
music, daily
reenactments, and
interactive displays.



After the British and their allies captured Fort Mackinac, they quickly built a small outpost and called it "Fort George." When the Americans regained the fort by treaty at the end of the war, it was renamed "Fort Holmes" after American Major Andrew Hunter Holmes who succumbed to wounds during a futile attempt to retake the fort from the British in 1814.

Since horses are a big part of Mackinac Island, the Mackinac Horsemen Association showcases the island's unique horse culture with a compilation of photographs at the entrance of the Mackinac Community Equestrian Center (MCEC).

The newest museum on the island is the "Richard and Jane Manoogian Mackinac Art Museum," which is a three-level structure that focuses upon fine and decorative arts throughout the years. There are interactive displays, hands-on activities, exhibitions, and an art studio for kids.

The Surrey Hills Carriage Museum features antique carriages and a working blacksmith shop.

The Stuart House Museum illuminates the island's history and is where John Jacob Astor made his living as a fur trader during the 1800s.

The Tower Museum not only offers the best view on the island – eight stories above ground level – but it is also a fascinating look at the past.

Some of the special events during the tourist season for 2015 include the Mackinac Island Lilac Festival, June 5-14; Mackinac Island's Star Spangled Fourth, July 4; Chicago Yacht Club's Race to Mackinac, July 11-14; and the Grand Hotel's Labor Day Jazz Weekend, Sept. 4-7. For a complete events calendar, refer to **www.MackinacIsland.org.** 

#### **Reservations & Special Deals**

You can find special deals and packages at the Harbour View Inn website at **www.harbourviewinn.com.** You can also make reservations by calling 906-847-0101.

EDITOR'S NOTE: 100LL and Jet A fuel are available across the bay from Mackinac Island at Mackinac County Airport (83D) in St. Ignace, Michigan. Consider topping off your tanks before landing on Mackinac Island in the event you need to depart the island IFR.



# WATA Difference

### **WISCONSIN AVIATION TRADES ASSOCIATION**

# **Wisconsin Homeschoolers Win Build-A-Plane Design Contest**

WASHINGTON, DC – The General Aviation Manufacturers Association (GAMA) and Build A Plane have announced that the CHEF Homeschoolers in Cuba City, Wisconsin, have won the third Aviation Design Challenge to promote Science, Technology, Engineering, and Math (STEM) knowledge among U.S. high school students. Four students, one teacher, and one chaperone from the high school will receive an allexpenses-paid trip to Glasair Aviation in Arlington, Washington to build a Glasair Sportsman airplane, June 8-19, 2015.

More than 70 schools in 31 states and Washington, DC, entered the competition. The teams used Fly to Learn curricula and training to learn the fundamentals of aerospace engineering and flight, and software powered by X-Plane to apply what they learned to modify and fly a virtual Glasair Sportsman airplane. Each school was scored on how much payload the plane carried, how much fuel it used, and the time the flight took. Judges from GAMA's engineering team selected the winning school, taking into consideration the design features based on what the students applied from the curriculum. The students also submitted a one-page essay about how the competition increased their knowledge of STEM.

The GAMA competition teaches the importance of teamwork, creativity, and critical thinking, the students wrote.

"We learned a great deal about STEM, how to test our aircraft consistently, and how to make very finite changes to our plane to get better results. The competition has been an excellent learning experience for us!"

GAMA President and CEO Pete Bunce said, "I am very excited that, once again, GAMA will be partnering with Build A Plane, Glasair, and Jeppesen to support this amazing educational opportunity for these talented young men and women. To have this many high school students participate in the design and flight simulation portion of this competition is exactly the type of STEM education we get excited about as manufacturers." (www.GAMA.aero)

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### **EPS Diesel Making Steady Progress Toward Certification**

NEW RICHMOND, WIS. — Since introducing the first modern aircraft diesel engine developed from a "clean sheet" design at EAA AirVenture Oshkosh in 2014, Engineered Propulsion Systems (EPS) has completed Phase One of their flight testing program, added staff, production facilities, sophisticated tooling and will soon be launching advanced tests with pre-production engines.

Expectations were met or exceeded with the first two concept engines. Dick Rutan will resume collecting performance data in the fair skies over Mojave, Calif., with a pre-production engine. A second pre-production engine



EPS has completed Phase One flight testing and will soon launch advanced tests with pre-production engines.

will be tested and calibrated on EPS' mobile static system developed for ground tests. They are also refining

software that is designed to significantly lighten pilot workload.

As the airborne and ground tests continue, the company is slowly adding staff, new production facilities and high tech equipment. "The progress has been encouraging," said EPS President, Michael Fuchs. "We have a lot of work in front of us, but the early results have confirmed that the ideas and reality are in sync. Our team is synthesizing a lot of new technology and we are optimistic about the future. The benefits that will accrue as General Aviation transitions to diesel will be substantial and global in reach."

To learn more about the EPS diesel project visit eps.aero.

### **Piper's Diesel Archer DX Receives FAA Validation**

VERO BEACH, FLA. – Piper Aircraft announced April 21, 2015, that its team member, Technify Motors GmbH, a German-based member of

the Continental Motors Group, has received validation approval from the Federal Aviation Administration (FAA) for its European Aviation Safety Agency (EASA) supplemental type certificate in support of the new diesel trainer option, the Archer DX.

# Piper Aircraft Launches Three New M-Class Products: The M600, M500 & M350

VERO BEACH, FLA. – At a historical product unveiling on April 13, 2015, Piper Aircraft announced three new aircraft as part of their esteemed M-Class line of single-engine,

pressurized, cabin-class business aircraft: the M600, the M500, and the M350.

"Our customers and dealers asked for aircraft with additional payload and exceptional range," said Piper





Piper Meridian

President and CEO Simon Caldecott. "They asked for increased options with the most progressive avionics and a contemporary interior. We listened and we delivered. These new aircraft each encompass the most advanced safety and connectivity technology available today in an ambitious, aesthetic package."

The Piper M600 is a significant

product advancement, featuring a new, clean sheet design wing and a sophisticated Garmin G3000 touchscreen-controlled glass flight deck. The M600 seats six and is powered by a Pratt & Whitney PT6A-42A 600shp engine. The aircraft has a maximum cruise speed of 260 KTAS/482 km/h, a max range of 1,300 nm / 2408 km, and a max payload of 1,200 lbs. / 544 kg. The G3000 avionics suite is the next generation of Garmin architecture, offering the most comprehensive, intuitive, and technologically advanced package on today's market. The M600 will be available before year's end and is listed at a competitive price of \$2.82 million.

The Piper M500 features the latest in Garmin G1000 avionics, enhanced safety features, and a number of other significant product improvements. The six-place M500 is powered by a Pratt & Whitney PT6A-42A 500shp engine, sports a 260 KTAS / 482 km/h max cruise speed and has a range of 1,000 nm / 1,852 km. Equipped with an improved Garmin G1000 avionics suite featuring the most advanced safety features available of any single-engine turboprop aircraft, the 2015 M500 is listed at a competitive price of \$2.26 million.

The Piper M350 comfortably seats six with club seating. It is powered by a Lycoming TIO-540-AE2A 350 horsepower engine, sports a 213 KTAS / 395 km/h max cruise speed,

and has a range of 1,343 nm / 2,487 km. The aircraft comes standard with an improved Garmin G1000 avionics suite, with the latest safety features, including a hypoxia recognition feature with an emergency descent mode. Additionally, the aircraft has a new digital fuel quantity system from Ametek. The 2015 M350 is listed at a competitive price of \$1.15 million.

Piper M-Class aircraft offer Piper performance and safety built upon a proven airframe that has been an industry standard for years. Three refined, cabin-class derivatives comprise the full line: the M600, Meridian M500, and the M350; the Matrix is also part of the M-Class family.

The trainer class Archer TX, Archer DX, Arrow, and twin-engine Seminole and Seneca, form the most complete technically advanced line of pilot training aircraft in the world. All Piper airplanes feature advanced Garmin avionics in the cockpit.

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 (www.dmfs.com). For parts call 800-247-2560.

Piper Aircraft Inc. is headquartered in Vero Beach, Fla.

### The HondaJet Receives Provisional Type Certification From FAA

GREENSBORO, N.C. – Honda Aircraft Company announced March 27, 2015 that the HondaJet has received provisional type certification (PTC) from the Federal Aviation Administration (FAA). This achievement indicates the FAA's approval of the HondaJet design based on certification testing, design reviews, and analyses completed to date.

A provisional type certificate is a design approval by the FAA and is common for business jets when final certification

is near. Honda Aircraft has demonstrated that the HondaJet is safe for flight and meets the airworthiness standards defined by the PTC.

HondaJet Midwest with headquarters in Des Moines, Iowa, provides HondaJet sales and service in the Midwest. For additional information call 800-622-8311 (www.HondaJet.com).

### **Eclipse & Kestrel Form ONE Aviation**

SUPERIOR, WIS. – ONE Aviation Corporation has been formed to design, develop, and manufacture a family of aircraft, starting with the Eclipse 550 twin-engine light

jet, which is currently in production in Albuquerque, New Mexico, and the Kestrel K350 single-engine turboprop, which is under development in Superior, Wis.

Alan Klapmeier of Kestrel, is CEO of ONE Aviation.

Mason Holland of Eclipse Aerospace, is chairman.

## Wipaire Receives EASA Validation For Wipline 13000 Floats On Viking Series 400 Twin Otter

SOUTH ST. PAUL, MINN. – Wipaire, Inc.'s EASA Supplemental Type Certificate No. 10015832 has received an updated validation from the European Aviation Safety Agency. The new validation adds the Viking Series 400 Twin Otter to the list of aircraft models eligible for Wipline 13000 floats in EASA-governed countries. Wipline 13000 floats were

first certified in 1992 for the de Havilland DHC-6 series. The inclusion of the Viking Series 400 Twin Otter allows European operators to take advantage of years' worth of field-tested additional benefits from the factory. In service in 27 countries worldwide, the Series 400 Twin Otter provides a next-generation airframe option for utility aircraft operators.

# **Aeronautics Report**

### **Wisconsin Bureau of Aeronautics**

P.O. Box 7914, Madison, WI 53707-7914

David M. Greene, Director (608) 266-3351 www.dot.wisconsin.gov



# **Annual Airport Construction Update**

by Hal Davis WisDOT Bureau of Aeronautics

014 Recap: In Wisconsin, we take a lot of pride in the condition of our airports. That's why we completed more than 80 airport improvement projects at over 60 airports last year. Perhaps the most critical feature of any airport is the pavement. As a result, we renewed our focus on maintaining runway pavement condition by completing over 20 projects related to runway rehabilitation



Hal Davis

- Dane County Regional Airport
- Neillsville Municipal Airport
- Park Falls Municipal Airport
- Waukesha County Airport/Crites Field
- West Bend Municipal Airport

Expect taxiway and apron projects at the following airports:

- Austin Straubel International Airport
- Dane County Regional Airport
- General Mitchell International Airport
- Rhinelander-Oneida County Airport
- West Bend Municipal Airport
- Wittman Regional Airport



Runway construction at Clintonville, Wisconsin.



Putting the final touches on a runway at Clintonville, Wis. WisDOT Photo

and reconstruction projects last year. We also completed major taxiway and apron projects and upgraded terminal facilities at several airports.

2015 Outlook: Looking ahead, we expect the 2015 construction season to be as busy as ever. Picking up where 2014 left off, several more runway reconstruction and rehabilitation projects are planned for 2015. Although various factors could delay certain projects until 2016, expect extended runway closures this construction season at the following airports:

Amery Municipal Airport

It wouldn't be practical to list every single project planned for this year, so be sure to contact the airport manager at the airports you frequent to find out if any projects are scheduled.

Most airport construction projects have the potential to impact normal airport activity, so always check NOTAMS before you go flying as well.

For more information on past and future airport development projects, including the Bureau of Aeronautics' Five-Year Airport Improvement Program, visit the Wisconsin Bureau of Aeronautics' website at http://www.dot.wisconsin. gov/modes/air.htm, or call (608) 266-3351. 

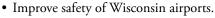
### **Framework For The Future**

by Judy Harding
WisDOT Bureau of Aeronautics

lanning is an important part of everyday life and is a critical step in accomplishing one's goals. At the Wisconsin Bureau of Aeronautics (BOA), our goal is to provide a system of airports that is readily accessible from both the air and the ground and one which features infrastructure that will attract businesssupporting economic growth. More importantly, our goal is to provide a safe and secure airport system, which meets the existing and future needs of its users and addresses community and environmental compatibility.

Earlier this year, BOA adopted the *Wisconsin State Airport System Plan 2030*, as part of a continuous planning process. An aviation

stakeholder group comprised of members of the aviation community, government agencies, and regional planning commissions was integral to the plan's development. The resultant plan is a statewide, long-range airport transportation plan, which provides an inventory and evaluation of the 98 public-use airports which make up the Wisconsin Airport System. The plan defines our vision for the airport system, identifies system goals, and offers a framework to meet current and future needs of the state's airport network. Our objectives in developing the *Wisconsin State Airport System Plan 2030* included:

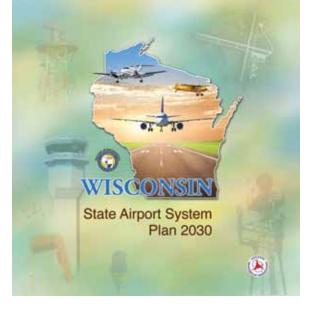


• Obtain a current inventory of the facilities and services

of each airport in the system.

- Establish airport system goals, performance measures and benchmarks.
- Identify system and airportspecific deficiencies, adequacies and surpluses.
- Identify potential overlaps or gaps in the system.
- Address Federal Aviation Administration's departure from ground-based navigational aids to a satellite-based system and its impact on Wisconsin.
- Develop cost alternatives to meet system goals and benchmarks.
- Establish a framework for future investments.
- Conduct a system environmental evaluation of the results of the system plan.
- Develop a method to monitor progress of system goals. All nine chapters and supporting appendices of the *Wisconsin State Airport System Plan 2030* can be downloaded by visiting http://www.dot.wisconsin.gov/projects/state/air2030.htm. An executive summary is also available. In addition, you can view a 20-minute video, which provides an overview of the Wisconsin Airport System and the *Wisconsin State Airport System Plan 2030*.

For questions, contact Judy Harding at 608-267-1223, or Judy.Harding@dot.wi.gov.



# **Meet The Bureau At AirVenture**

ypically, the Wisconsin DOT Bureau of Aeronautics publishes a short article in each issue highlighting one of our awesome staff members. This time, we would like to invite you to come meet some of our staff in person at EAA AirVenture Oshkosh 2015. Our booth will be located in Exhibit Hall A, just across the street from the air traffic control tower.

At the Wisconsin Bureau of Aeronautics, there's nothing we enjoy more than talking about flying and Wisconsin

airports, so we encourage you to bring all your questions and comments to our booth.

While you are at our booth, you can pick up complimentary Wisconsin aeronautical charts and roadmaps, information about Wisconsin seaplane bases, Wisconsin airport points of interest, children's aviation coloring books, and much more! We will also have new 2015-2016 Wisconsin airport directories available for purchase.

If you cannot attend EAA AirVenture Oshkosh this year, you can still meet us in person. To set up a meeting with any of our staff members, call 608-266-3351.



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

### Cassandra Isackson, Director

Dan McDowell, Editor

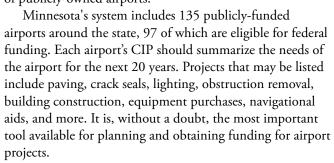
Minnesota DOT Office of Aeronautics Mail Stop 410 • 222 East Plato Boulevard • St. Paul, MN 55107-1618 651-234-7200 or 1-800-657-3922

# **Your Airport's CIP**

by Cassandra Isackson Director, Minnesota DOT Office of Aeronautics

o you know what your airport's Capital Improvement Program (CIP) is? What it does for your airport, your community, and you?

Although our construction season is well underway, planning for those Cassandra Isackson projects began years ago as a CIP line item. A CIP is used to plan and program the projects that will preserve and develop Minnesota's system of publicly-owned airports.



Each year, MnDOT Aeronautics requests updated CIP information from airports. Projects in the near-term (3-5 years out) require detailed cost estimates and environmental clearance. MnDOT Aeronautics and the Federal Aviation Administration (FAA) use the accumulated CIP data to guide



allocation of limited federal and state aviation dollars. Projects are prioritized statewide to utilize available funding.

An airport's CIP is the very first step toward accessing these dedicated funds. A well-prepared CIP can also help an airport avoid possible project delays by setting realistic expectations and reasonable time-lines.

Projects listed in the mid-term (5-10 years out) and longterm (10-20 years out) identify the cost of system preservation into the future. Planning for the future of an airport allows it to meet the current and growing needs of the aviation community. A CIP update is the first step for an airport manager, city or county to improve safety and security for today's users. It also helps to assure that an airport remains a viable and valuable asset, to and for its community.

The last several years, MnDOT Aeronautics has hosted CIP meetings at six or seven airport locations around the state, and invited airport staff to attend the meeting most convenient for them. This year we are changing that model and coming to individual airports when they want to review their CIP. I would like to be there to help answer any questions that may arise, so please invite me to an airport board meeting when the CIP is a topic for decision-making. Perhaps today is a perfect time for you to get involved with the airport board or management team by supporting and assisting their quality efforts to review and update your airport's CIP (http://www.dot.state.mn.us/aero/ airportdevelopment/cip.html).

# **Wipaire Announces Return of A&P Internship Program**

SOUTH ST. PAUL, MINN. - Wipaire, Inc. has announced the return of the Gateway to Success internship program for students pursuing an airframe and powerplant maintenance certificate. The program is comprised of several checkpoints for aspiring maintenance technicians.

Interested students must first apply for a paid summer internship opportunity, where they will work with an experienced Wipaire mechanic to gain real-world experience across all facets of Wipaire's services offerings. Airframe and powerplant school experience is required. Upon satisfactory completion of their internship, the intern may be called back 46 JUNE/JULY 2015 MIDWEST FLYER MAGAZINE

for an additional summer internship while still in school. If a full-time employment position is open at the time of the intern's graduation, the intern will have the requisite skills and experience to be a top candidate for the position.

The Gateway to Success program seeks to develop aviation maintenance technicians by helping to equip students with an employable skill set and professional attitude. Additionally, the program supports keeping skilled young aviation technicians in Minnesota.

Interested applicants can apply by emailing their resume to hr@wipaire.com. 

# **Think Before You Fly!**

he joy and excitement of flying is something that once felt, never leaves you. Even if you rarely fly or never flew again after that first joyous experience, you remember every detail of every moment of that first flight. You naturally speak of it with excitement in your voice and a smile on your face. How could you not? Once aviation in general and flying specifically have touched you, they become a permanent part of your entire being. For most, it never goes away, and that is a great thing.

One of the few things that can temper that joy of flying is illness or injury. Things like common colds, pollen allergies, or even air pollution sensitivities can have a significant impact on some people. A sprained ankle or wrist, for instance, can certainly be a limiting factor to flight. But often the conditions, whether illness or injury, may appear to be or feel as if they aren't bad enough to require a visit to the doctor.

So people self-medicate by using over-the-counter (OTC) medications. While these medications may or may not have an actual impact on the illness or injury, they most certainly can have a very significant impact on the user.

From spring through fall before the first frost, pollen allergies can cause suffering among people with pollen sensitivities. There are of course a number of OTC medications that can be purchased to ease the symptoms. One such medication is Diphenhydramine, known by its popular brand name "Benadryl." While this anti-histamine may work very well for most people, are you aware that it can make a person very drowsy? It can also cause jitteriness, anxiety, and palpitations, among other reactions.

Though Benadryl may open your sinuses and ease your headache, think! If you take medication like this, are you impacting your safety and the safety of your passengers as well as people on the ground, if you fly? Bear in mind that the side-effects can vary with changes in flight conditions, as well as altitude!

One major point is that OTC medications, while most likely not as potent as prescribed medications, can have side-effects that are potentially life-threatening when they are taken and you fly (or drive). The reactions of nearly any medication will vary per individual.

So for example, if your friend takes Benadryl and maybe seems normal — not sleepy, and able to functional as you would expect — you might think it is okay for you to take it. But if you take the very same product, it could make you very sleepy for hours, and do so in short order.

If you take a simple pain reliever like aspirin or ibuprofen, you could experience upset stomach with either product. Ibuprofen can also cause dizziness, while aspirin can cause ringing in the ears. None of these reactions is necessarily life threatening unless you are flying or driving. The

point is, you need to be fully aware of the potential and actual side-effects of any medication you use or plan to use.

Always read the label for correct application and use of the medication. Never take a medication before you fully understand how to take it and what the likely side-effects will be. If your condition is serious enough to require medication, then it is serious enough to prevent you from flying. Remember, you are responsible for your condition and assessment for flight readiness. Practice using the IMSAFE personal checklist. When in doubt, contact your FAA Aviation Medical Examiner for sound advice, and be sure to think before you fly.

Disclaimer: The inclusion or mentioning of a product or brand in this article is in no way an endorsement or recommendation, nor is it meant to be negative toward that product or brand. The product or brand is mentioned solely for ease of recognition by the reader and used herein to motivate the reader to think about the products they use, while reminding the reader to read the labels and instructions clearly before use.





# Aircraft Zowners

### By the way...

You can pay your current aircraft registration bill and sales/use tax online (with a few exceptions).

For more information: www.mndor.gov/aero/aircraftregistration

# IMPORTANT:

An aircraft must be registered in Minnesota if:

- · Owned by a Minnesota resident or business
- Owned by a non-Minnesota resident, or a non-resident business and the aircraft is operated in Minnesota;
  - \$\phi\$ 60 days or more during the registration year
  - O Before one day of commercial operation in Minnesota
- Owned by a non-resident and used for commercial operation for even one day during the registration year, to include charter operations originating in Minnesota, or:
  - ◊ Aerial photography
  - Aerial spraying or dusting
  - O Aircraft dealer
  - O Aircraft rental
  - O Air rides
  - o Aircraft servicing, maintaining and repairing
  - ◊ Flight school
  - O Ground school

Minnesota Department of Transportation | Office of Aeronautics 222 E. Plato Blvd. | St. Paul, Minnesota 55107-1618

Tel: 651-234-7200

Toll: 800-657-3922

Fax: 651-296-9089











We all have a stake in A B



### Registering your aircraft is easy.

# Follow these four steps:

- Step 1: Complete an aircraft registration application and sales/use tax form.
- Step 2: Provide proof of insurance. You are required to have liability insurance during the period of expected operation of your aircraft in Minnesota.
- Step 3: Pay, or show proof of sales/use tax payment.
- Step 4: Pay applicable registration fees based on the aircraft maufacturer's list price (see table below).

Manufacturer list price	Tax
Not over \$500,000	\$100
Over \$500,000, but not over \$1 million	\$200
Over \$1 million, but not over \$2.5 million	\$2,000
Over \$2.5 million, but not over \$5 million	\$4,000
Over \$5 million, but not over \$7.5 million	\$7,500
Over \$7.5 million, but not over \$10 million	\$10,000
Over \$10 million, but not over \$12.5 million	\$12,500
Over \$12.5 million, but not over \$15 million	\$15,000
Over \$15 million, but not over \$17.5 million	\$17,500
Over \$17.5 million, but not over \$20 million	\$20,000
Over \$20 million, but not over \$22.5 million	\$22,500
Over \$22.5 million, but not over \$25 million	\$25,000
Over \$25 million, but not over \$27.5 million	\$27,500
Over \$27.5 million, but not over \$30 million	\$30,000
Over \$30 million, but notover \$40 million	\$50,000
Over \$40 million	\$75,000

Note: Certain exceptions may apply for antique/classic aircraft, recreational aircraft, Civil Air Patrol, government aircraft, hot air balloons, agricultural aircraft, air ambulance, and other aircraft defined by Minnesota laws.

### COMMERCIAL OPERATIONS:

government or the services incidental to certificated operations, (Rule: 8800,3100)

# Minnesota Aviation Industry News

# **MATA President Meets With Minnesota Congressional Delegates**

president of the Minnesota Aviation Trades Association (MATA), Greg Reigel, recently spent time meeting with staff members



Greg Reigel

from the offices of all Minnesota Congressional delegates to thank them for their support of general aviation and to seek additional support on critical issues that will impact general aviation, both nationally and in Minnesota. Representatives from the Minnesota Council of Airports and Minnesota Business Aviation Association joined Reigel in this special initiative.

In each of his meetings, Reigel discussed the shortage of pilots and mechanics and how these shortages are already impacting general aviation. To that end, he also emphasized the

importance of the Pilot's Bill of Rights 2 and its third-class medical reform that will allow more pilots to fly without a third-class medical certificate, saving both pilots and the federal government millions of dollars each year without decreasing safety. The bill also provides a range of other protections for anyone holding a Federal Aviation Administration (FAA) certificate when dealing with the agency, in particular when facing FAA enforcement actions. Reigel urged those delegates who had not already done so to sign on as cosponsors of the Pilot's Bill of Rights 2.

Reigel also discussed FAA's Reauthorization in funding, and the need for a multi-year reauthorization that will sustain funding for multiyear projects. He also expressed the industry's frustration with the last reauthorization and the adverse impact on the industry resulting from the multiple continuing resolutions that were required before final

reauthorization was passed.

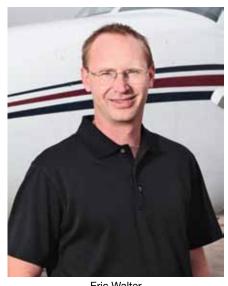
Other issues raised with the delegates included the continuation of Essential Air Service for rural communities that need assistance to retain commercial air service. maintaining the current 5-year depreciation schedule for aircraft, and extension of radar coverage in central Minnesota to fill an existing gap before the implementation NextGen.

Reigel thanked those delegates who are already members of the General Aviation Caucus for their participation and encouraged those who are not to consider joining. The conversations were productive and the delegates' staffs all recognized the importance of general aviation to both the economy and the National Air Transportation System. Reigel, as do the representatives of MBAA and MCOA, looks forward to working with members of Congress in the future to support and grow general

## **Bemidji Aviation Services Chief Pilot Receives National Award For Excellence**

WASHINGTON, DC - The National Air Transportation Association (NATA) has announced the recipients of its Industry Excellence Awards given annually to individuals, offices, and organizations that have helped improve the general aviation community. Among the recipients is Eric Walter, Chief Pilot at Bemidji Aviation Services, Inc., who received the "Excellence In Pilot Training Award" for his outstanding contributions in safety, professionalism, leadership, and excellence in the field of flight training.

Bemidji Aviation Services has a commercial pilot staff of more than 25 employees. Walter is responsible for all



Eric Walter

aspects of Part 135 initial pilot training, including airport specific training. He conducts more than 50 checkrides per year, holds ATP and A&P FAA certificates, and has amassed more than 11,000 hours of flight time.

In addition, Walter serves on the Event Review Committee for the Bemidji Aviation Aircraft Safety Action Program, and oversees the program that provides Air Attack Platform aircraft to the U.S. Forest Service, U.S. Department of Interior and Minnesota Department of Natural Resources for wildfire suppression. Bemidji Aviation's safety and performance record is a testament to his devotion. 

## **Cirrus Announces New Vision Center**

DULUTH, MINN. - In a special ceremony on May 6, 2015, at McGhee Tyson Airport in Knoxville, Tennessee, Cirrus Aircraft Co-Founder and CEO Dale Klapmeier joined Tennessee Governor Bill Haslam in announcing the expansion of Cirrus Aircraft to Knoxville with the new "Vision Center." This Cirrus Customer Experience Center will be the central location for all Cirrus Aircraft pilot, owner and customer activities. This will also include sales, delivery, training, maintenance, support, personalization, fixed base operations and more for all Cirrus airplanes concentrating around the new Vision SF50 single-engine personal jet.

The Vision Center will be the location for factory direct type rating training from Cirrus Aircraft. A key



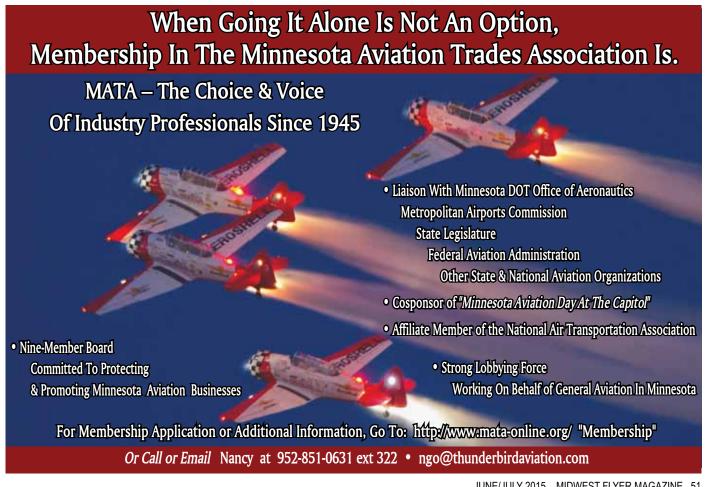
Cirrus Vision SF50

component of the SF50 training curriculum at the Vision Center is a Level D, full-motion flight simulator currently under development at CAE. This full flight simulator will be the cornerstone in Vision SF50 type rating training and annual recurrent training. In addition to factory direct training, the Vision Center will provide support for the new Vision SF50 and more than 6,000 SR aircraft. The

design center will allow customers to personalize new and current aircraft. Research and development (R&D) as well as manufacturing operations for Cirrus Aircraft will remain in Duluth, Minnesota. All aircraft will continue to be manufactured at company facilities in Grand Forks, North Dakota and

Knoxville's McGhee Tyson Airport was selected for the home of the Vision Center because of its convenient location to the Cirrus owner base in North America, the uniqueness of the airport and area amenities, favorable weather and, most importantly, a welcoming community for Cirrus Aircraft employees and their families.

Todd Simmons, Cirrus Aircraft Chief Customer Officer, will lead the Cirrus Aircraft Team at the new location for all Cirrus Aircraft customer activities and operations.



# Teaching Students, Teaching Teachers, Teaching Ourselves – A Great Glider Weekend!

by Jim Hanson

was recently reminded why I like gliding:

- It gets you into the air.
- It's a chance to improve your aviation skills and airmanship.
- It can be some of the cheapest flying you'll ever do.
  - It requires the assistance of friends.
- It offers some of the best aviation fellowship there is.

Yes, gliding (like all forms of aviation), CAN be expensive – but there is an economical alternative – *auto launch or car tow* – or launching the glider when towed by a pickup truck. I recently had the opportunity to do it again, after a layoff of some years.

I first learned how to *car tow* from Mr. Bob Nady - a former director of the Soaring Society of America. Bob was such an advocate of car tows that even the license plate of his Chevy 454-powered pickup "Ol' White" stated "Car Tow." Bob was a member of the soaring club "Silent Knights" of Ames, Iowa. Silent Knights had a program that





After group discussion and preflighting gliders, teachers receive final instructions before going to the flight line for glider and motor glider rides. *Jim Hanson Photo* 

ought to be emulated throughout the country; they taught kids to fly. They used a couple of old Schweizer gliders—airworthy, and paid-for.

The group would provide a free glider ground school for kids age 13-18 (you can solo a glider at age 14). The airplane and the instruction were free, but it came with a price. Upon completion of the ground school, students were given flight training by the members of the Silent Knights. They had to help assemble and maintain the gliders, keep them looking good, move them to the flight line, and act as ground personnel – running wings, checking the pattern for traffic before launch, keeping track of tows and time aloft, and putting the gliders away afterward. I like that idea – it teaches responsibility and makes kids a *participant* – not a spectator.

A good portion of them did get their ratings – and many stayed with Silent Knights – advancing as glider flight instructors – and paying back the benefits they had received 52 JUNE/JULY 2015 MIDWEST FLYER MAGAZINE

to yet another generation. Unlike airplane-rated private pilots, a high proportion of pilots getting glider ratings continue to fly for life.

One must always wonder "why the difference?" Why do glider pilots stay with the sport? I believe there are many answers – all related.

- Obtaining a glider rating is difficult. Unlike airplane flight training, you have to assemble a combination of a glider, an instructor, a wing runner, and a tow pilot or car-tow driver, and you need favorable weather.
- Glider pilots thrive because of the difficulty in getting the rating... They work hard for it!
- Just as important as learning to fly, the social side of flying gliders is important. Watch a glider flight operation... you'll see people assisting. When the flying is over, the group often goes out together to socialize, sometimes bringing the

family together at the airport. That's something rarely seen these days at the airport, but common at glider clubs. Even during the winter months while gliders are in storage, these pilots get together because they truly like each other.

• Gliding is relatively inexpensive. There is no engine to maintain or gas to buy. The airframes are simple, and the

avionics are few. Yes, the super-gliders can be expensive, but there are plenty of economical gliders out there. Since you need people to glide, the sport is tailor-made for club operations. Some clubs even save on hangar rent by keeping their gliders in their trailers. It takes only a few minutes to assemble, and the assembly process can be enjoyable.

• Gliding is pure sport. There is no pretention of it being used as business travel. Glider pilots fly for the pure FUN of flying!

### Back to launching gliders behind vehicles.

Car tows are far more prevalent in Europe, where avgas can run \$15 a gallon or more. It is an economical way to get launched, and on favorable days or in mountainous terrain, the glider can often get "out and away" and achieve climbs to altitude. The real benefit in the U.S., however, is flight training – a chance for students to get flight time 10 minutes



This beautifully restored 1961 Schweizer 2-22 training glider is painted to look like a World War II TG-4 glider. It is owned by Black Hills Soaring, and did exactly what it was designed to do during the contest...teach people to fly. Dennis Newman Photo

at a time...a chance for them to perfect their aircraft handling skills and the energy management of their motorless aircraft in performing takeoffs and landings.

Last fall, we held a "glider regatta" at Albert Lea, Minnesota. A regatta is not a contest... It is simply a collection of pilots who get together to fly and socialize with one another over a long weekend. We had about a dozen gliders, and a little over twice that many pilots.

I received a phone call from Greg Klein, director of the Lake Area Technical Institute in Watertown, S.D. He asked if I minded if he brought over a motor glider to the regatta. Minded? Of course not! Greg said that he would give a motor glider ride to anyone that asked: glider pilots, airplane pilots, prospective students, aerial applicators, or students at the flight training school. I asked what was in it for him. "It's the way I fill my classes," he replied. "Every person that rides in the motor glider becomes a salesman for our school. If anyone asks about attending a school, they are going to recommend ours!" I had to admire his willingness to get off the airport and go hunting for students, instead of waiting for the phone to ring. His classes were full!

Greg must have given 40 rides in his motor glider, and we all had a good time. He mentioned that the school program had rebuilt a Schweizer 2-22 for an owner who paid the cost of the materials, and that they did the annual inspections on a Schwiezer 2-33 for another owner, who in turn, gave glider rides to students. He also described how the training aircraft in the program had been built up with "sweat equity." They



The Schweizer 2-22 glider poised for takeoff behind a pickup truck. The towline was 1600 feet of Spectra line, allowing the glider to get to 1300 feet before releasing.

Dennis Newman Photo



This Schweizer 2-37 is really a "warbird!" It was formerly operated by the USAF Academy as a pilot trainer. It is able to self-launch, using its 112 hp engine, and is able to glide about 27 feet forward for every one foot it loses, even if there is no lift. The aircraft is owned and was restored by Lake Area Technical Dennis Newman Photo

needed a tow plane, so they acquired a derelict Cessna T-41 (a military Cessna 172, powered by a 210 hp engine) from U.S. Air Force federal surplus property for \$1,000. It didn't make financial sense to pay to have it restored, but it would be possible if the labor was free, and LATI had a number of students who needed to learn to repair sheet metal and engines, and update avionics. The aircraft was trailered back from



The Schweizer 2-22 glider is almost overhead the tow vehicle (note the towline). Though the pilot releases the towline, the tow vehicle can also release the line, and a special arrangement of the tow hook releases the line automatically in the event the glider goes beyond the tow vehicle. Dennis Newman Photo

California, and restored over a period of 3 years.

In the meantime, a Schweizer 2-37 motor glider became available at the USAF Academy at Colorado Springs. The motor glider had been used to train cadets in the mountainous region, but the Air Force was changing its flighttraining program and no longer needed the aircraft. LATI snapped up one of the four aircraft released. Similarly, a Ximango motor glider (manufactured in Brazil and sold as civilian aircraft around the world) became available at Holloman Air Force Base in New Mexico. They picked that one up too!

With the Cessna T-41 up and running, it was able to tow the gliders restored by LATI during the annual "Soaring Days." The students who sign up for the optional flight training receive glider time in the two motor



### PROMOTION THROUGH EDUCATION

gliders, as well as time in the T-41.

LATI was involved in ethanol aviation fuel research using an American Champion Aurora taildragger. Upon completion of the research period, rather than financial compensation, LATI was able to keep the airplane, and students now can receive tailwheel time as part of their training. As word of their needs spread, the school also received several nonflyable aircraft, including a Boeing 727 from Federal Express, an ex-Army U-21 (unpressurized King Air turboprop), a beautiful and well-equipped Beech Sundowner, a Seneca II, a pressurized Baron, and a Lear 24. Though these aircraft will never fly again, they are being maintained well in the A&P mechanic training program.

At Albert Lea, I mentioned to Greg that with all of this young talent in the A&P program—and the unusual concentration on gliders—that he ought to consider incorporating glider ground launches behind vehicles as a way to get his students into the cockpit at minimal cost. I told him that several other glider CFIs and I would conduct the training. We settled on the dates of April 17-19, 2015 so we could get the first class trained before they graduated, and the students in there first year class would be available to help with next year's event.

In addition to the gliders available at Brookings, S.D., the Black Hills Soaring Club provided a remarkably restored 2-22, and a whole crew of experienced flight and ground personnel to operate it.

Paul Randall – dealer for the Pipestrel line of modern motor gliders – offered to bring a demonstrator over for the event. Harry Thompson offered to fly tow in the Citabria, and several other experienced glider pilots and instructors volunteered as well. This was coming together nicely. However, as they say about "the best-laid plans of mice and men....." there are always problems... This time, it was the April weather in the Great Plains states. A spring storm dumped 5 feet of snow on the Rockies, where Bob Lynn (who was to conduct the auto-tow ground school) was stuck, unable to attend.

CFI-G (Glider) Steve Fischer, the Black Hills Soaring Club (including two FAA-designated pilot examiners) and I all collaborated on the effort. We trained the students as well as the glider pilots on ground-launch safety and procedures, and as so often happens, we re-trained ourselves in the process.

We took extra care to include the Watertown airport staff so they would be cognizant of what we were doing. The airport staff was wonderful—filing the NOTAMS for us, coordinating the arrival and departure of scheduled flights, providing safety vests and handheld radios, and filling animal holes in the turf prior to our use.

The day started with a pancake and sausage breakfast for workers and glider riders alike, courtesy of Lake Area Technical Institute in exchange for the generous services of all the glider instructors, pilots, and designated pilot examiners. (Didn't I tell you that glider people are very social?). After breakfast, we concentrated on the ground launches first.

As each person became proficient in one aspect of the ground launch, they were moved to train at another position at the glider end of the tow rope, moving gliders into position, loading passengers, hooking up the tow line, taking up slack and running the wing. All the while, experienced personnel and the field operations officer – the "head honcho" of the operation – monitored them.

Though the first hour or so moved slowly while training, people became comfortable with the operation, and the tempo picked up. There were the inevitable traffic conflicts, but the trainees and the experienced personnel did exactly what they were supposed to do, and halted the operation to prevent any problems. In the meantime, the three motor gliders were conducting operations—getting people into the air for a 20-30 minute ride, including shutting down the engine for full glider operations.

We were having fun now! We were having so much fun, that people didn't want to break to eat or drink. Greg solved that problem by bringing cases of bottled water on ice and a truckload of pizzas for the crew. (Is this a good day, or what!) We were tired at the end of the day, but it was a "happy tired." We all went out to eat, and hit the sack early; there was another day tomorrow!

On Saturday, everyone arrived early. Maybe it was the promise of another free breakfast, but more likely, everyone was looking forward to having another day of fun! The weather forecast initially was for wind and the possibility of rain, but the wind was okay, and the rain stayed just south of Watertown.

On this day, I had another element of our weekend – "teaching the teachers." During my years as a fixed base operator, I had a number of people come out and tell me "I always wanted to be a pilot, but my teacher told me I had to have 20/20 vision" (that hasn't been true for years), or "My teacher told me I'd have to give 8 years to the Air Force to be a pilot" (used to be good advice, but with the cutback in military flying, they don't build time rapidly as they used to).

Another problem – the common lament of many youth programs like Young Eagles – is "they won't let us into schools to let kids know this is available." This needs to change, and the way to change this is to make sure that teachers and high school counselors have accurate and up-to-date information.

What the aviation community needs is an "Educate the Educators About Aviation" (EEAA) initiative. I believe the Office of Aeronautics in each state should lead this. In Minnesota, this is the MnDOT Office of Aeronautics.

The Minnesota Office of Aeronautics has a long history of education activism. The agency has developed an education department over the years, which includes a lot of the material teachers and counselors need. There is material there for elementary grades through high school graduation. Best of all, since the Office of Aeronautics is a government agency, it is not perceived as having an agenda, and this is crucial in getting aviation education into schools.



The article on Lake Area Technical Institute, published in the Dec. 2014/ Jan. 2015 issue of Midwest Flyer Magazine, is on display at the school. Tony Wiegman Photo

I asked Greg Klein at Lake Area Technical Institute for a favor. Since LATI is an educational organization, I wanted to "Beta Test" my theory.

Today, STEM education (Science, Technology, Engineering, and Math) is the "buzzword" in education. Aviation incorporates all of those disciplines. I asked Greg to find 25 teachers for me to participate in a give and take session on providing the information they need to prepare students for an aviation career, and in return, we would give them glider and motor glider rides. Greg asked for volunteers at a South Dakota STEM conference, and after explaining that this was to help the teachers do their jobs, he quickly filled the 25 slots. Considering that some teachers drove almost 8 hours one way on a weekend, at their own expense to attend, I think the program had an impact.

#### **Educating The Educators**

We talked about the current and future demand for pilots, aircraft technicians, and other aviation professionals, and how students can start preparing in school now for these careers.

We presented materials available through the aviation industry, including the wealth of information available online

from the Minnesota Office of Aeronautics. Since the teachers involved were heavily loaded towards algebra, calculus, geometry, and physics because of the STEM conference, we produced four lesson plans involving Science, Technology, Engineering, and Math, and broke that down further for middle and high schools.

I further explained how the Office of Aeronautics cooperated with us on a trip I was involved with through Central and South America to the Antarctic. MnDOT provided the website, classroom posters, and teachers produced 60 lesson plans about what we would be experiencing on our trip. The result was nearly two million hits, as classes followed along on our blog.

I presented the teachers with contact information for EAA, AOPA, Sporty's Pilot Shop, Ace Camp, and CAP – all organizations that will provide free or low-cost training and flight experiences for students.

The encouraging takeaway for me in this meeting was that while teachers might be wary of "yet another mandated program to teach," once they found out that they were being provided the tools to teach classes they were already teaching and they would be able to teach it in a new and interesting way, they were ready to adopt the program.

After we left the classroom, we adjourned to the hangar, where LATI instructor Jim Behnken spent 20 minutes preflighting a glider for the teachers. The airframe itself provides many "teachable moments" about aerodynamics and aircraft control. The teachers toured the impressive facility at LATI, and the airplanes the students maintain. Then, it was on to the flight line! The teachers were able to experience ground launching and the aero towing of gliders, plus the operation of motor gliders (flown by Greg Klein, Tony Wiegman, and Paul Randall).

Though there were some initial fears, nearly every teacher elected to try each type of glider flight. There were smiles all around as they came down, and their cameras were loaded

CONTINUED ON PAGE 62

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## Minnesota Education Section

Minnesota Transportation Center of Excellence

# Northland Community & Technical College Selected To Launch National Science Foundation UAS Education Initiative

THIEF RIVER FALLS, MINN. -Northland Community & Technical College (NCTC) has been awarded a grant from the National Science Foundation (NSF) Advanced Technological Education (ATE) Program. The award provides nearly \$200,000 to be utilized over three years. The project, entitled "Revolutionary Opportunities for Highly Educated **Unmanned Aircraft Systems** Technicians," will be under the direction of Northland instructors, Jonathan Beck and Thomas Biller. The project will expand access and awareness about the rapidly emerging UAS industry through education and career pathways development in collaboration with educational institutions, industry, and existing NSF ATE Centers.

NCTC President Anne Temte commented, "I am so pleased by this award. Recognition by the National Science Foundation is truly an expression of confidence in our capabilities and our vision for the future."

"This grant will allow Northland to continue its first-in-the-nation education programming in unmanned aircraft systems to promote their growing use in the commercial sector. At the same time, we will leverage NSF's nation-wide network of advanced technology centers

and STEM expertise to develop best-inclass, technician level training for this revolutionary technology," states Jim Retka, Dean of Career and Technical Education.

"UAS are a revolutionary technology impacting many industries," notes Jonathan Beck, Principal Investigator. "The power of commercial utilization of the technology lies in technician education. This NSF ATE project will expand access to UAS education and develop pathways to exciting careers for highly educated technicians embracing new technology. We will partner with high schools, colleges, industry and other NSF ATE projects to cultivate imagination and provide education in the technical proficiencies, making future visions a reality."

"These are exciting times for all of aviation and the technologies coming online are amazing!" says Tom Biller, Co-Principal Investigator. "Through the grant funding established by our NSF project, we can continue to push this technology and the exciting career possibilities down to the high schools where kids can get exposed to some of the important reasons STEM curriculum matters so much!"

Northland will work with existing NSF ATE Centers including: 360° Manufacturing and Applied Engineering ATE Regional Center of Excellence at Bemidji State University, the National Resource Center for Materials Technology Education (MatEdU), and the National Resource Center for Aerospace Technical Education (SpaceTEC). Many institutions in the region also pledged support for the project initiatives including the University of North Dakota Center for UAS Research, Education, and Training, and high school consortiums; Pine 2 Prairie and the North Valley Career and Technology Center. Each of these external project partners plays a pivotal role in the success of the project.

Support for this project is provided by NSF/ATE DUE Award #1501629. Findings and opinions are those of the institution and not of NSF.

Northland Community and Technical College is a comprehensive college with campuses in East Grand Forks, Minn., and Thief River Falls, Minn. One- and two-year degrees, transfer programs and diploma certification are available in a variety of majors, as well as workforce training and continuing education programs. 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 Northland Community and Technical College at www.northlandcollege.edu & Northland Aerospace at www.northlandaerospace.com

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

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

NOTAM: Pilots, be sure to call events in advance to confirm dates and for traffic advisories and NOTAMs. Also, use only current aeronautical charts, etc., for navigation and not calendar listing information.

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#### 2015

#### **JUNE 2015**

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



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- For more information call West Metro Aviation at 763-682-1516.
- 7 DEKALB (DKB), ILL. - Pancake breakfast.
- 7 Mandan (Y19), N.D. - "Planes & Pancakes" Airport Breakfast 8-11:30am. Free rides to Buggies-n-Blues festival.
- JUNEAU (UNU), Wis. Pancake Breakfast 7
- 9 VINTON (VTI), Iowa - Tuesday Night Grill-Out 5-8pm at Vinton Veterans Memorial Airpark. 319-334-4000.
- 13 BUFFALO (CFE), MINN. - 2nd Annual North Central Sonex Fly-In. wflury@wh-link.net, 763-670-6021
- 13 Noblesville (180), Ind. - Pancake breakfast 8-11am.
- 13\* BENTONVILE (KVBT), ARKANSAS - Wings & Wheels Swap & Show 2-7pm. Airplane, Automobile, Motorcycle show. Aviation swap meet. Family entertainment. www.bentonvilleevents.com
- 14 DENISON (DNS), Iowa - Breakfast 7am-Noon. 712-265-1608.
- 14 FERGUS FALLS (FFM), MINN. - Dad's Belgian waffle breakfast 8am-1pm.
- ANN ARBOR (ARB), MICH. Pancake 14 breakfast 8am-Noon.
- 14 Poplar Grove (C77), ILL. - Pancake, waffle, eggs & sausage breakfast 7am-
- 20 LEE's SUMMIT (LXT), Mo. - Pancake breakfast 8:30am-Noon.
- 20 PERU (GUS), IND. - GUS Fly In Pancake breakfast (8-11am, burger & dog lunch 11am-1pm.
- 20 Keosauqua (6K9), Iowa - Pancake & sausage breakfast 7-10am.
- 20\* GRANITE FALLS, MINN. - Ray Fagen Memorial Airshow starting at 11am. Airport closed day of show. Fly to Southwest Minnesota Regional Airport in Marshall. Shuttles to and from.
- 21 STANTON (SYN), MINN. - Breakfast 7am-Noon, 507-645-4030.
- 21 LACON (C75), ILL. - Father's Day pancakes, sausage, eggs, waffles, drinks breakfast & static displays 7am-
- 21 SCHAUMBURG (06C), ILL. - Gourmet pancake breakfast 8am-Noon.
- 21\* REDWOOD FALLS, MINN. - Rotary Fly-In Breakfast 8am-Noon. Pilots eat free.
- 21\* Hutchinson (HCD), Minn. - Pancake & sausage breakfast & classic car show 8am-Noon. PIC free.

- 21\* HUTCHINSON (HCD), MINN. - Pork chop dinner with baked potato, beans, corn, apple sauce bread and coffee or juice.
- LACON (C75), ILL. Safety Seminar 22 7-9pm. 32-246-2870.
- INDEPENDENCE (IIB), IOWA Grill-Out 23 5-8pm. 319-334-4000.
- 27 Menomonie (LUM), Wis. - Airfest and Autorama (car/bike show). Breakfast 7am-?. Kid activities.
- 27-28 Mankato (MKT), Minn. MN Air Spectacular Air Show. Featuring U.S. Thunderbirds, U.S. Army Golden Knights, Sean Tucker, John Klatt, Air Guard and Jet Waco, Dave Dacy, Jelly Belly, and warbirds.
- DODGE CENTER (TOB), MINN. Breakfast 28 8am-Noon. 507-272-5099.
- RED OAK (RDK), Iowa Breakfast 28 8-11am. 712-623-6523.
- 28 MARION (C17), Iowa - Breakfast 6am-Noon, 319-377-0457.
- 28\* STRUM (3WN9), Wis. - Pancake Breakfast at Brion Memorial Field 7:30-Noon, CTAF 122.9
- 28-7/3 Branson (PLK), Mo. Short Wing Piper Club National Convention. "Show-Me Short Wings Over the Ozarks." Piper Vagabond, Clipper, Pacer, Tri-Pacer and Colt. www.2015ShortWingConvention.com/

### **JULY 2015**

- Branson (PLK), Mo. Short Wing 1-3 Piper Club National Convention. "Show-Me Short Wings Over the Ozarks." Piper Vagabond, Clipper, Pacer, Tri-Pacer and Colt. www.2015ShortWingConvention.com/
- PHILLIPS (PBH), Wis. 2015 Price 3-4 County Airport & Harbor View Fly-In, Float-In & Lake Rattle & Roll featuring a "Breakfast Buffet" at Harbor View Pub & Eatery on Saturday morning from 8:30-11:30am, air show performances at the airport on Friday night at 7pm and again 11am on Saturday, and Lake, Rattle & Roll with a live band Saturday from 8pm 'til Midnight at Harbor View.
- MANSFIELD (MFD), OHIO Airport Day & Car Show 8am-4pm.
- Austin (AUM), Minn. Fly-In Breakfast. Pancakes, SPAM, sausage, milk, coffee, juice - 7am-1pm. \$6.00 per person age six and over, Pilots In Charge - Free. Contact Steve Jensen

#### 507-433-7115.

- VINTON (VTI), IOWA Grill-Out 5-8pm. 319-334-4000.
- 12 POPLAR GROVE (C77), ILL. - Pancakes, waffles, eggs, sausage breakfast 7am-Noon.
- 12 MIDDLETON (C29), Wis. - Pancakes, eggs cooked to order, sausage, coffee, juice & milk breakfast 7am-Noon.
- 16-19 Brodhead (C37), Wis. Annual gathering of the Brodhead Pietenpol Association and the National Hatz Club.
- 17-19\* Madison (MSN), Wis. Rides & Ground Tours of Heavy Bombers Weekend 2015. B-29 FIFI, B-17 "Aluminum Overcast," EAA Ford Tri-Motor, P-51 Mustang, T-6 "Texans," C-45 Expeditor and more! www.heavybombersweekend.splashthat.com
- 18\* MADISON (MSN), Wis. - 1940's Hangar Dance, Saturday Evening, July 18th, 6:30pm to 10:30pm. Much more TBD, visit website to purchase tickets in advance or at the gate. www. heavybombersweekend.splashthat.com
- LEE's SUMMIT (LXT), Mo. Pancake Breakfast 8:30am-Noon. 18
- 18\* ZIONSVILLE (TYQ), IND. - Wheels & Wings GOF Central Show. Vintage Plane Show/Fly-In & Classic MG sports car at Indianapolis Executive Airport. http://hoosiermgs.com/gof.html
- WASHINGTON ISLAND (2P2), Wis. Fish Boil, Hayrides & Music 11am-18
- 19 TAYLORVILLE (TAZ), ILL. - Biscuits and gravy, sausage and eggs, hashrounds, pancakes, donuts, cereal, coffee, tea, orange juice breakfast.
- 20-26 OSHKOSH (OSH), Wis. - EAA AirVenture 2015 www.airventure.org
- INDEPENDENCE (IIB), Iowa Grill-Out 5-8pm. 319-334-4000.
- 25-26 Mason City (MCW), Iowa Fly Iowa 2015. www.flyiowa.org **AUGUST 2015**
- Northport (5D5), Mich. The Northport Lions Club annual Fly-in Drive-in Pancake Breakfast will be held on Saturday August 1, from 8 am to noon at the Woolsey Airport (5-d-5), just north of Northport, Michigan. Alternate rain date is August 2, 2015. Pancakes, sausage, cherry topping, coffee etc. will be served for \$8 (adult), \$4 (child) under 5 free. A multi-age car show and band will also be on the grounds. Airport location is approximately 40 miles north of Traverse City. (About 1 hour east of Oshkosh, flight time). Call 1-231-386-9936 or 386-5984, and 1-616-460-8965.
- VINTON (VTI), IOWA Grill-Out 5-8pm. 319-334-4000.
- 8 MORAINE (173), OHIO - Flying Heritage Festival 7am-9pm.
- LINO LAKES (MN24), MINN. At Surfside Airport. Minnesota Seaplane Pilots Association Pig Roast, 12:00 noon to 4:00 pm. For additional information refer to www.MnSeaplanes.com or call or email Randy Schoephoerster at randy@airtreknorth.com 952-594-1184.

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

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- Poplar Grove (C77), Ill. Pancakes, waffles, eggs, sausage. coffee, milk & juice breakfast 7am-Noon.
- 10-13 & 13-16 MIMINISKA LODGE, ONTARIO 2015 Canadian Fishing Fly-Outs. 3-Night/2-Day Trips.
- 10-15 & 13-18 5-Night/4-Day Trips. For more information call 1-888-465-3474.
- 14-15 Muskegon (MKG), Mich. Michigan Air Rally. 616-401-3637.
- INDIANAPOLIS (7L8), IND. Taildragger Rendezvous at Post Air Airport 10am-2pm, www.900.eaachapter.org
- 15 FOREST LAKE (25D), MINN. - Pancake, Lunch, Ice Cream Social & Car Show 7am-4pm at 2,700 ft. grass Daniel De Ponti Memorial Airport. 651-373-3779.
- 18 INDEPENDENCE (IIB), Iowa - Grill-Out 5-8pm. 319-334-4000.
- MADISON (MSN), Wis. 1940s Style Hangar Dance featuring Ladies 18 Must Swing 6-10:30pm at Wisconsin Aviation.
- 22 BLAINE (ANE), MINN, - AOPA Fly-In at Minnesota Anoka County-Blaine Airport. To read more about the AOPA Fly-In go to www. midwestflyer.com/?p=8264. RSVP to attend by going to www. aopa.org/Community-and-Events/AOPA-Fly-In/2015/About
- 22 GLENCOE (GYL), MINN. - Sweet Corn & Bratwurst Feed Fly-In 10am-
- 22 Noblesville (180), Ind. - Pancake Breakfast 8-11am.
- 29 Washington Island, Wis. - Death's Door Bar-B-Q (chicken, pork. pork ribs & beef brisket) starting at 10am. Kids activities, music. visit washingtonisland-wi.com
- 30\* Owatonna (OWA), Minn. - French Toast Breakfast 7am-Noon at the Owatonna Degner Regional Airport. 507-444-2448.

#### SEPTEMBER 2015

- VINTON (VTI), IOWA Grill-Out 5-8pm. 319-334-4000.
- New Lisbon (82C), Wis. Planes & Old Cars 8am-1pm. Breakfast 5 7-10:30am, Lunch 10:30am-2:00pm.
- 5-7 CLEVELAND (BKL), OHIO - Featuring U.S. Air Force Thunderbirds and Breitling Jet Team from France. Sean D. Tucker, Rob Holland, Shockwave Jet Truck, U.S. Army Golden Knights Parachute Team and military jet demonstrations.
- Mondovi (W69), Wis. Hot dogs, baked beans, potato salad, & fresh sweet corn brunch at Noon at the Log Cabin Airport. 715-287-4205.

CONTINUED ON PAGE 62



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

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





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1975 Piper Cherokee 140 - N4359X 4460 TT, 2045 SMOH, Fresh annual! Recent interior, IFR with a Stormscope! KX-155, Aera 560 GPS with XM Weather!



1981 Piper Seneca III - N8407R 90 SFRM & 90 SPOH, November annual & 135-ready! Known ice! GNS-530/Dual Glideslopes, GNS-430, GDL-69, WX-500, KFC-200 AP/FD!



1979 Cessna 310R - N2638Y 9485 TT, 1140 SMOH, 1040 SPOH/175 SNEW. October annual, rare 203-gal. fuel, Garmin 430W, HIS, color radar, boots and hot props hangared in Midwest. .... Reduced to \$104,500!



1977 Cessna 414 -N126BT 3500 TT. 917/874 SMOH

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

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#### A GLIDER WEEKEND FROM PAGE 55

with photos and videos to share with their fellow teachers and their students, along with what they had learned in the classroom. A written debrief in the days following revealed **real enthusiasm** on the part of the teachers!

All in all, it was a superb weekend! All goals were met. We qualified the LATI students on all ground launch procedures and positions, and we certified and recertified 14 glider pilots and instructors on the positions. We engaged in a good dialogue with 23 STEM teachers on using aviation as a way to make Science, Technology, Engineering, and Math fun and relevant, and we all had fun in the end.

We made new friends, and it went so well that there

are already plans afoot to do more of these events in other locations. As for the teachers, we received superb feedback. They drove hundreds of miles at their own expense to experience this and to give us suggestions on implementing this program. Everyone stated that they will use much of what they experienced in their classrooms for years to come.

EDITOR'S NOTE: Jim Hanson is the long-time manager of the municipal airport in Albert Lea, Minnesota. Jim is "UP" for almost anything aeronautical. He has spent his entire life having fun with aircraft and people interested in aviation. If you have questions or suggestions on this program, contact Jim Hanson at 507 373 0608, or via email at jimhanson@ deskmedia.com.

## CONTINUED FROM PAGE 59 SEPTEMBER 2015

- 7\* GAGE (GAG), OKLA. Labor Day Breakfast Fly-In. New Runway. Come have breakfast with us!!!
- **Superior (SUW), Wis. -** Blueberry pancake breakfast 8am-Noon.
- JOLIET (JOT), ILL. Airport Festival. Pancake, sausage, coffee & juice 8-11am. Warbird display & children's activities until 3pm.
- POPLAR GROVE (C77), ILL. Pancakes, waffles, eggs, sausage breakfast 7am-Noon.
- 15 INDEPENDENCE (IIB), Iowa Grill-Out 5-8pm. 319-334-4000.
- 19 LEE's SUMMIT (LXT), Mo. Pancake Breakfast 8:30am-Noon.
- 19\* Осонто (ОСQ), Wis. Fly-in & Car Show 9am-5pm. 920-246-5620.
- 20 Taylorville (TAZ), Ill. Biscuits and gravy, sausage and eggs, hashrounds, pancakes, donuts, cereal, coffee, tea, orange juice breakfast.
- 20-22 Kansas City, Mo. 4 State Airport Conference at Downtown Marriott Hotel. 816-289-7218 or 816-810-5706.
- 23-24 Stevens Point, Wis. Wisconsin 2015 Airport Operations & Land Use Seminar at Stevens Point Holiday Inn & Convention Center (715-344-0200). For seminar information contact:

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

11 Poplar Grove (C77), Ill. - Pancakes, waffles, eggs, sausage, coffee, milk & juice breakfast 7am-Noon.

#### **NOVEMBER 2015**

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

#### 2016

#### **APRIL 2016**

**20-22** Brainerd, Minn. - 2016 Minnesota Airports Conference at Madden's On Gull Lake (www.mnairports.org).

#### **MAY 2016**

2-4\* Оsнкоsн, Wis. - 2016 Wisconsin Aviation Conference. For additional info contact bob@thewisconsinriver.com.

Wisconsin Flying Hamburger Socials www.wisconsinflying.com/flysocial 
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Airports or EAA Chapters, go to this site to find out how you can be a part of this.

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