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AOPA making headway with fighting egregious FBO fees

As general aviation pilots, we rely heavily on FBOs whether we're traveling to a new destination, or just staying in the pattern. But FBOs provide more than just gas and tie-downs, they are a gateway to local communities and businesses. So, when we hear from more than a thousand AOPA members expressing concerns about transparency of fee costs, access, and pricing, we take them seriously.

In August 2017, we filed Part 13 complaints with the FAA over egregious FBO fees at three airports, one of which was Waukegan National Airport just outside Chicago. Following continued coverage from AOPA on our efforts, along with recently published FAA guidance for airport owners, we began to see several locations take notice and make positive changes to improve conditions and transparency for pilots.



Photography courtesy of Mike Fizer

One of those locations is Waukegan National Airport. Following AOPA's complaint, the airport announced that it would offer free tiedowns for transient aircraft and a pedestrian gate to access the ramp, so pilots and passengers would not be forced to go through the FBO. The FBO also reduced the price of self-service avgas by more than \$2 a gallon.

In light of the recent improvements, AOPA withdrew the complaint against Waukegan and acknowledged the steps taken by the airport to make it more accessible and friendlier to pilots.

We applaud Waukegan and the other self-help airports out there that are taking action to ensure they are open to all segments of general aviation. We will stay focused on this issue, assuring other airports where we have received complaints take similar steps.

This issue is driven by input from our members and we are working hard to continue addressing your concerns. To learn more about our egregious FBO pricing and fee initiative, please watch the most recent AOPA Webinar on this issue and keep checking **AOPA.org** for the latest. Find the webinar by searching the AOPA website for "webinars."

Mark R. Baker

President & CEO, AOPA

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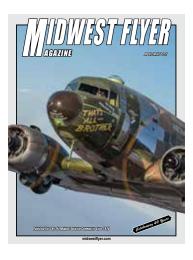
ON THE COVER: The C-47 "That's All, Brother" takes its first flight at Oshkosh, Wisconsin, following initial restoration. Complete story beginning on page 32

CAF Photo by Jim Koepnick, KoepnickPhotography.com

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President May Want His Pilot In The Top Spot

by Dave Weiman

n the February/March 2018 issue of Midwest Flyer Magazine, it was announced that former airline pilot, military pilot, and airline lobbyist, Daniel Elwell, was appointed the acting administrator of the Federal Aviation Administration (FAA). Elwell replaced FAA Administrator Michael Huerta, who was appointed by former President Obama



in 2013 to lead the agency for five years, and his time was up.

The media is now reporting that the President would like to see his longtime personal corporate pilot, John Dunkin, lead the agency, and hopefully because Dunkin is a general aviation pilot, he believes in the importance of fair access for all, and will communicate this to President Trump, whether he is appointed or not.

Dunkin isn't just another Boeing 757 pilot. He apparently has managed airline and corporate flight departments, certified airlines from start-up under FAA regulations, and oversaw the Trump presidential campaign's air fleet, which included managing all air travel to 203 cities in 43 states over the course of 21 months. Also, if Dunkin is appointed, we will once again have an administrator who is a pilot and understands firsthand how the air transportation system works. Dunkin would know that we need all airports – general aviation and commercial - and the cooperation of all pilots and aircraft owners to meet the modernization requirements of the Next Generation Air Traffic Control System (NextGen).

Understanding the need for fair access to the air traffic control system is only one consideration, however. We need an administrator who will work with general aviation groups, businesses and flight schools to promote and attract more people to our industry.

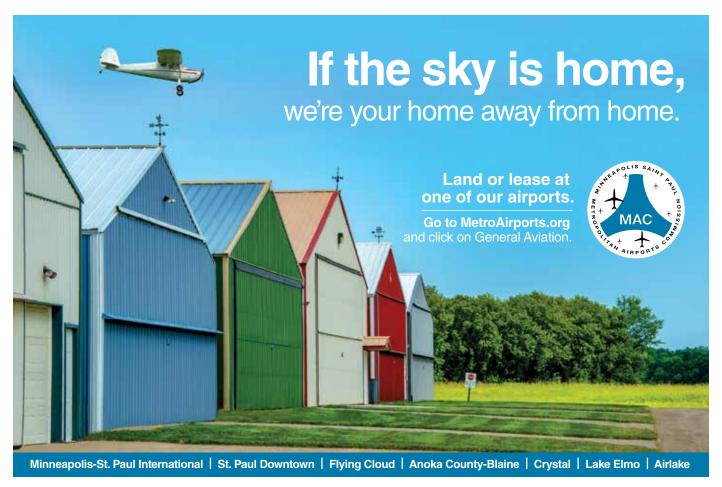
Be sure to read the article in this issue on the Super Bowl that was held in Minneapolis, Minnesota on February 4. That event alone required more than 3,000 general aviation pilots to fly some 1,600 corporate aircraft to the Twin Cities and surrounding area – mostly to general aviation airports.

But things are definitely looking up for general aviation with the defeat of House Bill 2997, which would have privatized the air traffic control system. See article immediately following this editorial.

This issue of *Midwest Flyer Magazine* is dedicated to the state airport conferences being held throughout the Midwest this spring, and to seaplane pilots everywhere!

If you are receiving a "sample copy" of Midwest Flyer Magazine, we encourage you to subscribe online at www.MidwestFlyer.com.

Thank you!





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ATC Privatization Proposal Is Dead!

by Dave Weiman

WASHINGTON, DC – No sooner than pilots and other concerned individuals contacted their U.S. Congressmen to oppose H.R. 2997, which was intended to reintroduce privatizing the air traffic control system, it was announced February 27, 2018 that House Transportation and Infrastructure Committee Chairman Bill Shuster (R-Pa.) would forgo continued debate over his controversial ATC reform proposal. Rep. Shuster stated:

"Many, including myself, continue to believe that the air traffic control provisions of the 21st Century AIRR Act are good government reforms, and necessary for the future efficiency, effectiveness, and safety of our entire Nation's aviation system and its users.

"We built strong support for this critical reform over the last two congresses, and we had a golden opportunity to move beyond the status quo and accomplish positive, transformational change with this bill.

"Despite an unprecedented level of support for this legislation - from bipartisan lawmakers, industry, and conservative groups and labor groups alike – some of my own colleagues refused to support shrinking the federal government by 35,000 employees, cutting taxes, and stopping wasteful spending.

"Although our air traffic control reform provisions did not reach the obvious level of support needed to pass Congress, I intend to work with Senator Thune and move forward with a reauthorization bill to provide long-term stability for the FAA."

The reaction from industry organizations to the news that H.R. 2997 was dead, has been extremely positive, with the presidents of each organization expressing their appreciation to their members for contacting their congressman to oppose the legislation. Each president has indicated a desire to work with Chairman Shuster and other leaders in Congress on a bill that improves aviation for every American – a long-term reauthorization bill, which will help modernize the air traffic control system, which is already underway.

"This is what advocacy is all about," said AOPA President & CEO Mark Baker. "AOPA and other groups identified the threat this bill posed for GA and with great support from AOPA members, we worked every angle on Capitol Hill, through the media, and with other organizations outside of aviation who would also be negatively impacted. The coalition and excellent strategy paid off and kept this bill from reaching the House floor.

"Now we can focus that energy on continuing to improve the excellent air traffic system we already have and in bringing other improvements to the FAA. Meanwhile, we will remain ever vigilant for future efforts that will be disruptive to general aviation because the general aviation we enjoy in this country is unique in the world and is worth protecting."

AOPA, along with hundreds of other aviation groups and organizations across the political spectrum, opposed the legislation. AOPA members alone contacted their representatives in Congress more than 200,000 times asking them to oppose the bill.

North Dakota Governor Declares March 'Aviation Month'

he Alliance for Aviation Across America applauded North Dakota Governor Doug Burgum for declaring March 2018 "Aviation Month." In North Dakota, general aviation airports support more than \$121 million in total economic output each year.

According to the proclamation: "Aviation is an essential

part of our agricultural productivity as 101 aerial applicator businesses provided service to over 2.5 million acres of crops in 2017."

Formed in 2007, the Alliance for Aviation Across America is a non-profit, non-partisan coalition of over 6,300 individuals representing the general aviation community across various public policy issues.



AVIATION LAW - ON YOUR SIDE

Pencil Whipping Has No Business In Aviation

by Greg Reigel, AAL Copyright 2018. All Rights Reserved

o this day, I am still amazed at the number of pilots and aviation professionals I run into who think it is OK to "pencil whip" a document. Some pilots trying to build time toward their next certificates/ratings may add "pencil whipping



Greg Reigel

time" to their pilot logbooks. A CFI may provide a flight review endorsement when none, or when only some of the flight review, was actually conducted.

Sometimes a mechanic will add an entry to a maintenance record when the item was not yet performed, or backdate the record to show the item was performed at a date/time before the work was actually completed.

Training records may be "doctored" to correct errors. Unfortunately, even when this "pencil whipping" occurs with the best of intentions and when the spirit of the regulation has been met, it is still not the correct way to handle these types of situations.

As many of you may know from my past articles and posts, the Federal Aviation Administration (FAA), and the Transportation Security Administration (TSA) for that matter, take a dim view of pencil whipping, which they consider falsification. The FAA will not hesitate to revoke all of an airman's certificates, or an air carrier's or repair station's certificate, when it discovers intentional falsification. Although the majority of falsification cases involve applications for medical certificates, the FAA also pursues legal enforcement action against individuals in the situations I mentioned above. And both the FAA and TSA have authority to assess significant civil penalties in falsification cases.

Although it should go without saying, the easiest way to avoid this risk is to simply be honest and accurate when you are providing information and/or completing documents required by the regulations. And, fortunately, in situations where someone has pencil whipped a document and it is clear that the individual was not trying to intentionally deceive (something the FAA rarely acknowledges), alternatives

to pencil whipping usually existed to address the situation without risking certificate or civil penalty actions

So, what should you do? Well, even though the temptation may be great, don't pencil whip documents. Make sure what you write down to show regulatory compliance is accurate. If you aren't sure what you should write, then do some more investigation and talk to someone who can help (like an aviation attorney). The risks/ liabilities associated with pencil whipping

are simply not worth the perceived rewards. It is better business and practice to simply not do it. But if you do, and you find yourself facing a legal enforcement or civil penalty case as a result, let me know and I will be happy to defend you.

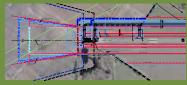
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Get That Clearance Right! Some Tips On Handling Difficult IFR Clearances

by Michael J. "Mick" Kaufman



Michael Kaufman

n the February/March 2018 issue of *Midwest Flyer Magazine*, I wrote about IFR emergencies with a description of several I have personally experienced. For a well-trained pilot, what is a routine operation, can be an emergency to someone who is not well trained. Today, we see aircraft owners spending tens of thousands of dollars

for state-of-the-art avionics, but hesitate to spend even a few dollars on flight training to learning how to properly use that new expensive equipment.

An issue that many of us face as instrument rated pilots is copying an IFR clearance and then complying with it. I am going to cover some of these items and relate some of my own experiences and how it may help you. Some issues back, I covered the subject of "holding patterns" and how important it is to know how to navigate correctly. From that article, I mentioned getting an intersection hold in hard instrument meteorological conditions (IMC) with no autopilot shortly after getting my instrument rating, some 45 years ago. I lucked out on that one, because I slowed down and was cleared to my destination before I got to that intersection. I made it a point to learn those holding patterns very well before my next IFR flight. The requirements set by the FAA are that you do a holding pattern as part of an instrument proficiency check (IPC). Almost all of the GPS navigators include missed approach holds as part of their database and this is nothing more than knowing which button to push. If you were given an intersection hold clearance by air traffic control (ATC) using only one VOR and no GPS or moving map, could you do it? For more on holding patterns, see my column in the June/July 2017 issue Midwest Flyer Magazine, which are archived at MidwestFlyer.com.

The main topic in this issue is "clearances" – what the best way is to get them, program them into the GPS navigator, and fly them. For pilots flying in the Midwest, clearances

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are relatively simple compared to the northeastern U.S. and around Washington, D.C., where most of your routing will be on airways. Let us explore the easy clearances first and how I handle them.

If you are departing from an uncontrolled airport and you can depart VFR and pick up your clearance in the air, this is the best way to go. I do caution you, however, that you must be 99.99% sure you can remain VFR until you can get that clearance. Once you have taken off and have cleaned up your aircraft in a stable climb, you call for your clearance.

Example: (Pilot) Chicago Center, Piper 8412N, 3 miles SW of 63C, looking for an IFR clearance to RFD. (ATC) Piper 8412N, remain VFR, squawk 1241 and say altitude. (Pilot) Squawking 1241, climbing through 2500 for 4000. (ATC) Piper 12N, radar contact. You are cleared to RFD as filed. Climb and maintain 6000. (Pilot) 12N, cleared to RFD as filed, maintain 6000.

You may notice that this was a short exchange of words, and as a pilot, the only item I would need to write down would be the altitude, as this is one of the most critical items for ATC, and the number one separation criteria for controllers. If you don't get the altitude correct, not only are you affecting your safety and that of others, it can quickly get you a violation!

In our next example, let us look at a departure from a remote airport in Wyoming; let's say "Shively" (KSAA). The weather is bad and we have a Class G airport, and there is no cell phone service in this remote area. So, what is the pilot to do?

First, it is necessary for the pilot to preflight the aircraft. You go to the public telephone and call flight service for your clearance for the flight plan you filed by phone earlier. You get your clearance, you run to your airplane, start it up and taxi like a jack-rabbit to the runway, then rush through the checklist and do the run-up like the airplane is on fire, and depart before your clearance void time.

Should you have the great privilege of having cell phone coverage and a Lightspeed Zulu headset with Bluetooth (I love my Zulu), you could save the mad dash and taxi safely to the runway, complete a thorough checklist and run-up, and make the call for your clearance through your headset/cell phone. After your run-up, it is important when calling for your clearance that you advise them that you are ready for immediate takeoff and state the runway you are departing from. If you have a complex routing, you might tell ATC you will be ready for departure within two or three minutes of getting your clearance. In either case, your clearance will be much more complex and you will need to write it down.

It is important to read your clearance back completely and promptly, and if there is an error, ATC should give you the correction, which you must then reconfirm. There is a clearance shorthand and format for copying clearances that I will explain later in this article. If you have a Lightspeed Zulu headset, there is an app that records to your iPad or iPhone

and can be played back for clearance verification, as well as any ATC radio communications.

As a side note, I can't forget the time I did an instrument rating for two brothers in a Cessna 182 Skylane. They had the hardest time with copying clearances and had a digital recording device installed in the aircraft. This was so stateof-the-art at the time that no one had heard of it. The first time they received a clearance from ATC after installing the device, one of the brothers pushed the push-to-talk button and playback at the same time. The controller received the clearance back in his own voice, but I could tell he did not find any humor in this procedure.

Another hint you may find useful for departure and routing clearance is a feature of ForeFlight that gives you the routing you can expect after filing your IFR flight plan on their app. I find this anticipated routing to be quite accurate as it is based on previous flights along this same route or to an airport close to your destination. I find it helpful to review this route and program it into the GPS navigator. One of the features and benefits of having two Garmin 430 or 530 navigators is that they can be interconnected. You then have the ability to cross-fill routes between the two navigators.

A set-up recommendation I give pilots that are equipped that way is to program the #1 navigator to auto cross-fill and the #2 navigator to manual cross-fill. This allows the pilot to navigate on the #1 box and make the changes to the flight

plan or clearance on the #2 box. Once the changes are made and verified as correct, pushing the manual cross-fill on the #2 box will update #1 and both navigators will have the same flight plan.

An important note: Both boxes must be running the same firmware version and the data cards must have the same navigation data updates for the cross-fill to work.

Copying clearances, understanding them, programming the route, making in-flight changes to your routing and correctly flying them, can be challenging for many pilots. ATC is very unforgiving, especially if they have lost minimum separation in their airspace. There is no place for an improperly trained pilot in the IFR environment. If you are instrument rated and have any question on your competency as an IFR pilot, don't fly in the system until you get professional training!

I have given a few hints and sample clearances that hopefully help you, but there are also procedures that must be followed, which I will review with some more useful hints.

Previously, I stated that you should copy the clearance and read it back promptly and verify any corrections given to you from ATC. If you are on the ground, it is your responsibility to verify that you can comply with the clearance before you take off. That may take a while as you verify your routing. Once you take off, you must comply with the clearance. If there is a discrepancy, don't take off!



A technique I use when given an amended clearance in flight is to copy the clearance and if there is any question, I reply promptly to ATC with "standby for read-back." I then check the route and when I am satisfied, I read back the clearance to ATC. Once I do the read-back and it is confirmed as correct, I am responsible to comply with that amended clearance.

Another hint for pilots given an amended clearance flying the Garmin 430/530 navigators is to use the wild card function on the navigator. For example, let's say you have a flight plan programmed in the navigator with 10 waypoints and your re-route was a simple change of adding a fix for a short re-route. If you use the direct-to button, you can add "one" waypoint without disrupting any waypoints in your flight plan. The flight plan that you previously spent 5 minutes programming into the navigator is still there. After completing that short re-route, go back to the flight plan, select the next desired fix and hit the "direct to enter, enter" and you are back flying your flight plan as if nothing ever changed. A word of caution with these navigators is when you load an approach, the navigator will always load the approach to the last airport in the flight plan. If the wildcard option you selected is an airport, bye-bye flight plan!

I have also found an interesting human factor when training new instrument pilots, which you may relate to and I will describe it this way:

When training pilots for an instrument rating, a common example is using the "Five Ts" with the last "T" being the word "Talk." The brain is like a computer in a certain form that there is a limited amount of processing power. The pilot is on the instruments hand flying the airplane, interpreting the approach plate and now ATC gives the pilot the approach clearance. Brain overload, and either the pilot deviates from flying or the approach or the clearance read-back comes back with errors. Has this ever happened to you? ATC does not except "cleared for the approach," and rightfully so, as an error in understanding at this point could be fatal. I do not recommend writing down the clearance as this could be a task (brain) overload when hand flying an approach. You can, however, develop a technique for reading back an approach clearance. You do not need to read back every word of the clearance from ATC, but confirm the critical parts of the clearance, so the controller knows that you are both on the same page.

Example: (ATC) Cessna 456DB, you are five miles from Micky, turn left 030 degrees, maintain 3500 until established on a segment of the approach. You are cleared for the ILS 36 approach to Happy Town. Report established on the localizer. (Pilot) 030, 3500 for the ILS 36. Will report established. 6DB.

You have given the controller a read-back of all the critical data to verify that you and the controller are on the same page. You saved transmit time and the brain power to drag out every word in the clearance. Listen sometime to a professional pilot read back a full departure clearance, and you will notice it is done in the same manner. Many pilots have developed acronyms to help copy a clearance and some of you may have heard of the word CRAFT as one that is helpful for copying a clearance. Let's see how that works with an explanation to follow:

C: Clearance Limit

R: Route

A: Altitude

F: Frequency

T: Transponder Squawk

(ATC): Piper 4257N is cleared from the Stevens Point Airport to the Rockford Airport (KRFD) via Direct BIPID V191 OSH V9 MSN, then Direct. Climb and Maintain 4000. Expect 6000 one zero minutes after departure. Contact Minneapolis Center 124.4. Squawk 4371. Clearance Void if not off by 1245 Zulu. Advise intentions no later than 1255.

C: Rockford Airport (KRFD)

R: BIPID V191 OSH V9 MSN

A: 4000/6000 - 10

F: 124.4

T: 4371

V: 12:45/12:55

C: The clearance limit is usually the destination airport. If your clearance is short of your destination airport, ATC should give you an EFC (expect further clearance) time. This is rare, but if it is the case, you are expected to hold at the listed waypoint until your EFC time.

R: This is your route and in many cases, it is cleared as filed, so make sure that you have a copy of the routing you filed. Sometimes, ATC will specify that the clearance is a full route clearance, in which case it can be quite lengthy on a long flight. If the pilot should have any question on the route, they can ask ATC for a full route clearance.

A: This is the altitude that you are expected to fly. The reason the lower altitude is being specified is that they want to keep you low until you are radar identified. Should there be a radio or communications failure, it is important to climb to the higher altitude at the time specified, so write down your departure time. In the case of lost communications, it is also the pilot's responsibility to fly the altitude specified unless there is a higher minimum enroute altitude (MEA) for the route. When flying off airways, this is a minimum safe altitude (MSA). Should you have a change in the MEA, you begin the climb at the fix specified as the change point; however, if it is a minimum crossing altitude (MCA), the climb should begin to cross the fix at the altitude specified.

F: This is the frequency to make your first contact once airborne. Should the departure be from a tower-controlled airport, a frequency may not be given or given later (rare), or it may be given so you can have it in your standby radio. The tower will tell the pilot when to switch frequencies after departure.

T: Transponder squawk code should be put in the box and activated.

V: This is the clearance void time (not in the word CRAFT) and is usually given only when departing from a non-towered airport. Also, listen for other miscellaneous instructions like "hold for release" or "advise when number one for departure." Another item that can be extremely important is the heading you need to fly after take-off, and it is important for the pilot to understand the airspace structure surrounding the airport. Example: "Enter controlled airspace on a heading of 360." The pilot may need to reference a VFR chart to see what altitude controlled airspace begins at to

comply with ATC instructions.

It has not always been easy for me to copy those clearances like a pro, but here are four points that may help.

- 1. A good headset with noise canceling and Bluetooth (I love my Lightspeed Zulu).
- 2. A good communication radio and audio panel.
- 3. A digital cockpit voice recorder (iPad app from Lightspeed).
- 4. A ForeFlight app for your iPad (receive possible routing to fly).

I want to relate one last tip from an incident that happened to me at Chicago's Meigs Field some time ago. In those days, we did not have the quality sound in the radios or headsets that we have today, so that was a small contributing factor to this incident. I had filed an IFR flight plan from Meigs back home. I was not a regular visitor to that airport, and I did not have ForeFlight to give me an idea as to what ATC would give me for a routing. This was also a contributing factor in this incident.

When I called ground for my clearance, I got a controller with an accent that I could not clearly understand and when he gave me my clearance, I was given radar vectors to an intersection after departure. I could not decipher the name of the intersection in his transmission, and I kept asking him three or four times to repeat that name. I could tell he was getting quite upset with me, so I finally read back some word that sounded like what I thought he said. All the while I was looking on the enroute chart for any intersection that even sounded close to what he said. I never found it, hoping that after takeoff, all would go well. Luckily it did, but I was vectored to a different intersection and was given an amended routing clearance. Later I learned a trick that I will pass on to you as my final tip for this article. If you have difficulty with understanding the name of a fix, ask the controller to spell it phonetically. The phonetic alphabet was developed for this purpose, so try it.

I hope you find this article useful, and maybe it will save you a violation or incident because you did not copy a clearance correctly or fly it correctly. With the modern technology we have today, in the future ATC will be able to send you the clearance digitally. You will then check it and send it to your navigator and George (the autopilot) will fly it. We already have digital ATIS (D-ATIS is shown on the approach charts for airports that have it) at some airports, which is usable with some of our equipment, and the airlines are already sending flight plans digitally.

Till the next issue of Midwest Flyer Magazine, FLY SAFE!

EDITOR'S NOTE: Michael J. "Mick" Kaufman is a Certified Instrument Flight Instructor (CFII) and the program manager of flight operations with the "Bonanza/Baron Pilot Training" organization. Kaufman conducts pilot clinics and specialized instruction throughout the U.S. in a variety of aircraft, which are equipped with a variety of avionics, although he is based in Lone Rock (KLNR) and Eagle River (KEGV), Wisconsin. Kaufman was named "FAA's Safety Team Representative of the Year" for Wisconsin in 2008. Email guestions to captmick@me.com or call 817-988-0174.

DISCLAIMER: The information contained in this column is the expressed opinion of the author only, and readers are advised to seek the advice of their personal flight instructor and others, and refer to the Federal Aviation Regulations, FAA Aeronautical Information Manual and other instructional materials before attempting any procedures discussed herein.



The Tailwheels Are Back!

by Harold Green

ay back, a few decades ago, those learning to fly did so almost exclusively in airplanes with the third wheel in the tail (tailwheel or taildragger). There were few airplanes around that had the third wheel in the nose of the plane (tricycle). In the small, single runway airport where I learned to fly, it was a spectator event to have a tricycle gear airplane fly in. As

everyone is aware, as time passed, tricycle gear airplanes became the norm. Now taildraggers, while not as rare as tricycle aircraft were back then, have become more uncommon.

In fact, for a pilot to legally fly tailwheel aircraft today, they need an endorsement in accordance with FAR 61.31(i) from an authorized instructor certifying that the pilot has received training in normal and crosswind landings and takeoffs, wheel landings and



Harold Green

go-arounds. (Not required if tailwheel time was logged prior to April 15,1991. Why the 15th instead of the calendar month, I don't know.) Obviously, tailwheel operations are no longer routine in the eyes of the FAA.

While relegated to the minority of airplanes in recent years, taildraggers have never gone away, being used anywhere people need to land on relatively unimproved terrain, such as bush pilots, crop-dusters, farmers, ranchers, and those who like to fly into small, unimproved airstrips in the mountains and elsewhere. The homebuilt movement has never abandoned tailwheel airplanes, and light sport planes are also heavily into taildraggers for whatever reason. Taildraggers

are generally less expensive and less complicated to build, weigh less and are faster. In addition, there has been a continuous parade of folks who just like traditional or vintage aircraft because in their minds they are more beautiful than tricycle aircraft, or the fact that it takes greater skill to takeoff, land and taxi a taildragger.

Recently, there has been a resurgence in the sale of tailwheel aircraft. To name just a few, the ubiquitous "Super

Cub" has been copied by and updated by Cub Crafters and others. American Champion builds several versions of their aircraft based on the old "Aeronca 7AC" (Airnocker). Aviat builds the "Husky" – a hefty taildragger, and Maule has their own design. Some of these manufacturers have hung in there through some very lean times, but are now enjoying the resurgence in demand for their products.

There is a growing group of people who enjoy landing at remote, outof-the-way airports, and unprepared landing sites (i.e. farm fields and dirt roads). There is an organization, the Recreational Aviation Foundation



1946 Cessna 140



(RAF), devoted to sustaining and expanding airstrips well suited to tailwheel aircraft.

It should not be a surprise that with the recent increase in tailwheel operations, there is an attendant increase in tailwheel accidents. Much of this can apparently be attributed to inexperience.

During 2017, in Wisconsin, out of 26 accidents, eight (8) accidents and two incidents involved tailwheel aircraft. Of the accidents, six (6), or 75%, were ground-loops.

To gain some perspective on these accidents and incidents, let's look at what is different about tailwheel and tricycle gear aircraft. For the sake of those not acquainted with taildragger operations, the key difference in operation is on the ground, not in the air. Once in the air, there is no difference between the aircraft.

A primary difference in handling on landing is the need to keep the center of gravity, best referred to here as the center of inertia, from moving sideways and ahead of the resistance center provided by the main landing gear. The difficulty with this is that once the center of inertia moves sideways and forward, the tire on the outside of the slide tends to skid sideways, increasing the drag, causing the tail to move forward faster, and the tire on the other side tends to move slower as

a result. This means the wheel drag increases faster also as the airplane turns as a result of the nonsymmetrical wheel drag. The net result is positive feedback resulting in the infamous ground loop. In short, the airplane tries to swap ends. If done at a high enough speed, this can cause significant damage to the airplane resulting in injury to the pilot's ego and perhaps to his/her physical self and that of his passengers.

Each airplane model has a slightly different proclivity to ground loops, but all taildraggers obey the laws of physics and therefore are prone to ground loops. This situation is exacerbated by crosswinds because the plane tends to weather vane once the wheels are on the ground. In fact, some airplanes, including the Cessna 195, were offered with optional crosswind landing gear in which the main gear swiveled to reduce the tendency to produce side resistance. You then traveled down the runway with the nose pointing more or less into the wind. However, it is all manageable if done properly. NOTE: Tricycle gear aircraft can also ground loop, but it takes a lot to accomplish this. If you had a tricycle as a child, you know how this can happen.

Since the issue is landing, we will discuss the two types of landings in a tailwheel aircraft. The three-point, or full stall landing, and the wheel landing.



The common landing is a "three-point landing" or landing on all three wheels at the same time, which happens with a full stall, or very close to a full stall at touchdown. This means that the elevator must be held full up at touchdown to keep the tail down and the angle of attack above the critical angle until the plane slows down. Otherwise the angle of attack can decrease if the pilot relaxes on the elevator control, or due to a gust of wind, causing the plane to balloon upward as it comes un-stalled.

A gust can happen anytime, and if during initial rollout the gust is strong enough, the plane can become airborne again anyway. The pilot needs to be prepared for this event. If this happens and the pilot does not execute an immediate go-around, the result can be to turn the plane into a very expensive pogo stick, with the possibility of a prop strike or even going upside down on the runway.

The second type of tailwheel landing is called a "wheel landing" or landing on the main wheels first, then as the plane slows, the pilot lowers the tailwheel. This is accomplished by keeping the speed slightly above the stall speed, perhaps carrying a slight amount of power, and flying gradually onto the runway, and when the main wheels contact the runway, briskly applying forward elevator to keep the plane glued to the runway. Any power carried can be removed at this point if desired. The tail is held up using the elevator and the airflow over the wings will keep the plane glued onto the runway until the pilot decides it is appropriate to lower it or the speed of the plane will not permit the tail to be kept up. The wheel landing is an effective way to land in a crosswind since it provides more effective control until the plane slows down. **NOTE:** This technique requires finesse, and therefore greater pilot skill.

Obviously, while not requiring to be "super pilot," tailwheel airplanes do require more than average attention on landing, so maintaining pilot proficiency is important. The recent accident profile of taildraggers reported earlier indicates additional instruction and review might be needed to reduce the accident/incident rate. To this end, the Wisconsin FAA Flight Standards District Office (FSDO) is encouraging both

AOPA and EAA to offer training seminars in those areas of Wisconsin with the greatest population of tailwheel aircraft, directed at addressing these vulnerable aspects of tailwheel operations. The plan is to offer a free two-hour morning workshop discussing preflight operations of taildraggers, followed by optional flight instruction in the afternoon by experienced tailwheel instructors in either the attendee's aircraft or the instructor's.

Presently, the plan is to offer these sessions at Hartford, Palmyra, Brodhead, Cumberland, Three Lakes and Pulaski, Wisconsin. Watch the FAASTeam site and other publications for the final locations and schedule for these events. The hope is that there will be a reduction in tailwheel accidents. If so, the seminars will most likely be continued. While session locations are limited to Wisconsin communities, attendees are not limited to Wisconsin residents. So, if you live in the neighboring states of Minnesota, Iowa, Michigan, Indiana or Illinois, you are welcomed to attend. Best to check with your local FSDO to determine if programs will be offered in your area.

Recreational aviation still constitutes a significant portion of personal flying. Not all of us fly for business or for a living, and many of us just want to occasionally go for that expensive hamburger or land at a friend's private airport or hayfield. That can be a fun, safe and enjoyable form of flying we can encourage and enhance with additional training.

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

DISCLAIMER: The information contained in this column is the expressed opinion of the author only, and readers are advised to seek the advice of their personal flight instructor and others, and refer to the Federal Aviation Regulations, FAA Aeronautical Information Manual and other instructional materials before attempting any procedures discussed herein.



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Ask Pete!

by Pete Schoeninger

Q: With spring just around the corner, are there any hazards especially associated with spring that I should be reminded of?

A: Yes, birds and bees and crosswinds. Birds will be building nests to start new families with the arrival of warm weather, and sometimes they will build a nest in the engine compartment, or the tail of an airplane. Bird nests can completely block airflow to one or more cylinders, thereby damaging the engine or causing a



Pete Schoeninger

fire hazard. Nests can also jam control cables in the tail of an air-craft. It is easy for a bird to get into the engine thru cowl openings, and thru the tail openings where the horizontal tail joins the fuselage. Look closely for nests with each preflight inspection you do because birds can build a nest in a day or less. Bird droppings on your propeller or tail area are signs that there may be a new resident in your airplane.

Bees (and other insects) can plug up your pitot system or fuel vents. A plugged pitot static system means no usable airspeed, altitude or rate of climb information. A plugged fuel vent often results in a forced landing due to fuel starvation.

Your mechanic can show you what to look for on pitot and fuel vents, as they vary from model to model.

Spring also brings unstable air and strong gusty winds. Now would be a good time to practice crosswind techniques if you can find a good flight instructor and a good crosswind. The com-bination of rusty pilots (from little flying during winter) and strong spring winds have pushed lots of airplanes off runways resulting in embarrassing and expensive repairs.

Q: I noticed that the Piper Comanche was available with 180, 250/260, and 400 hp engines. How did Piper manage their empty center of gravity with such varied weights in the nose?

A: If you look at a Comanche 180 (4 cylinders) with the cowl off, you will see that the en-gine mount moves the engine far ahead of the firewall. The 250/260 hp (6 cylinders) model has a shorter engine mount, so the furthest aft two cylinders are closer to the firewall, so the CG change due to the additional two cylinders is not huge. The 400 hp (8 cylinders) is in many ways a differ-ent airplane. Among other things, Piper put a larger, heavier tail on it. Only about 150 400 hp air-planes were built. I did fly one a couple of times; it had lots of power as expected, but a massive fuel burn. Kind of like the old Pontiac I once owned. It could pass everything on the road except a gas station!



Aviation planning guru, Stephanie Ward began logging flight hours at the tender age of 16. Her lifelong passion for aviation is now focused on how to ignite that same spark in the next generation of aviation enthusiasts and the future industry workforce. Give Steph a call to share your ideas on how to tackle this critical industry challenge.

517-908-3121 stephanie.ward@meadhunt.com



There are many things aeronautical engineers do to compensate for changing empty center of gravity from engine changes. One of many is that the airplane battery can be positioned in vari-ous places, such as in the rear of the fuselage, or on the firewall, or beneath rear seats as needed for a desired empty C.G. location. And the most famous C.G. solution of all was when the Piper J-3 Cub (two tandem seats) was found to have a very forward C.G. location when flown solo, so the instrument panel was placarded "Solo flight from rear seat only!" Not high tech, but it has worked well for 70-plus years on Cubs.

Q: I have a 1966 Cessna 172 and would like to do some off-airport landings with it, and to that end I am thinking about installing larger tires. Is that possible? Does it make sense?

A: Possible, yes. Does it make sense? I wouldn't, but you judge, because it will be expen-sive, increase your empty weight, and add more drag, reducing cruising speed. You will have to install a new larger nose fork, and then three bigger wheels and tires, probably new brakes, and this assumes your mechanic can find an available STC to allow these changes. Figure probably at sev-eral thousand dollars to do it. For the cost and benefits received, I suggest you only consider it if you plan on keeping the airplane for a long time. Your mechanic can give you more specifics. An-other solution for off-airport work might be a tailwheel airplane like a Cessna 170 or 180, Maule, Super Cub or Citabria.

Q: A friend of mine had an alternator conk out on his Cessna 172 in flight. He told me as a precaution he turned his master switch off, and landed 20 minutes later without incident. Wouldn't the engine quit when he turned off the master switch because of no electric power to the spark plugs?

A: No. Spark for most airplane engine spark plugs comes from magnetos that are driven by the engine turning, not a battery. A very old system, but it allows the engine to be run with no elec-tric system (think old Cubs, Taylorcrafts, etc.). Depending on the year of your friend's 172, he may have had a split master switch. That is, the switch is really two switches

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 one for the alternator and one for the battery. This allows you to take the alternator off line if needed, but still allows use of the battery for radio calls, lowering flaps (in newer ones), etc.

Q: All of the Cessna 172s I have seen have an oil cooler. My friend has a very early 172; I think about 1960. He says he has NO oil cooler. Is this possible?

A: Yes, 1956 to 1967 Cessna 172s had the Continental O-300 engine rated at 145 hp. Like smaller Continentals, it did NOT have an oil cooler. In 1968, Cessna began installing the Lycoming O-320 150 hp engine, which had an oil cooler. I felt that engine change was an improvement, as the O-320 had more power with less weight, and in my experience, was reliable and long lived.

Q: What is the most affordable metal airplane to own and maintain that's roughly 50 years old or less?

A: By most economical to own, I presume you mean buy? It would be a tossup between a Cherokee 140 and a Cessna 150/152 made in the mid to late 1970s. (The last Cherokee 140 was made in 1977.) Expect to pay around \$25 -\$35K for a nice version of either. They are humble mounts, but as airplanes go, tough, durable, and easy to fly.

In my opinion, the overall best buy available right now would be the four-seat Piper Warri-or made in the 1970s. On the used market the Piper Warrior is roughly \$10K less than a similar Cessna 172. Expect to pay \$35K or so for a nice 1975 Warrior, and \$45K for a nice 1975 Cessna 172. Their performance, reliability, etc., are just about the same. Please don't forget my standing lecture: Be SURE to have an airplane mechanic check over any airplane before you buy it. Also, have a title search done to your satisfaction. I can tell you dozens of horror stories about owners who did not take these precautions.

Q: I have inherited a stash of airplane parts from my recently deceased father. He had com-pletely disassembled an old Aeronca Chief, and bought some replacement parts, and he has a nice binder of receipts for everything. I am wondering if I should hire someone to complete the project, or sell it as is, and if so, what I might expect to get for the completely disassembled hangar full of stuff?

A: Your path of least resistance and my suggestion, would be to sell what you have. Do NOT expect to get anywhere near what your dad paid for the sum of the parts. The only exception to this would be if there is an engine with a very recent overhaul, that may be worth as much or more than your dad paid for it. If you have to pay someone shop rate of say \$50 - \$90 per hour to put everything back together, and cover and paint it, you will be buried in it and lose a lot of money when you sell it.

Time to Fly

by Mark Baker AOPA President & CEO

through the cold months and we're finally back to my favorite time of year: fly-in season. The weather



is (usually) great and nothing beats the camaraderie shared among pilots when we gather to enjoy our favorite pastime. And after years of flying, I've come to learn that - ironically - half the fun is on the ground.

While I'm somewhat biased, you can't go wrong attending an AOPA Fly-In. After having attended all 20 of ours, I always look forward to the next one. Each one is designed to help make flying more fun, affordable, and safe.

We created these regional fly-ins to replace the annual three-day national AOPA Summit. The idea is that we come closer to members, rather than expecting members to come to one of the coasts each year, which can be much more expensive for attendees.

This year, we start out in Missoula, Montana, June 15 and 16, where you'll have several opportunities to experience my favorite type of flying in the backcountry of Montana. I'm planning to participate in one of the fly-outs at Seeley Lake Airstrip, where pilots will be treated to a delicious potato bake hosted by the Recreational Aviation Foundation.

There will also be other opportunities to see Montana in all its glory with a chance to fly over a section of the Bob Marshall Wilderness Area and the 1,000-foot-high Chinese Wall that stretches for 22 scenic miles.

After Missoula, we head to the oldest state capital city in the United States -Santa Fe, New Mexico, September 14

and 15, which is sure to be rich with history and culture. Then if you plan to meet us in Carbondale, Illinois, October 5 and 6, I recommend the award-winning 17th Street BBQ in nearby Murphysboro - and make sure to try the ribs.

You'll need to pack the sunscreen if you're going to our final fly-in of the season in the southern town of Gulf Shores, Alabama, October 26 and 27, known for its white



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What a positive impact we can make on the industry when we come together, and that's one of the reasons the Pilot Town Halls we host at every AOPA Fly-In, along with Sun 'n Fun International Fly-In and EAA AirVenture, are so important to me. Each one gives us a chance to share what AOPA is focused on, what we've accomplished, and what we're looking forward to next. It's also a great time for us to hear what matters most to you and what AOPA can do to improve your flying experience.

Attending fly-ins is not a requirement for being a pilot, but participating in these timeless traditions is something every pilot should experience at least once in their lifetime. And if you have one you'd like to share with fellow AOPA members or find out more about one you'd like to attend, you can read and post about it all on the AOPA Hangar (https://hangar.aopa.org).

I look forward to seeing you this fly-in season and hope you have a chance to enjoy it as much as I will.



AOPA Initiatives In Michigan, South Dakota, Ohio, Indiana, Minnesota & Washington, DC

by Kyle Lewis

Regional Manager / Government Affairs & Airport Advocacy / Great Lakes
Aircraft Owners & Pilots Association

good pilot is always learning.
To that point, a highlight of the
winter months was the Michigan
Aviation Safety Forum (MASF) held at
Eastern Michigan University in Ypsilanti.
Organizer Jerry Delaney, along with
members of the FAA's FAAST Team,
did an excellent job of bringing pilots
and mechanics together for a full day of
seminars. AOPA's Andy Miller presented



Kyle Lewis

two topics: "Fly by Night" and "Accident Case Studies at Non-Towered Airports."

Andy Miller is AOPA's Great Lakes Region Ambassador for the "You Can Fly Program." He consults with groups on starting and operating flying clubs, presents "Rusty Pilot" seminars across the region, and provides AOPA visibility at fly-ins and airshows with AOPA's Re-Imagined Cessna 152 "Yellowbird." If you get an opportunity to attend a seminar presented by Andy, I encourage you to do so. He is passionate about bringing lapsed pilots back into the air, and making sure they have the resources and knowledge to operate safely.

Throughout the day I had very positive conversations with pilots, and am currently working on some new airport issues that would have otherwise gone unknown to AOPA. Planning for MASF 2019 has started, and Andy Miller and I have both committed to attending and presenting for next year.

As I write this column, February is half over and planning is underway for "Powder River Council 2." The meeting will be held April 5th at Ellsworth AFB, South Dakota. Stakeholders and state aviation officials from a four-state area, along with FAA, the National Business Aviation Association (NBAA), U.S. Air Force

(USAF), and AOPA will be on hand to discuss remedies for communication and radar services throughout the large Powder River Special Use Airspace (SUA). AOPA's goal is to create an open dialogue between the USAF and the civilian stakeholders using the airspace.

AOPA and NBAA created a short survey that has provided valuable input from members, and that information will be used when I visit congressional delegations from the four affected states in Washington, DC, prior to the April meeting. The purpose for the DC visit will be to educate legislators on the need for investment in upgraded communication and radar facilities, along with ADS-B equipage for military aircraft. AOPA's Airspace Regulatory Director Rune Duke, and AOPA Legislative Manager Katie McMichael, will join me in this effort.

Regional Legislative Updates

Michigan House Bills 4350/4351 (maintenance tax exemptions on parts and labor for aircraft registered in Michigan) have passed the House, and are awaiting a full floor vote in the Senate. The outlook in the Senate vote is very positive.

The Michigan Business Aviation Association (MBAA) and AOPA have been compiling data and statistics to hand over to the Governor's Office that will aid in thwarting off any chance of a veto. Gov. Snyder's office has raised questions as to the loss in tax revenue if the exemption is put into effect vs. the loss in jobs and/or business.

As AOPA and MBAA have projected, the loss in jobs and downturn in operations for Part 91/135 show that Michigan is losing business to other states because of the lack of an exemption on parts and labor. Researching the topic, it was discovered that certain operations in Michigan are down as much as 30% compared to surrounding states.

Michigan Senate Bills 626/627 (Floatplane Protections) are still in committee. I wish I could have more to say about the

outlook right now, but there has been little movement in the Transportation Committee to hold a vote. I am staying in contact with Sen. Marleau's office to offer support or resources to move the legislation forward.

Ohio House Bill 370 (State Seal Modification) passed the Ohio House on February 14th and will move on to the Senate. This bill would modify the official state seal and add a depiction of the Wright Flyer. Obviously, this is long overdue as Ohio is home of the Wright Brothers, and nearly all their early test flights (aside from December 17, 1903) were made at Huffman Prairie, just outside of Dayton. Plans are in the works for a "State Aviation Legislative Day" at the State Capitol in Columbus. A date in September is tentative, and more information will be forthcoming.

Indiana Senate Bill 66 (Tall Structure Permitting Near Public Use Airports) has been introduced in the Indiana Senate. The bill provides for a permitting process for structures to be built within 2 miles of a public-use airport. AOPA has raised questions if the process will conform to current Indiana Code and FAA Part 77 compliance. The bill lacks any information regarding the FAA 7460 processes already in place. It seems the bill is getting very little traction, and will most likely not be taken up under the current session which ended March 21, 2018.

Other Regional News of Note: I am planning an Airport Support Network Gathering in South Dakota, just before the South Dakota Aviation Conference, April 11-12, 2018. AOPA will host our volunteers and present an update to the program, and recruit new volunteers for the region. I will also be spending some time in South Dakota between Powder River and the aviation conference, making airport visits.

I am currently working with our airports staff on multiple airport issues across the region. Topics ranging from onerous hangar leases, land use issues, on-airport developments that could negatively impact GA, wind energy projects impacting airports, and noise and safety concerns from residential developments around airports.

Planning is underway for the Great Minnesota Aviation Gathering (GMAG) held at Anoka County-Blaine Airport (KANE) in April. Again, Andy Miller and I will both be on hand representing AOPA at the event. The Minnesota Seaplane Pilots Association Safety Seminar is also on my calendar in May, expecting another great event connecting with our membership.

Ken Mead, AOPA's Chief Legal Counsel, will take part in a panel discussion on FBO pricing at the Ohio Aviation Association (OAA) Conference in April. If you are an OAA member and will be attending the conference, make it a point to attend this discussion.

As always, please feel free to contact me with questions or concerns. I am here to serve you: kyle.lewis@aopa.org



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New Senior Vice President of Product Development At Cirrus

DULUTH, MINN. & KNOXVILLE, TENN. - As Cirrus Aircraft continues to innovate and lead general aviation with the best-selling SR series aircraft and the Vision® Jet, the world's first single-engine Personal Jet, the company has added industry veteran, Ken Harness, to its management team as Senior Vice President of Product Development.

Harness joins Cirrus Aircraft with more than 28 years of leadership experience in the aviation and aerospace industries. Most recently, he served as Vice President of Product Development and Engineering at Highland Group, an aerospace consulting firm. Prior to that, Harness led commercial helicopter production as Chief Operating Officer at Sikorsky Global Helicopters. He also served as Chief Operating Officer at Diamond Aircraft and Vice President of Engineering at Eclipse Aviation, where he helped lead the development and certification of the Eclipse 500 Very Light Jet. Harness is a co-inventor on three patents as a result of

his leadership at Eclipse on the world's first FAA certified halon replacement fire suppression system. Beyond his most recent experience, Harness held leadership roles with Sikorsky Aircraft, Pratt and Whitney, and Williams International.

Harness holds a Master's of Business Administration from Oakland University, and a Bachelor's of Science in Aviation Technology from Purdue University. He also served six years in the United States Army as a helicopter test pilot. As an aviation enthusiast, Harness holds a commercial pilot certificate for both helicopters and multi-engine airplanes, and is an aircraft technician.

As the Senior Vice President of Product Development at Cirrus Aircraft, Ken Harness will lead all aspects of Product Development and Engineering, including design, manufacturing and process engineering, as well as the experimental build and flight test teams.

Letters

Hi Dave & Peggy:

I was Googling flying articles and found out about *Midwest Flyer Magazine*, and it had an article from a pilot I met a few times at some AOPA events in Iowa. I first met Yasmina Platt (formerly manager of AOPA's Central Southwest Region) in April 2012, and later in September at an event in Atlantic, Iowa.

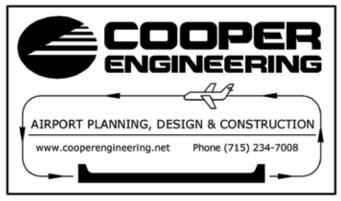
If you hear from Yasmina, please tell her I said "Hello."
I finished my 9th grade at Chippewa Falls (Wisconsin)
High School in 1972, and attended 10th grade, and part of
my 11th grade, in Racine and Kenosha, Wisconsin.

Cheers!

Robert (Bob) Ross Rees, Jr. Author/Inventor Des Moines, Iowa



EDITOR'S NOTE: Yasmina Platt has been with the international airport planning and development consulting firm AECOM since 2016. She also writes an aviation travel blog called "Air Trails" (www.airtrails.weebly.com), and articles on "Pilot Destinations" for *Midwest Flyer Magazine*. Pilots can read articles Yasmina Platt has written by going to www. MidwestFlyer.com and typing in her name in the search box. □







Racing around the pylons at the National Championship Air Races, Reno, Nevada. Dan Whitney Photo

RENO, NEV. - The Reno Air Racing Association (RARA) has announced its initial lineup of airshow performers for the 2018 National Championship Air Races to be held September 12-16, 2018 at Reno-Stead Airport.

The Patriots Jet Team will headline this year's performers featuring former members of the U.S. Air Force Thunderbirds and U.S. Navy Blue Angels. The team currently operates as a six-ship team, flying the Czech-built Aero L-39 Albatros.

Also performing will be The Screamin' Sasquatch Jet Waco from John Klatt Air Shows, and the jetpowered truck, "Smoke 'n Thunder." Military demonstrations will feature the U.S. Air Force General Dynamics F-16 Fighting Falcon, and a Lockheed Martin F-35 Lightning II.

Tickets are now on sale! For more information or to volunteer, visit www. airrace.org.



Midwest Seaplane Pilot

Where Does One Go On Floats In The Wintertime!

by Al Lindquist

he question is, what do you do with a Cessna 172XP on Wipline amphibious floats in the winter in the state of Minnesota? Well, you could pickle it. You can put a special oil additive in the engine and make certain rust doesn't form, and then sit by and wait for spring to arrive. Or you can wait for a 20degree day, shovel out the taxiway in front of

the hangar, plug in the Tanis engine preheater for a few hours and locate a pleasant destination. We used to take the floats off, and reattach the wheel landing gear, but financially it's cheaper to leave the amphibs on and use the money we save to buy gas.

Last winter, we flew to Granite Falls, Minnesota to tour "Fagen Fighters World War II Museum." They've built two





Al Lindquist with his wife, Barb Wiley, at Minneapolis Crystal Airport, ready to go flying in their Cessna 172XP amphibious floatplane in the middle of winter.

new buildings that resemble World War II vintage hangars, a Quonset hut briefing building, a control tower and a museum that houses a railroad car shipped in from Germany that transported people to the concentration camp where they were killed in gas chambers. A couple of years ago the museum purchased a World War II Sherman tank from someone in South Carolina, had it shipped

by rail to the Granite Falls depot, then had it driven to the airport on the paved road. The person who was collecting the donations that day said that the top speed on the tank was 18 mph, and it rides very rough.

All aircraft at the museum, except for the glider, are fully operational. There are two P51D Mustangs, a P38 Lightning, a P40 Tiger and an FM2 Wildcat, to name a few aircraft on display. The museum's mission statement is: "To Preserve History, Promote Patriotism and Inspire the Future." The museum is well worth your flight there, but checkout their hours of operation before you go (http://www.fagenfighterswwiimuseum.org).

Another place we occasionally fly our floatplane to in the winter is Red Wing, Minnesota. The airport is actually located on the Wisconsin side of the Mississippi River and there's a courtesy car to drive into town. We like to dine at the St. James Hotel, which is an antique hotel well known for its fine food. The town is a unique place filled with interesting shops and restaurants.

We have also flown our floatplane to Siren, Wisconsin in the winter, and used their courtesy car to enjoy our \$150.00 hamburgers at the local restaurant. Fortunately, the courtesy car was free!

A week ago, we flew to Grand Rapids, Minnesota, right above a plowed runway on a lake near McGregor, which was hosting a winter fly in. We counted about 40 aircraft parked on the ice. The temperature was about 35 degrees and all the pilots were in a hangar near the lake enjoying brats and a beverage.

A couple of weeks before Christmas, we flew from Minneapolis Crystal Airport where we are based, to Duluth, Minnesota to meet some friends. There is so much to do in Duluth we had to spend the night. There is the Depot, the Anchor Restaurant, the Richard I. Bong Veterans Historical Center in Superior, Wisconsin, the lift bridge, the fall bird migration, Grandma's Marathon, and on and on goes the list. The next day we awoke to 40-knot winds. We had tied down the airplane the day before so the line personnel secured the tug to the airplane before we released the tie-downs.

The line guys said it was about to get a little noisy with the F-16s taking off on their training mission. A little noisy? Are you kidding? You get a double blast – one when they start their departure roll, and a second when the blast bounces off the terminal building.

After we took our hands off of our ears, we dragged the airplane up next to the terminal building where we could plug it into the electric outlet. After a couple of hours, it didn't seem to warm up at all. The 40-knot wind was blowing directly into the openings in the cowling behind the prop. We borrowed some foam packing material and stuffed it into the openings and finally we were able to warm the engine to startup temperature. We then disconnected the tug and I fired up the 172.

As we began to taxi, we turned to the right on the ramp and the wind was so strong, we started to slide sideways across the icy surface. We were finally able to taxi all the way to the runway, made a departure into the strong southerly wind, and slowly flew back to Crystal. Another exciting day of winter flying!

There are always interesting people to talk with and many activities taking place at all the little airports around the state, winter or summer. The floatplane does draw some unusual looks in the winter from people on the airports we visit. They can't seem to understand floatplane flying during the winter months, but we try to explain, why not?

There is an interesting thing that occurs when you fly on a 20-degree day and have a fun time... You stay current and enjoy the trip, then wait for another pleasant day to fly once again. Before long, winter is over and it's time to begin landing on the lakes of Minnesota and Wisconsin all over again, and enjoy the beautiful summer weather. Life is good!

EDITOR'S NOTE: Al Lindquist is a retired air traffic controller from the Twin Cities. He is married to retired Delta captain, Barb Wiley.



The Mississippi River Seaplane Tour

by Woody Minar

ve flown along the Mississippi River between Surfside Seaplane Base (8Y4), east of Anoka County-Blaine Airport in Lino Lakes, Minnesota, to Le Claire, Iowa, some 17 times! And each time it has been a very enjoyable trip. Why? Imagine flying BELOW the scenic river bluffs looking down at the locks of the Mississippi, barges passing through them, fishing boats, sun bathers on many of the islands, and trains hauling cargo. You can



Woody Minar

follow the train tracks along the river as they pass through small river towns. On one trip, we were flying level with the tops of the river bluffs. Near La Crosse, Wisconsin, there's a picnic area on top of a limestone bluff. As we approached this picnic area, we were literally eye level with the picnickers — we waived at each person with big smiles. Imagine their surprise to have a seaplane fly by. The fall is a great time to see the colors of the leaves against the backdrop of the bluffs.

Twelves miles southeast of Red Wing, Minnesota, there's a small town called Lake City, Minn. on Lake Pepin. Just north of the marina is a nice shoreline where we beach the planes and tie their tails to the nearby trees. A short walk into town past the boats at the marina, many of which are large sailboats, takes you downtown and to several restaurants.

About five miles southeast and across the river in Pepin, Wisconsin, is the Pepin Pickle Factory Waterfront Grill. There's





An "Adventure Seaplanes" Cessna 172 at the city dock in Le Claire, Iowa. Woody Minar Photo



Seaplanes beached on shore in Lake City, Minnesota.

Woody Minar Photo

a marina next to it and a shore in front where you can beach a seaplane. In the early 1900s, this historic building was a factory where pickles and sauerkraut were made. You can eat inside or at a picnic table outside along the shore. A hotel is just a block away if you decide to spend the night. For more information, visit www.pepinwisconsin.com and www.pepinpicklefactory.com

Further south is Le Claire, Iowa, just northeast of Moline, Illinois. This is a unique river town that is home for the hit television program and antique shop, "American Pickers," where you can browse and shop for hours. You can tie down at the city dock that is seaplane friendly and where the town center, lodging, restaurants, and tourist sites are just a few short blocks away. If you have amphibs, you can always tie down in Clinton, Iowa (KCWI), take the courtesy car, and drive south about 15 minutes to Le Claire. The Buffalo Bill Cody Museum is very near the dock and is attached to a River Boat Museum where you can explore an antique river boat. If you want to tour the Mississippi, hop onboard a 126-foot, 100-year-old river boat



The Pickle Factory in Pepin, Wisconsin with the Mississippi River bluffs in the background. Pickle Factory Photo

replica for a 1.5-hour, one-day, or two-day cruise. You can also take a tour of the Mississippi River Distilling Company, which distills many different spirits using locally grown crops. Finally, it's tough to decide which restaurant to partake - they're all good! For information on Le Claire, go to www.visitleclaire.com. For assistance with fuel and floatplane information in Le Claire, contact George Millar at 563-343-1340.

EDITOR'S NOTE: Woody Minar is a Designated Pilot Examiner, Master CFI, CFII, MEI, CFI-G, the FAA Safety Team Lead Representative, 2012 FAA Great Lakes Region CFI of the Year, and 2013 FAA Great Lakes Region Safety Team Representative of the Year, based at Osceola, Wisconsin (KOEO).

Air Force One – The Book

or the last 60 years, Air Force One has served every president and first lady through tragedies and triumphs. In aviation expert Nicholas A. Veronico's book, "Air Force One," he looks at all of the early aircraft used by the U.S. presidents, ending with Air Force One, bringing the story of the mighty aircraft up to date; detailing how the plane has adapted to the digital age; and what to look forward to as Boeing updates the aircraft once more for 2024.

The presidential plane wasn't always known as Air Force One. FDR traveled in the "Guess Where II," a transport version of the four-engine Liberator. Later presidential aircraft included the Dixie Clipper and Sacred Cow (FDR), Independence (Truman), and Columbine I and II (Eisenhower), followed by Air Force One.

Air Force One: \$35.00 U.S., 160 pages, hardcover. ISBN: 9780760357996.



Oh, The Places You'll Go... In A Seaplane!

by Chris Hinote

ho hasn't been enamored with the romance of seaplanes, or imagined splashing down on a remote mountain lake, far away from the hustle and bustle of everyday life, or perhaps whisking oneself away to warm, tropical islands? In a time when air travel is a necessity, seaplanes still evoke the romance of the golden age of aviation. Most of us have had these thoughts, but due to cost, accessibility, or practicality, they tend to remain fantasy. Well, seaplanes are a lot more practical, and accessible, than you may think, and offer so much more than the \$100 hamburger.

When talking seaplanes with a prospective water flyer, many questions come up, but a few are inevitable. For

Minnesota Seaplane Pilots Association



Brad Thornberg Photo

The purpose of the Minnesota Seaplane Pilots Association is to promote seaplane flying and safety programs pertaining to seaplane operations throughout the state of Minnesota...to promote a forum for the purpose of approaching governmental agencies and to educate said agencies, the legislature and the public in understanding seaplane operations... and to create safe and compatible seaplane base facilities in Minnesota.

The organization hosts two large fly-ins each year:

MSPA Spring Safety Seminar Madden's Resort, Brainerd, Minnesota May 18-20, 2018

and the MSPA Surfside Pig Roast Surfside Seaplane Base, Lino Lakes, Minn., August 19, 2018

For additional information, contact Steve Guetter, president at 952-484-9457 or email Steve@penguinflight.net www.mnseaplanes.com/contact.php example, where can you go in a seaplane? How do you know if you can land somewhere? As one of my college professors, Dr. Horine, used to say, "it depends!"

In a very broad sense, seaplanes may land on any open navigable waterway, or private body of water with the water owner's permission. Some publicly-owned waters are open, some are closed, and others have various restrictions. The Seaplane Pilots Association maintains a nationwide "Water Landing Directory" to help pilots determine the status of a particular body of water. However, the best way to be assured of the status of a proposed landing area is to call ahead and verify with whomever controls or owns the water.

In the St Louis area where I live, we have access to the Missouri, Mississippi, and Illinois Rivers, in addition to Carlyle and Mark Twain lakes. A little farther afield in Missouri, we have the Lake of the Ozarks, Stockton Lake, Table Rock Lake, and Bull Shoals Lake, each offering something different.

The rivers bring a challenge to the seaplane pilot. They are muddy and carry debris downriver, which can be hazardous and challenging to the seaplane pilot. But they offer some fun



Amanda Hinote relaxes on the beach at Stockton Lake in Missouri, while Chris Hinote brings in their 1979 Cessna A185F. Stockton Lake is located in southeastern Cedar County, northeastern Dade County, and southwestern Polk County, Missouri.



Flying over Carlyle Lake in Illinois. Carlyle Lake is a 26,000-acre reservoir largely located in Clinton County, Illinois, with smaller portions of the lake within Bond and Fayette counties.

spots to pull onto a sandbar for a picnic or fishing. There are numerous boat ramps, beaches, docks, and marinas along the river, and each river town usually has one waterside restaurant worth checking out.

One of my favorite places to splash down is Carlyle Lake, east of St Louis. Carlyle is an Army Corps of Engineers Lake open to seaplane traffic with restrictions. Those restrictions



Chris Hinote with his son, Wake, with their 1979 Cessna A185F Carlyle Lake in Illinois. The aircraft is equipped with a Continental IO-520D, WingX wing extensions, and Wipline 4000 amphibious floats.

are for seaplanes to stay 500 feet away from the dam on the south end of the lake, and to stay south of the railroad causeway at the north end of the lake.

Carlyle offers camping, hiking, and boating. It is popular with St Louis area sailors, and can get pretty breezy. There is a great restaurant on the southeast side of the lake called "The Fish House." They have a semi-private cove with a beach and



dock for their patrons.

Mark Twain Lake, northwest of St Louis, is another Corps lake open to seaplanes. Like most of the Corps lakes, private docks are prohibited or severely restricted, keeping lake traffic down. Mark Twain Lake is relatively quiet compared to other Missouri lakes. It offers two marinas and a lot of shoreline suitable for beaching. Mark Twain Lake is known for fishing, so bring your fishing tackle if you go there.

The Ozark area of southern Missouri and northern Arkansas offers some of the best flying anywhere! There are several large lakes and backcountry strips to choose from. Among them, the famed Lake of the Ozarks, which has a lot to offer the pilot flying in: restaurants, night life, fishing, boating – you name it. The lake is big, and there are a lot of options with regard to things to see and do. Just exercise caution over the summer and holiday weekends, as the lake traffic gets pretty heavy, and the water is often too rough for seaplanes.

Stockton Lake, in southwest Missouri, is a beautiful lake with a rock bottom and relatively clear water. The lake has two large arms with numerous coves. Stockton State Park Marina, near the center of the two arms, caters to seaplanes with multiple docks, moorings, and boat ramps available. The marina also has a small store and restaurant. This is a great lake for family fun offering swimming, sailing, fishing, camping, and more. If you don't want to lug your camping gear along, the Stockton State Park Marina also runs a modestly priced hotel. Just stay 500 feet from the dam at the north end of the lake, and stay north of the causeways on the south end of both arms.

The Branson area's Table Rock Lake is seaplane friendly with numerous marinas, beaches, and resorts. Lake Taneycomo connects Table Rock and Bull Shoals Lakes. Bull Shoals, arguably one of the prettiest lakes in the Ozarks, spans the Missouri-Arkansas border. It offers numerous marinas, campgrounds, resorts, restaurants, and activities. You can even swim and go scuba diving in Bull Shoals Lake. The Bull Shoals Lake Boat Dock Marina has moorings and dockage available. They will gladly give you a ride to Gaston's White River Resort, a well-known spot for trout fishing just downstream from the dam. There is a grass runway at Gaston's worth noting for the pilots with wheels. Gaston's is in a valley surrounded by hills.

There are numerous other lakes that are open to seaplanes, which are waiting to be explored in the Midwest. For more information, check out the interactive map at https://flyingfishseaplanes.com/no-limits-flying-club under the "make a splash here" button. If you are a seaplane pilot and want to see your home waters listed on the map, contact us at Flying Fish with the details.

Another good question we hear a lot is "How do I get into seaplane flying?" For a long time, the status quo for the majority of pilots not living in Alaska, Minnesota or Florida, was to go get a seaplane rating for fun, most likely to never fly a seaplane again, unless they bought a plane of their own. Flying Fish is on a mission to change that.

We have developed a program to allow someone with no seaplane experience to safely solo our seaplanes. We call this program the "No Limits Flying Club." To find out how you can slip the surly bonds and splash down on a lake or river near you, checkout the club on our website at https://flyingfishseaplanes.com, or call 340-514-1680! Follow us on Facebook @flyingfishseaplanes1.

EDITOR'S NOTE: Chris Hinote is the owner of Flying Fish LLC, located at St. Charles County Airport in Portage Des Sioux near St. Charles, Missouri.

No Limits Seaplane Flying Club Starts Up In Missouri

his spring, "Flying Fish" at St. Charles County Smart Field (KSET) in Portage Des Sioux, Missouri near St. Charles, is making seaplane flying more affordable and accessible with its new Progressive Aerodyne Searey amphibious aircraft, and "No Limits Flying Club." Since the aircraft is amphibious, club members can land on numerous lakes and rivers in the St. Louis area in addition to airports.

The non-equity club allows everyone, from Light Sport Pilots to Airline Transport Pilots, to solo a saeaplane. The Progressive Aerodyne Searey is a special light sport aircraft (SLSA) and has been in production for 25 years, starting as



Progressive Aerodyne Searey amphibious aircraft.

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a homebuilt, and receiving certification as an SLSA in 2012. The Searey is manufactured in the United States and has an excellent safety record, especially compared to other aircraft in its class, according to club officials.

No seaplane rating? No problem! The flying club checkout includes tailwheel and light sport aircraft single-engine sea (LSA SES) endorsements. Check-rides for an SES add-on rating are also available, but not required.

If you've always wanted to get a seaplane rating, or you have one and long to use it, No Limits Flying Club may be the answer.

What is Flying Fish's goal? According to owner Chris Hinote, it is "to help more pilots safely get out on the water

and enjoy all that seaplane flying has to offer."

Membership in the club comes with some other great perks as well. Flying Fish has an online store to provide all the essential gear an active seaplane pilot may need. Club members will have exclusive access to early releases of new products, discounted event tickets, and specials on merchandise throughout the year.

Membership dues are \$150 per month, and the Searey is \$125 per hour wet. Once a pilot completes the checkout, they will be insured to solo club aircraft!

To find out more, visit their website https://flyingfishseaplanes.com/adventures-in-seaplanes, or call Rachel Hinote at (340) 514-1680.

Minnesota Seaplane Safety Seminar & Fly-In

his edition of "Midwest Seaplane Pilot" is dedicated to the "Minnesota Seaplane Pilots Association Annual Safety Seminar & Fly-In" to be held May 18-20, 2018 at Madden's Resort in Brainerd, Minnesota. Madden's is a popular destination for seaplane pilots, as well as pilots on wheels throughout the Midwest. Madden's Resort operates

its own seaplane base on Gull Lake, as well as East Gull Lake Airport (9Y2), located adjacent to the resort. Courtesy shuttle service is available between the airport and the resort, but is not needed when landing a floatplane on Gull Lake (www.Maddens.com).

New Products & Services

SiriusXM Supports AOPA "You Can Fly"

FREDERICK, MD –The Aircraft Owners and Pilots Association (AOPA) and SiriusXM have a new agreement that will support AOPA Air Safety Institute programs and feature SiriusXM Aviation services in the AOPA "You Can Fly" Ambassador Program.

AOPA believes that SiriusXM's detailed in-flight weather information will enhance pilot safety and situational awareness whether the pilot is on the ramp preflighting, at 1,500 feet, or at FL450.

SiriusXM offers pilots and their passengers superior aviation weather and information services. Delivered to the cockpit by satellite, SiriusXM weather has no altitude or line-of-sight restrictions and is available throughout the continental United States, as well as many parts of Canada. Pilots subscribing to SiriusXM Aviation services can also add SiriusXM's audio entertainment channels at a discounted rate. (www.aopa.org/siriusxm).





C-47 "That's All, Brother"

CAF Photo by Jim Koepnick, KoepnickPhotography.com

The Aircraft That Led The D-Day Invasion Flies Again!

he Commemorative Air Force (CAF) has announced that the aircraft that led a formation of more than 800 C-47s to Normandy, France to drop paratroopers on D-Day on June 6, 1944, took its first flight since its restoration began.

During World War II (1939-1945), the Battle of Normandy, which lasted from June to August 1944, resulted in the Allied liberation of Western Europe from Nazi Germany. Codenamed "Operation Overlord," the battle began on June 6, 1944, when 156,000 American, British and Canadian troops landed on five beaches along a 50-mile stretch of the heavily fortified coast of France's Normandy region. By late August, all of northern France had been liberated, and by the following spring, the Allies had defeated

the Germans. The Normandy landings have been called the beginning of the end of war in Europe.

On January 31, 2018, at 1:00 pm CST, the C-47 "That's All, Brother" returned to the sky when it took off from Wittman Regional Airport in Oshkosh, Wisconsin. CAF volunteer pilot, Doug Rozendaal of Mason City, Iowa, was at the controls, and aviation photojournalist, Jim Koepnick of Oshkosh, Wisconsin, was there to photograph the historic flight.

It has been nearly 10 years since the C-47 flew, but the airplane's D-Day history was only recently discovered by U.S. Air Force historian, Matt Scales. The aircraft was located at Basler Turbo Conversions in Oshkosh, and was slated to be converted to a modern turboprop aircraft. Like so many aircraft which survived World War II, "That's All, Brother" was used in a variety of civilian roles following the war, hauling people and cargo across the United States. In time, its vital role in the liberation of Europe had been forgotten. Upon learning of the aircraft, the CAF, an organization known for rescuing, restoring and flying more than 170 vintage military airplanes, launched an effort to buy and restore it to its original D-Day configuration.

It was known early on that the restoration would be massive, due to extensive corrosion. Nearly every inch of the aircraft has since been restored to full functionality.

"We estimate that we have put more than 22,000 hours into this restoration project so far and the work continues," said CAF President/CEO Bob Stenevik. "Thanks to the



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has been among the most trusted resources for providing the aviation community with quality aviation news and information from highly qualified and respected aviation professionals.

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For Additional Information Contact

Midwest Flyer Magazine

Dave Weiman | Dave@MidwestFlyer.com

608.772.1776





"That's All, Brother" on display at EAA AirVenture Oshkosh.

Photo Courtesy of Commemorative Air Force

financial support of over 3,000 individuals and organizations, and an extraordinary group of volunteers, we have been able to achieve this great milestone with the first flight."

Much of the work up to now has been carried out by Basler Turbo Conversions. The next steps are interior and detail work to be completed in Tulsa, Oklahoma, and restoring the aircraft's exterior to its 1944 appearance. Once completed, the aircraft will become a valuable tool for the CAF, helping to tell the story of D-Day and the great efforts and sacrifices made on the shores of Normandy.

Once the restoration has been completed, the C-47 will be assigned to the CAF Central Texas Wing in San Marcos, Texas. Then, in June 2019, the aircraft will fly with several



"That's All, Brother" at Basler Turbo Conversions, Oshkosh, Wis. CAF Photo by Jim Koepnick, KoepnickPhotography.com

other World War II aircraft across the Atlantic Ocean to Duxford, England to participate in the 75th Anniversary of D-Day in Normandy, France.

Anyone interested in learning more about "That's All, Brother," and supporting efforts to keep this aircraft flying, are urged to visit www.ThatsAllBrother.org.

Video footage of the first flight since the aircraft was restored, can be seen via Facebook at www.facebook.com/thatsallbrother.

To learn more about the Commemorative Air Force, visit www.CommemorativeAirForce.org.

For additional information on aviation photography by Jim Koepnick, visit KoepnickPhotography.com

B-17F Memphis Belle™ Restoration Continues To Move Closer To The Finish Line

DAYTON, OHIO - Restoration on the B-17F Memphis Belle[™] – the first U.S. Army Air Forces heavy bomber to return to the United States after completing 25 missions over Europe – continues to move forward at the National Museum of the U.S. Air Force at Wright-Patterson Air Force Base near Dayton, Ohio.

Since the aircraft first arrived at the museum in 2005, museum staff and volunteers have worked meticulously for countless hours to preserve the iconic bomber, which was in dire need of corrosion treatment, the full outfitting of an extensive list of missing equipment, and having the proper paints and techniques applied.

One of the first challenges for restoring the aircraft was to obtain a list of missing parts, determine what could be obtained from a similar aircraft, and then try to fabricate the rest.

According to Casey Simmons, a restoration specialist at the museum, obtaining parts for a 1940s-era aircraft was not an easy task.

"For any of the parts that we needed on the airplane, if you can't get another one from another aircraft, you have to completely fabricate the part," said Simmons. "So that means going to the blueprints, figuring out what goes into that, how they did it and trying to re-create that process."



Boeing B-17F-10-BO "Memphis Belle"

Some of the parts that had to be fabricated by the restoration division included the gun mounts; all of the flooring; new sheet metal on the right vertical stabilizer and left bomb-bay door; the wind screen and eyebrow glass in the cockpit; and a fuselage longeron and rear vertical stabilizer spar.

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One of the parts that Simmons helped to fabricate was the glycol heater, which went inside the left wing of the aircraft and provided heat for the cabin.

"No one will ever see it, but we had to completely fabricate that from scratch and it is fully functional," said Simmons. "But I know the work that went into it, and I know where it's at, so it's pretty neat."

Among the most challenging aspects of the restoration of the aircraft was painting it. The painting process lasted several months with plans calling for the aircraft to look as it did after completing its 25th mission, but before it went on the war bond tour. Authentic paint for the time period was used.

"We were looking at pictures down to the single rivets on the aircraft to try to get markings where they belong," said Simmons. "You have a lot of different images from different sources, and you're trying to match colors, but the color in every photograph is just a little different depending on how the film was developed. So, the hardest part is getting it exactly the way it needs to be."

Even in going to those lengths, the color on the vertical tail and control surfaces are slightly different shades of green than the rest of the aircraft and Simmons has an explanation for that too:

"When the aircraft first came out of the factory, it would have been pretty much one color of green," said Simmons. "However, as you can see in the photographs from that time period after it completed its 25th mission, the paint began to fade and so we had to replicate that as well."

Museum Curator Jeff Duford, who led efforts to research the colors and markings on the Memphis Belle, discovered that although the paint on the tail faded over time, the paint that's on the fabric-covered control surfaces faded faster and to a greater degree than the rest of the aircraft. So, the museum's team worked until they got those colors right as well.

"We actually mixed 25 different samples to get to the right shade of green to ensure that the color is accurate," said Duford.

To a large extent, Duford credits the 1944 William Wyler film, "The Memphis Belle," as the reason why so much information about the aircraft was available. Wyler volunteered to serve the country and the Army Air Forces gave him a commission as a Major and sent him over to England to film heavy bomber operations. He brought a camera crew with him and they shot hours and hours of color footage of heavy bomber operations, including some scenes in combat.

"In the film, you see aircraft dropping bombs, aircraft getting shot down, German fighters attacking them, and real flak," said Duford. "So, Wyler and his cameramen were taking the very same risks that the bombing crewmen were, and in fact one of them was killed in a combat mission."

Wyler's team shot more than 11 hours of color footage, which is now preserved in the national archives and the museum obtained a copy of it.

"Because of this color footage, we're able to correctly mark and configure the aircraft today," said Duford. "It is truly astounding because we've worked on many restorations here, and by far there is more evidence about the Memphis Belle because of these out-takes, than any other restoration we've done."

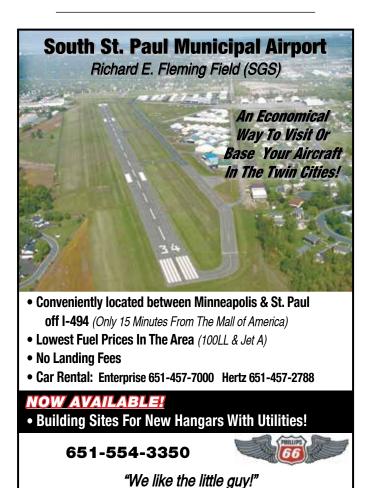
In addition, the museum also obtained copies of more than 5,000 original documents related to the combat history of the Memphis Belle and heavy bomber operations, which provided a wealth of information, including details on each crewmember and mission.

According to Duford, all of the time and effort spent on all of the details to accurately restore the aircraft – from its structural parts to the paint – is what this national treasure deserves.

"We have symbols in the history of our country – things like the flag that flew at Iwo Jima; the battleship Arizona – these recognizable symbols of the American experience, and the Memphis Belle is truly one of those icons in our history," said Duford. "And now fittingly so, the aircraft will be preserved at the Air Force's national museum for generations to come."

Although restoring the Memphis Belle has been a long and strenuous process, which will continue in the interior of the aircraft even after it has been placed on display, it's also been very rewarding as well, said Simmons.

"When I first got here in 2007, the aircraft was in multiple pieces – just individual bare metal sections of the aircraft," said Simmons. "Now it is a complete aircraft that actually



looks like something, and it's just the biggest transformation that you could ever imagine."

Plans call for the B-17F Memphis Belle exhibit to open to the public on Thursday, May 17, 2018, with celebratory events May 17-19, 2018. This three-day event will include World War II-era aircraft static displays, flyovers, World War II reenactors and vehicles, memorabilia and artifact displays, music from the era, related guest speakers for lectures, book signings and films, including both Memphis Belle films in the

Air Force Museum Theatre.

The National Museum of the U.S. Air Force is the world's largest military aviation museum. With free admission and parking, the museum features more than 360 aerospace vehicles and missiles and thousands of artifacts amid more than 19 acres of indoor exhibit space. Each year about one million visitors from around the world come to the museum (www.nationalmuseum.af.mil).

B-17F Memphis Belle™ Crew Overcame Long Odds To Complete 25 Missions

DAYTON, OHIO - Since the Air Force was created more than 70 years ago, there have been many shining examples of airmen who have exemplified the core value of "service before self," but few flight crews have faced the odds that were presented to the heavy bomber crewmen of World War II.

During the war, more than 25,000 U.S. heavy bomber crewman were killed in combat with over 8,000 heavy bombers destroyed. "It's an extraordinary number, and at some points in the campaign, only about one in four of the crewmen would finish their tour, and the other three crewmen would be killed, captured or wounded so badly that they couldn't continue," said Jeff Duford, curator at the National Museum of the U.S. Air Force, located at Wright-Patterson Air Force Base near Dayton, Ohio. "The idea that their odds of finishing a tour were about 25% is very difficult for us to understand, but these young men knew what they were doing and accepted the call to serve."

Overcoming the odds, the B-17F Memphis Belle[™] became the first U.S. Army Air Forces heavy bomber to return to the United States after completing 25 missions in Europe, and was selected by the Army Air Forces to be the symbol of the heavy bomber crews and support personnel who helped win the war against Nazi Germany.

The Memphis Belle was damaged on seven of its 25 missions, but remarkably, none of the crewmembers were ever badly injured, although tail gunner John Quinlan later received the Purple Heart for wounds he sustained during a

mission. The closest call came during a mission to Lorient, France, on January 23, 1943, when a German fighter blew two large holes in the tail of the aircraft. The aircraft made it safely back to base, but was so heavily damaged that they had to replace the entire tail.

According to Duford, the crew attributed their good fortune to a combination of skill and some luck.

"They felt like they were a great crew; they were tightly knit, confident and dedicated to what they were doing," said Duford. "However, being in those formations, flying straight and level with enemy anti-aircraft and fighter aircraft, there certainly was a little bit of luck for them too."

With the new Memphis Belle exhibit opening at the museum in May, Duford hopes that visitors will come to understand and appreciate that the Memphis Belle represents the extraordinary sacrifice of the heavy bomber crewmen during World War II.

"How does one climb inside of this aircraft knowing that I'm probably not going to come home, and I don't have to do that one time; two times; three times; 10 times – I have to do that 25 times," said Duford. "These crewmen were faced with choices that we are not faced with in our daily lives, and thousands of them made the choice to do their duty and selflessly fly these missions in order to defeat an evil regime."

In the end, many of the bomber crewmen paid for the price of victory with their lives. But thanks to the upcoming Memphis Belle exhibit, the legacy and sacrifices of these young men will be remembered for generations to come.

Plans call for the B-17F Memphis Belle exhibit to open to the public on Thursday, May 17, 2018, with celebratory events May 17-19, 2018. This three-day event will include World War II-era aircraft static displays, World War II reenactors and vehicles, memorabilia and artifact displays, music from the era, related guest speakers for lectures, book signings, and films, including both Memphis Belle films in the Air Force Museum Theatre.

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Midwest Pilots Baker & Clisham Named Living Legends of Aviation



Honorees inducted into the fifteenth annual "Living Legends of Aviation" were from (L/R): Dr. Ulf Dietrich Merbold, H. Ross Perot Jr., John Travolta, Felix Baumgartner, Danny Clisham, Bruno Gantenbrink, and Mark Baker.

BEVERLY HILLS, CALIF. - The fifteenth annual Living Legends of Aviation awards ceremony was held January 19, 2018 at the Beverly Hilton hotel in Beverly Hills, California. Actor and pilot, John Travolta, hosted the black-tie event, a fundraiser for the Kiddie Hawk Air Academy. Honorees included Dr. Ulf Merbold, H. Ross Perot Jr., John Travolta, Felix Baumgartner, Bruno Gantenbrink, Mark Baker, and Danny Clisham,

The President and CEO of the Aircraft Owners & Pilots Association (AOPA), Mark Baker of White Bear Lake, Minnesota, was recognized for his passion for aviation and willingness to share it with others, and for his leadership in supporting general aviation causes as head of the world's largest community of pilots.

Famed airshow announcer, world record-holder airline pilot, and test pilot, Danny Clisham of Ann Arbor, Michigan, was also inducted. Clisham was also the emcee for the evening.

Felix Baumgartner was recognized for having jumped from a capsule at the edge of space to become the first human to freefall beyond Mach 1, landing safely under a parachute in the desert.

Bruno Gantenbrink, a world champion glider pilot and safety advocate for glider racing, was also enshrined into the group.

Dr. Ulf Dietrich Merbold was inducted for his role as the first European Space Agency astronaut to go into space. He also was the first non-U.S. citizen to reach orbit in a U.S. spacecraft.

Businessman and passionate pilot, H. Ross Perot Jr., joined the elite club, recognized for his record-setting round-theworld flight in a helicopter, achieving the feat in only 30 days, a trip that some believed would take at least 90 days. Perot is also the developer of Fort Worth Alliance Airport, one of the largest privately-owned airports in the nation.

Tyson Weihs and Jason Miller, co-founders of the flight planning app "ForeFlight," received the "Eren Ozmen Aviation Entrepreneur of the Year Award." The award is named after the founder of Sierra Nevada Corp.

Aerobatic helicopter pilot, Chuck Aaron, presented the

"Vertical Flight Hall of Fame Award" to Mike Silva, a career helicopter pilot who flew helicopters for news organizations and firefighting, and flew multiple tours in Vietnam, for which he received the Distinguished Flying Cross and Bronze Star.

Steven F. Udvar-Hazy presented the award named for him to Jack Dailey, a U.S. Marine Corps general who served for 18 years as the head of the Smithsonian National Air & Space Museum.

Financier Kenn Ricci presented his "Lifetime Aviation Entrepreneur Award" to Robert Bigelow of Bigelow Aerospace, which is developing collapsible habitats soon to be launched into space, making it practical and cost-effective to have laboratories and hotels in space.

David Joyce of GE Aviation received the "Lifetime Aviation Industry Leader Award" for his longtime leadership at the company that has pioneered new turbine engine manufacturing techniques.

Actor and pilot, Harrison Ford, presented his "Aviation Legacy Award" to Senator Jim Inhofe of Oklahoma for his advocacy on behalf of GA causes, especially his opposition to privatizing the air traffic control system.

The evening also included a moving tribute to astronaut Eugene Cernan, a Living Legend, who died just days before the award ceremony last year.

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National Aviation Hall of Fame Announces 2018 Enshrinement Date & Venue

WASHINGTON, DC - The National Aviation Hall of Fame (NAHF) will hold its 56th Annual Enshrinement Dinner & Ceremony at the National Building Museum in Washington, D.C. on September 28, 2018.

"Our mission is to honor aerospace legends to inspire future leaders. This significant venue will make the 2018 enshrinement the most prominent to date and help us achieve our mission," says NAHF Chairman Michael Quiello. "Our event has always been widely recognized as the Oscar Night of Aviation, but this will be beyond anything our enshrinees, sponsors and members have ever seen before. The NAHF has reached the next level."

The NAHF Class of 2018 is a highly distinguished group representing a broad range of enduring contributions to both the advancement of flight and the manned exploration of space:

General Ronald R. Fogleman, USAF (Ret.), is a United States Air Force Academy graduate, decorated Vietnam veteran (logging 80 missions as a misty forward air controller), command pilot and parachutist, 15th Chief of Staff of the U.S. Air Force, and the author of the current "Air Force Core Values."

Colonel Walter Cunningham, USMC (Ret.), is a decorated Korean War veteran, fighter pilot, physicist, Apollo 7 Lunar Module pilot, SKYLAB chief, entrepreneur, author of "The All-American Boys," and a radio-show host.

General John R. (Jack) Dailey, USMC (Ret.), is a decorated Vietnam veteran, who served as the Former Assistant Commandant of the Marine Corps and Chief of Staff from 1990 to 1992, Associate Deputy Administrator of NASA, and is currently the Director of the National Air and Space Museum in Washington, D.C.

(The late) William H. (Bill) Dana was a 40-year veteran of NASA, test pilot and aeronautical engineer. He was also the project pilot for the X-15, and pilot astronaut for the X-20, among several other aircraft.

Chairman Michael Quiello says, "The Washington D.C. area is very easy to travel to and has outstanding accommodations and venues. Our induction ceremony will certainly attract senior industry leaders in both the private and

government sectors. As a national organization, it is an honor and privilege to be inducting the Class of 2018 in our nation's capital."

This year's enshrinement venue, the National Building Museum (formerly known as the Pension Building), was built in 1887 to house the disbursement of pensions to Civil War veterans and widows, and is an early example of Renaissance Revival architecture. Listed on the National Register of Historic Places in 1969, the museum was designated as a national historic landmark in 1985. Its column-lined interior has held numerous presidential inaugural balls and even has the Seal of the President of the United States set in the floor.

"We are also proud to announce that the Class of 2019 will be inducted at the Wings Over the Rockies Museum in Denver, Colorado," said NAHF President David Brixey. "We have yet to take our brand to the western U.S. and feel that Denver's aerospace-rich environment is ideal for us to share our mission in another exciting market."

Executive Director Amy Spowart adds, "Our goal is that by 2020, our Learning Center, which is visited by over a quarter of a million visitors a year and is co-located with the National Museum of the United States Air Force, will have been completely renovated and revitalized with updated content, improved state-of-the art interactives and sponsored galleries. This would make Dayton the ideal location for a magnificent homecoming enshrinement event and a grand unveiling of our new Learning Center."

Founded in Dayton, Ohio and chartered by the U.S. Congress in 1964, the non-profit NAHF is co-located with the National Museum of the United States Air Force at Wright Patterson AFB. Its 17,000 square-foot public learning center offers interactive exhibits and attracts over 250,000 visitors a year. NAHF programming includes an annual Wings of Women youth education event and other collaborations that support the mission of the 501(c)(3): Honoring Aerospace Legends to Inspire Future Leaders.

Sponsorship information and individual seats will be available soon at www.nationalaviation.org, or call 937-256-0944, ext. 11 for more information.

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You need your own software such as Excel, Word, Filemaker Pro, etc. We do not provide technical support for your software. Download free aircraft and pilot samples at AviationDataCenter.com



Dynon Avionics Receives First FAA STC For Installation of SkyView HDX In Type Certificated Aircraft

ynon Avionics received its first Supplemental Type Certificate (STC) for its flagship SkyView HDX system. The STC's Approved Model List (AML), which initially covers many Cessna 172 models, ushers in a new era of truly affordable, safety-enhancing integrated avionics systems for type certificated aircraft. For more information, visit www.dynon.aero/certified.

Strong Aircraft Deliveries Drive Impressive 2017 Performance At Cirrus Aircraft







SF50 Vision® Jet

DULUTH, MINN. & KNOXVILLE, TENN. - Cirrus Aircraft announced in February that new customer aircraft deliveries for the company's best-selling SR Series soared to over 350 aircraft in 2017, a recent record high. As the global SR Series fleet approaches 10 million flight hours in over 60 countries, the company has also ramped up production of its turbine aircraft − the world's first single-engine Personal Jet™, the SF50 Vision® Jet − with 25 aircraft currently delivered and in service around the world.

The past year marks the fourth consecutive year that Cirrus Aircraft has delivered more than 300 SR Series aircraft. Enterprise growth also propelled facilities expansion and employee growth across all Cirrus locations in Duluth, Minnesota; Grand Forks, North Dakota; and Knoxville, Tennessee with nearly 300 jobs added in total over the last year. Included in the expansion is the Knoxville-based Vision Center campus, which will open the doors to its new world-class Cirrus Approach™ training center later this year. The new training center will include a Level D full-motion Vision Jet simulator for the most advanced Cirrus transition training in the world.

Cirrus Aircraft's first high-performance SR airplane – the SR20 – was delivered in 1999 and transformed general aviation with intuitive avionics, game-changing performance and revolutionary safety systems, including the Cirrus Airframe Parachute System® (CAPS®). Today's SR Series aircraft include the SR20, SR22 and turbocharged SR22T. And a new company milestone is just ahead as Cirrus will deliver its 7,000th SR airplane in April.

Now in its sixth generation, the SR Series has been the best-selling general aviation piston aircraft in its class for 16 consecutive years.

2017 marked the launch of the enhanced G6 SR Series with the Cirrus Perspective+™ by Garmin® flight deck, which

includes expanded avionics and flight planning options, luxury automotive-inspired Cirrus Spectra™ wingtip lighting, cockpit connectivity solutions and premium interior options.

In 2016, Cirrus Aircraft ushered in a new era in personal transportation with the FAA certification of the world's first single-engine Personal Jet – the Vision Jet. The turbine aircraft defines a new category in aviation – the Personal Jet – with its spacious, pilot and passenger-friendly cabin featuring panoramic windows, reclining seats and comfortable legroom to accommodate five adults and two children. The cabin is complemented by the proprietary Cirrus Perspective® Touch™ by Garmin®, which delivers a wide array of sophisticated and intuitive global navigation capabilities and safety features at the touch of a finger. The Vision Jet has won widespread industry accolades, including Plane & Pilot's 2017 Plane of the Year, as well as Popular Science's 2017 Best of What's New.

The company has delivered 25 Vision Jets to customers since certification in late 2016, with owners enjoying the added value of a truly comprehensive ownership program, JetStream. The program includes the Williams International TAP Blue turbine engine coverage, airframe and avionics maintenance, normal wear item replacement, premium recurrent pilot training and more.

Cirrus Aircraft continues to transform pilot training and safety with Cirrus Approach™, which provides ongoing training to new and experienced pilots through in-person and online training courses. More than 12,000 pilots and owners have joined the program.

In addition to Cirrus Approach, the company also launched Cirrus Embark™ in 2017, a unique program designed specifically for owners of pre-owned Cirrus aircraft.

For additional information, contact Gary Black at 612-810-4712 or Al Waterloo at 773-372-0104 (www.cirrusaircraft.com).

Aeronautics Report

Wisconsin Bureau of Aeronautics

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Pardon Our Dust: Annual Airport Construction Update

by Hal Davis
Airport Compliance Manager
WisDOT Bureau of Aeronautics

ellow X's, like orange barrels, send multiple messages. In the literal sense, they simply say don't land/drive here! They also signify delay and disruption. Yet, if you look past the temporary inconvenience, you will see these symbols as a sign of better things to come.



Hal Davis

Here in Wisconsin, we are always looking to improve our airport facilities. That means smoother, longer and wider runways, enhanced navigational aids, and better terminal facilities. It also means giving airport owners the equipment they need to keep their facilities in tip-top shape. While we try to minimize the effect on airport users, impacts are sometimes unavoidable. Contact your local airport managers to find out if any projects are scheduled at the airports you frequent, and always check NOTAMs before you go flying.



2017 Recap

In the aviation industry, we have a shared priority: improving safety. With that in mind, we completed runway reconstruction projects at several airports around the state including Eagle River, New Holstein, Oconto and Solon Springs. Looking for a place to perfect your landings? Nothing beats landing on a new runway!

We also crack sealed several runways, taxiways and aprons; built new terminal buildings and hangars; installed new fuel systems and perimeter fences; and purchased snow removal, mowing and firefighting equipment for a number of airports. In total, we funded more than 100 different projects at over 50 airports last year.



Resurfaced taxiway at Ephraim-Gibraltar Airport.

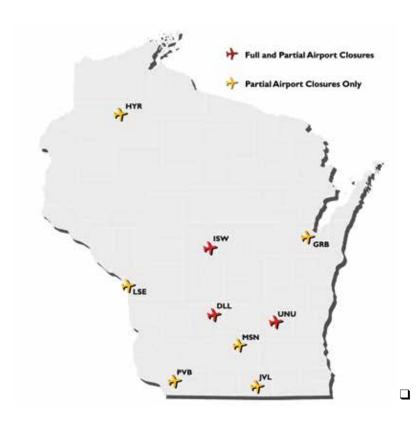
2018 Outlook

While project timelines are always dependent on a variety of factors, often beyond our control, there are projects scheduled this summer which may affect users of various airports across the state. Expect full airport closures at Baraboo-Wisconsin Dells Regional Airport, Dodge County Airport, and Alexander Field due to major runway reconstruction projects. Projects at Platteville Municipal Airport, Dane County Regional Airport, Green Bay-Austin Straubel International Airport, Sawyer County Airport, La Crosse Regional Airport, and Southern Wisconsin Regional Airport will also cause some occasional runway and taxiway

closures. Several additional airports will have resurfacing projects.

New or upgraded fuel systems are planned for installation at Richland Airport, Fort Atkinson Municipal Airport, Iowa County Airport and Cumberland Municipal Airport. Hangar, hangar area, and apron improvements are also planned at several airports. Finally, visitors to Shawano Municipal Airport will soon be greeted by a brand-new terminal building.

For more information on past and future airport development projects, including the Bureau of Aeronautics' Five-Year Airport Improvement Program, visit the Wisconsin Department of Transportation website at wisconsindot.gov and type in "airport five-year plan" in the search bar or call (608) 266-3351.



Meet Mark Graczykowski

Airport Development Engineer WisDOT Bureau of Aeronautics

ark Graczykowski joined the Wisconsin DOT
Bureau of Aeronautics (BOA) in October 2017. As an airport development engineer, Mark is responsible for managing projects at 10 airports around Wisconsin. His duties include helping airports develop a realistic and achievable capital improvement plan; contracting with consultants for planning, design and construction



Mark Graczykowski

engineering services; conducting plan reviews; and working as a liaison between local sponsors and state and federal agencies.

Mark, a Manitowoc native, earned two bachelor of science degrees from the University of Wisconsin-Platteville in 2004 in Civil Engineering and Environmental Engineering. He worked in consulting for 13 years before joining the BOA and

is registered as a Professional Engineer in Wisconsin. Mark is very passionate about helping airport owners succeed with their development projects and looks forward to the new challenges at the BOA.

Right before joining the BOA, Mark spent eight weeks as a volunteer at Zion National Park in southwestern Utah. There, he participated in the "Concrete to Canyons" program which brings underserved 5th graders from Nevada (including Las Vegas) to the park for three days and two nights filled with educational programing, hiking, camping and most importantly, a chance to have fun. Being 'Ranger Mark' for eight weeks was a life-list highlight, along with living in the park and getting to learn many of its secrets. Since returning to Wisconsin, Mark has fueled his desire to contribute to society by becoming actively involved with the Ice Age Trail Alliance in Dane County.

In his free time, Mark enjoys reading, listening to music and producing artwork. He also takes multiple yearly trips to visit various National Parks to hike and camp. Unlike most engineers, Mark is fond of writing and hopes to start a blog or publish a book in the future. He will be getting married in July to his longtime girlfriend, "Sarah."

You can contact Mark Graczykowski by phone at 608- 266-0902 or email at mark.graczykowski@dot.wi.gov.

Aeronautics Bulletin



NNESOT/

The State of Minnesota provides this Technical Bulletin in the interest of Aviation Safety and to Promote Aeronautical Progress in the State and Nation.

Cassandra Isackson, Director

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It's a new season!

by Cassandra Isackson

Director, Minnesota DOT Office of Aeronautics

pring is here and summer isn't far away. This is a happy time of the year for many, especially after a long, cold, snowy winter. It is time to dust off the cobwebs, and get back into the flying mode. But first, do a thorough inspection of yourself as a pilot.

Are you truly ready to fly? Is your medical current? Have you checked with your doctor to be sure you can fly and will be safe if you take certain prescription medications? Are you



Cassandra Isackson

prescription medications? Are you mentally ready? Have you familiarized yourself with the latest Federal Aviation Regulations (FARs)? We want you to make safety your first priority in every aspect of your flying and your life. In other words, walk the talk.

Practice safe habits in everything you do. In fact, make sure you attend a general aviation safety seminar by going to faasafety.gov. If your EAA chapter, flying club, pilot association or other group would like a safety presentation at one of your meetings, call FAA Safety Team Program Manager Jay Flowers at 612-253-4418, or email jay.flowers@faa.gov.

Those of us at the MnDOT Office of Aeronautics are excited to be in our 75th year of operation and partnerships with our 135 public-use airports. They serve the general aviation community, as well as local communities. These quality facilities bring benefits to every citizen of the community, whether or not they are aviators. That makes your local airport a valuable asset to your community and surrounding area, as well as to the state of Minnesota. After all, the local airport is the front door to your community.

We are looking forward to a great spring and summer season of aviation events around the state and region. For example, the 2018 Minnesota Aviation Maintenance Technician Conference was held at the Earle Brown Heritage Center in Brooklyn Center, Minnesota on March 19 and 20th. Pilots attended this conference as well, especially those who like to do some minor maintenance on their own aircraft.

Coming up, we have the annual Minnesota Seaplane Pilots Association Safety Seminar & Fly-In, which will be held May 18-20, 2018 at Madden's Resort on beautiful Gull Lake in Brainerd. By the way, be sure to read Rachel Obermoller's seaplane article in this Technical Bulletin.

There are many more terrific aviation events all over the state. Just go to: www.dot.state.mn.us/aero/events to see the list we have. Check back often as we frequently add more events, dates and locations.

Enjoy the new season. Think safety first. Plan your flights well, and share your joy of aviation with young people.



Sometimes The Best Information Can't Be Found On The Internet

by Rachel Obermoller Pilot, MnDOT Aeronautics

ver show up at an event at the wrong time or with the wrong details? One of my fears, especially since becoming a parent and juggling work, home, school and kid schedules, is that my phone will ring someday with



Rachel Obermoller

someone on the other end of the phone asking if I'm on my way. Between doctors and dentists, social engagements, organized events, and a work schedule that can have me flying early one morning and late the next night, I sometimes wonder how I manage to show up at the right time and place with the right family members in tow. I know part of our success is sharing my calendar with my husband and being diligent in entering appointments when I make them, but I also know that I'm a planner by nature and wired to deal with the details.

I like to research things: places to eat at our work trip destinations, fuel prices, transportation, and accommodation options. I read product reviews on Amazon, research the best diaper brand for the price, and know of several methods for getting a 3-year-old to follow instructions and baby to sleep through the night. (I'll let you know if I find one that works....) I've refined my research methods over the years, found the websites I like the best for my repeat queries, and know which friends to call or text for sage advice, a little humor, or a good recommendation.

One of the best research methods I use for flying destinations, however, is still the trusty telephone. For instance, want to know if an airport has a courtesy car? A quick call to the fixed base operator (FBO) or airport manager will answer the question. Want to know if someone will be available to fuel you, if they have a tall enough ladder (important information for some amphibious planes), or which hotels they recommend locally? Ditto for the FBO or airport manager. Want to know if anyone will deliver food on a quick fuel stop, what the runway condition is after a snow event when there's no NOTAM, or why the AWOS isn't currently reporting the visibility? Again, the FBO or airport manager will generally cheerfully steer you towards the answer.



The ramp at Grand Marais, Minn. (KCKC). A phone call to the airport will let you know in advance where to park for fuel and plug in your airplane preheater.

Not every seaplane base has the amenities so clearly marked and visible as International Falls (09I), so a phone call in advance is helpful to know where to find things.

I used to hesitate to pick up the phone to call the airport manager at times, thinking "Surely they're busy/don't want to answer a million questions/it isn't really that important." But you know what I've discovered over the past few years? Airport managers like getting the phone calls. They wish more people would pick up the phone and call before they visit. It helps them make sure the right information is in the pilot's hands. They can share relevant information about where you should park the plane, whether the courtesy car will be available, and what the conditions are at the airport. It helps them sell their airport and amenities, and to inform pilots about the things they can do for them and their passengers which they might not otherwise be aware of. For those airports where someone is in attendance, either working for the airport or the FBO, it lets them know why you're pulling up on the ramp, and what if anything you might need from them.

Ever show up at a busy FBO ramp and get marshalled somewhere miles from the front door, when all you need to do is pick someone up or get a quick fuel turn? I'll give you a hint. If you call ahead of time and tell them what's going on, chances are you'll end up a lot closer to the door, rather than perceived as an unknown intruder. I've worked at several busy FBOs over the years, and knowing who was coming and what services they might need helped us get them on their way faster, plan ramp space and parking better, and in general, provide superior service.

For *seaplane pilots*, this is all the more important to make the phone call. Airports are generally comprised of a swath of pavement or grass with established buildings and parking areas. I have yet to find a seaplane base anywhere near Minnesota where the seaplane and all obstructions on the lake are clearly marked or the most convenient parking spaces are painted with a yellow "T." The chart supplement doesn't always clearly communicate the fuel situation, ramp and parking provisions, or other amenities. The person who does know the answer is just a phone call away though.



Eveleth Sky Harbor Seaplane Base (9Y5)

The phone number for the airport manager is published in the FAA Chart Supplement (also known as the "Green Book," formerly the Airport/Facility Directory, and sometimes still called the A/FD). Sometimes a secondary phone number will be published in the remarks as well, but beyond that, there's not much in the way of contact information available there. There are several websites and other directories which list FBOs and businesses at an airport or seaplane base. In Minnesota, the Minnesota Department of Transportation Office of Aeronautics publishes a handy book called the *Minnesota Airport Directory & Travel Guide*. Each address with a valid Minnesota aircraft registration receives a copy of the directory. We used to publish the directory in January, but now that we use aerial imagery for the directory, we aim to publish and mail the directory in February. This allows us to try to capture any changes from the previous year with more accurate aerial photos.

In our directory, you'll find the airport manager's phone number and email address, as well as a contact person listed. This might be an employee at the airport, the local FBO, or someone who has volunteered to answer questions people might have about the airport. At some Minnesota airports, the manager is an employee at city hall or in the public works department, so having another contact listed can be really helpful. Additionally, you'll find contact information for FBOs, businesses on the airport, information about courtesy cars and transportation, fuel, facilities for pilots and passengers, local dining, and lodging. It's not the only place, but a good place to start when you're looking for information about the local community.

To obtain a copy of the *Minnesota Airport Directory & Travel Guide*, the first and best place to look, where we keep the information current throughout the year, is our website, **www.mndot.gov/aero.** Click on the "Publications" tab and you'll find a link to the "Airport Directory" page. There are low resolution and high-resolution PDFs available there, which you can view online or download to your device and carry with you, instead of a printed publication. If you want a paper copy, you can also find a link to order one from us there. They are free of charge (one copy per person), and available until our inventory runs out during the year.

Recently, it's become rare for me to not make a call before I go somewhere. Whether it's for information gathering, or to inform the FBO of our plans, it's helpful for both parties and usually makes the trip much smoother. Plus, sometimes they tell us about a good new place to eat. Nobody likes a hungry pilot.

MAC Turns 75 In 2018

he Metropolitan Airports Commission (MAC) marks its 75th anniversary in 2018, but the idea of creating a single government entity to own and operate Twin Cities' airports only came about with some diplomacy following years of spirited competition. Long

before MAC became the airport's owner and operator, air travel in the Twin Cities went through a series of boom-and-partial-bust periods. The Roaring 20s, the Great Depression and the build-up to World War II, all influenced the growth of what is now Minneapolis-St. Paul International Airport (KMSP), and to create a governing board to promote the growth of aviation in the Twin Cities.



he city known as the home of Cirrus Aircraft -- Duluth, Minnesota -- will host the Minnesota Airports Conference, April 18-20, 2018 at the Duluth Entertainment Convention Center.

Sponsored by the Minnesota Council of Airports (MCOA) and the Minnesota Department of Transportation (MnDOT) Office of Aeronautics, and facilitated by the Airport Technical Assistance Program (AirTAP) of the University of Minnesota, the Minnesota Airports Conference aims to deliver the most up-to-date information for Minnesota airport professionals, and an opportunity for industry and government officials to exchange ideas. The conference is open to anyone with an interest in airports and aviation.

The Federal Aviation Administration, MnDOT Office of Aeronautics and Transportation Security Administration (TSA) will give presentations on federal and state funding and policy issues. There will be special presentations on "Super Bowl LII" preparations and its impact on Minnesota airports, and the State Aviation System Plan. Other topics will include careers, challenges, and successes of women in aviation; airfield pavement management; environmental compliance; and unmanned aerial vehicle (UAV) operations.

The conference will kick off Wednesday morning with a tour of Cirrus Aircraft at Duluth International Airport. Cirrus has been the largest manufacturer of piston aircraft since 2013. Cirrus Aircraft co-founder and CEO, Dale Klapmeier, will be the keynote luncheon speaker. Klapmeier and his brother, Alan, have garnered numerous aviation industry and entrepreneurial awards. They were inducted into the National Aviation Hall of Fame in 2014. Klapmeier's talk will focus on the future of Cirrus, discussing the SR20, SR22, Vision Jet and beyond!

Astronaut Rhea Seddon will be the keynote speaker on Thursday. In 1978, Seddon became one of the first six women to enter the astronaut program. She worked at the National Aeronautics and Space Administration (NASA) for 19 years, and flew on three space shuttle missions, spending a total of 30 days in space. Seddon was inducted into the U.S. Astronaut Hall of Fame in 2015. She will also be one of the panelists in a breakout session focusing on women in aviation, along with airshow performer, Julie Clark, and Colonel (Ret.) Penny Dieryck, former Mission Support Group Commander, 148th Fighter Wing, Duluth Air National Guard.

One of the highlights of the conference is the annual awards luncheon on Thursday. Individuals, airport sponsors, consultants and construction firms are recognized for their contributions in improving aviation in Minnesota.

The new \$80 million terminal at Duluth International Airport.



APRIL/MAY 2018 MIDWEST FLYER MAGAZINE 45

Friday's keynote speaker is Brian Ryks, the executive director and chief operating officer of the Metropolitan Airports Commission (MAC). Ryks will discuss the state of the industry, focusing on what's happening nationally, and how this affects Minnesota airports and the air transportation system.

Brian Ryks was born in Lakeville, Minnesota, and received his Bachelor of Arts Degree in Criminal Justice Studies at St. Cloud State University in 1990. He first worked at MAC as a noise and operations technician, and went on to become a noise abatement manager at Stapleton and Denver International Airports in Denver, Colo. (1990-95). He became airport manager at Aberdeen Regional Airport in Aberdeen, S.D (1995-97); and St. Cloud Regional Airport, St. Cloud, Minn. (1997-2002). In 2002, Ryks was named executive director of the Duluth Airport Authority, Duluth, Minn. (2002-12); and executive director and chief executive officer at Gerald R. Ford International Airport in Grand Rapids, Mich., in 2012. In March 2016, Ryks succeeded Jeff Hamiel at the Metropolitan Airports Commission, who served the commission for 39 years. Like Hamiel, Ryks is a general aviation pilot (www.metroairports.org).

The 2018 conference will commemorate the 75th anniversary of state aeronautics in Minnesota. In 1943, the Minnesota Aeronautics Commission became the Minnesota Department of Aeronautics. In the same year, a constitutional amendment was proposed (and ultimately passed in 1944) that would allow the state to collect taxes and build airports. Today, the Minnesota Department of Transportation Office of Aeronautics serves airports, airport tenants and pilots

throughout the state and is located in St. Paul.

Persons can register for the entire conference or a single day, and there is a special rate for college students. To register, contact Marie Villano at ccapsconf2@umn.edu or call 612-624-4972. Accommodations are available at the Holiday Inn & Suites Downtown Duluth:

1-888-HOLIDAY. To receive the special conference rate, mention group code "MCA."

Anyone interested in learning more about the conference, lodging or registration can go to (http://www.airtap.umn.edu/events/airportsconference/2018/). Those interested in becoming a conference sponsor or exhibitor can learn more at http://www.airtap.umn.edu/events/airportsconference/2018/sponsors/.

Duluth Airport Authority

The Duluth Airport Authority and its executive director, Thomas J. Werner, are hosting the conference. Duluth International Airport (KDLH) completed an \$80 million passenger terminal in 2013. The airport is served by Delta and United Airlines, and has a U.S. Customs Office on the field. In addition to Cirrus Aircraft, businesses on the airport include Monaco Air Duluth, Top Flight Avionics & Maintenance, Lake Superior College and Lake Superior Helicopters.



Thomas J. Werner

FILMS & VIDEOS

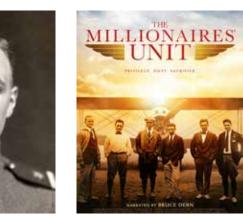
The Millionaires' Unit

THE MILLIONAIRES' UNIT tells the unsung story of a group of Yale college students who took the initiative to learn to fly in preparation for America's entry into World War I and became the founding squadron of the U.S. Naval Air Reserve.

The award-winning film's video on demand release date of February 15, 2018, was chosen to commemorate the 100th anniversary of the death of

First Yale Unit (FYU) member, Albert D. Sturtevant, the first U.S. Naval Aviator killed in combat, when his plane went down in the North Sea on February 15, 1918.

Narrated by Academy Award-nominated actor, Bruce Dern, grandnephew of one of the aviators, the feature-length



Kenneth MacLeish, a member of the Fist Yale Unit, known as the Millionaires' Unit of World War I.

documentary charts the romantic, little-known story of the origins of American airpower and features very rare archival footage and thrilling dogfighting sequences, filmed air-to-air with replica World War I aircraft, some with original engines.

Inspired by Marc Wortman's book The Millionaires' Unit, the film has been developed and produced by descendants

of the First Yale Unit, including filmmaker Ron King, producers Harry Davison and Mike Davison, and narrator Bruce Dern, who are all grandnephews and grandsons of FYU members. Now available on DVD and Blu-ray, 120 min/Not Rated.

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Minnesota Education Section

Minnesota Transportation Center of Excellence

Northland Community & Technical College Takes Geospatial Intelligence Program Online To Train Students Worldwide For Next-Gen Aerospace Careers

Emerging industry delivers 'more than a trillion dollars' in economic impact!

by Jonathan Beck **UAS Instructor** Northland Community & Technical College NSF ATE DroneTECH Principal Investigator

THIEF RIVER FALLS, MINN. - With drone technology advancing into more and more industries, the aerospace department at Northland Community



Jonathan Beck

& Technical College (NCTC) is gearing up to take its Geospatial Intelligence Analysis program online this coming fall. The move to a distance learning format will allow the college to train students around the world for diverse careers in both the public and private sectors, ranging from military intelligence to retail marketing.

As an industry in and of itself, Geospatial Intelligence Analysis (GeoInt) is complex enough to defy simple categorization. Its widespread use across the greater aerospace spectrum has given rise to different meanings for different applications. In basic terms, GeoInt is the practice of interpreting images of planet Earth, geo-referencing them, and identifying objects, structures and patterns in order to make actionable recommendations. "We train our students to turn images into digital maps with pieces of information layered on top much like a flip book," explained Steve Sorenson, one of NCTC's program instructors. "Looking at the recent California fires, for example, we can map the fires and then look to see what extent the damage is, how it will impact towns and how to plan evacuations, all based on these layered maps we produce." (Part Gamer, Part Sherlock Holmes: Geospatial Intelligence Unlocks Career Paths for Problem Solvers)

The NCTC aerospace programs, including those that train aviation maintenance and unmanned aerial systems (UAS or drones) technicians, have all earned reputations for excellence since the department was first created more than 50 years ago.

"Northland aerospace education and aviation maintenance is well regarded in the industry," said Curtis Zoller, Associate Dean of Aerospace & Agriculture. "Companies like Northrop

Grumman and Boeing come and recruit our students right out of class. We basically have a 100% job placement rate. Our instructors are in a constant coordination with these industry leaders to make sure our education is at the cutting edge of what's going on in these advancing careers, and we're doing the same thing with the imagery and geospatial programs, working with industry to stay on top of the trends."

Nearly 80 percent of companies across all industries rely on some sort of geospatial data. Whether they realize it or not — or directly employ specific GeoInt technicians companies, farmers and municipalities rely on geospatial data for things like mapping new retail locations, planning new communities or forecasting crop yields.

For consumers, Google Earth may be the most obvious example of GeoInt in action. These maps of planet Earth are layered with information like street names, businesses, road conditions, etc. Behind all that functionality sits an expert technician trained in analyzing images and providing actionable intelligence in the form of a map.

More than four million jobs are directly linked to digital maps, explained Jon Beck, an instructor for UAS technology at NCTC. "The economic impact is more than a trillion dollars yearly in terms of sales for businesses," he said, "but beyond the economics, geospatial intelligence is enormously valuable to society as a whole. For example, digital maps created with geospatial imagery and data have decreased emergency team response time by about 20 percent in situations where someone's life is on the line. You wouldn't typically think of a map as a lifesaver, but the maps we create can do just that."

According to Zoller, geospatial intelligence is still an emerging field. "The demand is great and increasing due to the continuing advancements in drone technology, which we here at Northland are on the leading edge of. With all the aviation technology, high-def cameras and high-tech imaging tools now available to every sector of the economy, it's no longer just the military that needs trained analysts. We've only just scratched the surface in terms of career potential, and

CONTINUED ON PAGE 62



WATA Difference

WISCONSIN AVIATION TRADES ASSOCIATION

Wisconsin Pilot Opposes Unpowered Ultralights/Hang Gliders At Local Airport

PALMYRA, WIS. – Louis Radecki, a pilot, flight instructor and an FAA Safety Team Representative at Palmyra Airport (88C) in southeastern Wisconsin, is raising concern to the Town of Palmyra Airport Commission of a proposal to allow unpowered ultralights/hang gliders to operate at the airport. Radecki says that mixing unpowered ultralight vehicles/hang gliders with airplanes is dangerous due to differences in speed and performance, and that wake turbulence is a significant issue for ultralight operators.

Radecki cites FAA Order 7110.99 which states in part "... the speed and flight characteristics of ultralights, especially as related to wake turbulence, may make them incompatible with aircraft operations. ...ultralight vehicles should be

segregated from all non-ultralight aircraft in the use of runways and the airport surface."

"This vibrant general aviation airport would be put at risk if unpowered ultralight vehicles/hang gliders are allowed to operate here," says Radecki.

Radecki notes that of the 54 hang-gliding and paragliding schools listed on the U.S. Hang Gliding & Paragliding Association website, only one school is located at an airport, and that airport in Warton, Texas, only has 37 based aircraft and 86 operations per week versus 83 based aircraft and 259 operations per week at Palmyra. Also at Warton, ultralight and hang-gliding activities do not use the single runway, but rather a corner of the airport property.

For Membership Application Call 920-303-0709 - wataonline.org

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Minnesota Aviation Industry News

Minnesota Aviation Trades Association Creates Mentorship Program For Member Businesses

he Minnesota Aviation Trades Association (MATA) has created a new "mentorship program," which is available exclusively to member businesses, whose owners or managers need some advice or guidance on various business matters from time to time.

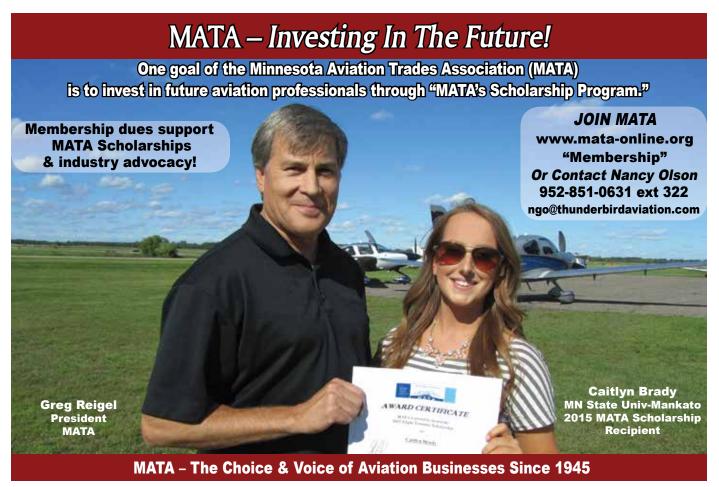
Volunteer members with expertise in business, fixed base operator and airport legal matters, flight training, or risk management are available to consult with members to provide basic information and answers to questions, and can refer them to resources which can further assist them in addressing a particular question or issue.

Members may contact MATA board member and MATA Mentorship Program Chairman Bill Mavencamp of St. Cloud Aviation with their initial request. Mr. Mavencamp will then direct the member to the appropriate person who can help.

To take advantage of the MATA Mentorship Program, or to become a mentor, email Bill Mavencamp at billmavencamp@mac.com for additional information.

The Minnesota Aviation Trades Association was founded in 1945 to represent the interests of aviation businesses in the state, and to assist members in operating strong, ethical and competitive businesses to serve Minnesota communities and the aviation community. A nine-member volunteer board of directors meets bimonthly to discuss and take action on issues affecting aviation in the state.

MATA works closely with the Metropolitan Airports Commission, Minnesota Office of Aeronautics, Federal Aviation Administration, local aviation authorities and other trade organizations, to address key issues important to aviation in the state and its members. MATA actively lobbies the Minnesota legislature, and is heard in Washington, D.C. as an affiliate member of the National Air Transportation Association (NATA). Additionally, each year a representative of MATA goes to Washington with representatives of the Minnesota Business Aviation Association (MBAA) and Minnesota Council of Airports (MCOA) to meet with congressional leaders in an effort to help keep them informed on aviation issues affecting Minnesota and the nation. Within the state, MATA members are encouraged to participate in "Minnesota Aviation Day At The Capitol"



each year, whereby they meet with state representatives to likewise inform them of pressing issues affecting aviation in Minnesota, and to be a resource on aviation matters.

MATA sponsors a "scholarship program" to help students at MATA-member flight schools achieve their career goals in aviation. For details, email mnavtrades@gmail.com. The

deadline for applications is June 30.

For additional information on the Minnesota Aviation Trades Association and its programs, visit www.mata-online. org, and read about MATA's accomplishments and member activities at https://midwestflyer.com/?s=minnesota+aviation+trades+association.

An Aviation Game Plan For Super Bowl LII



Corporate jets lined up on the crosswind runway at St. Paul Downtown Airport.

Dan McDowell Photo

MINNEAPOLIS, MINN. – While the Philadelphia Eagles and the New England Patriots prepared to duke it out in Super Bowl LII at the U.S. Bank Stadium in Minneapolis, Minnesota on February 4, 2018, Twin Cities area airports and operators prepared for a major onslaught of transient aircraft. Some 1,600 corporate jets flew in to not only Minneapolis-St. Paul International Airport, but several of its reliever airports, plus St. Cloud, Rochester, Mankato and New Richmond. In the end, the National Football Conference (NFC) champion, Philadelphia Eagles, defeated the American Football Conference (AFC) champion, New England Patriots, 41–33, to win their first Super Bowl and their first National Football League (NFL) title since 1960, and by all accounts, area airports won big time in fuel sales alone, as aircraft lined the

taxiways and crosswind runways were closed for parking.

Another highlight of the game was a flyby featuring the Wings of the North Air Museum's Sierra Sue II P-51 Mustang, which led the U.S. Air Force Heritage Flight over the stadium. Sierra Sue II, which is based at Flying Cloud Airport in Eden Prairie, Minn., was the first aircraft in a diamond formation featuring two A-10 Thunderbolt IIs and an F-16 Fighting Falcon. The P-51 was flown by renowned warbird pilot, Steve Hinton, who flew the aircraft on behalf

of the Air Force Heritage Flight Foundation in the first Heritage Flight at a Super Bowl.

In 1979, Hinton became the youngest person to set a new 3-kilometer world speed record for piston-powered aircraft in a highly modified P-51 Mustang. A founding member of the Motion Picture Pilots Association, Hinton has served as a pilot and/or aerial coordinator for more than 60



Steve Hinton s of the North Air Museum Photo

motion pictures and made-for-television movies, series and commercials, including serving as chief pilot for the motion picture "Pearl Harbor" in 2001, and as himself in "Iron Man" (2008). Hinton owns Steve Hinton Filmography.

Sierra Sue II is one of only a handful of flying Mustangs that actually saw combat in World War II. Assigned in 1945 to the 402nd Fighter Squadron, 370th Fighter Group, 9th



USAF Heritage Flight Flyby at Super Bowl LII over the U.S. Bank Stadium in Minneapolis, Minnesota.

Nick Halseth Pulsevisuals



Wings of the North Air Museum's Sierra Sue II P-51 Mustang. Winas of the North Air Museum Photo



The ramp at Thunderbird Aviation, Flying Cloud Airport, Eden Prairie,



The ramp at St. Cloud Aviation, St. Cloud Regional Airport, St. Cloud, Minnesota. St. Cloud Aviation Photo



The staff at Thunderbird Aviation, Flying Cloud Airport, Eden Prairie, Minnesota. Thunderbird Aviation Photo

Air Force, 1st Lt. Robert Bohna named the plane for a girl he knew in high school. Sierra Sue II was fully restored in 2014 by AirCorps Aviation in Bemidji, Minnesota to replicate 1944 factory delivery specifications. Authentic details include working World War II era radios and full armor plating.

Wings of the North was proud to support the USAF Heritage Flight Program, which presents the evolution of USAF air power by flying today's state-of-the-art fighter aircraft in close formation with vintage fighter aircraft. A 501(c)(3) nonprofit organization based at Flying Cloud Airport, Wings of the North serves people of all ages by restoring and showcasing flying aircraft to bring history to

life, honoring Minnesota's aviation pathfinders and veterans through exhibits and events, and inspiring youth to meet 21st century challenges by using science, technology, engineering and mathematics (STEM).

Wings of the North Museum Director Bob Jasperson, and Wings of the North board member, Jack Larsen, were involved in the flyover. A pilot for 30 years, and the Executive Vice President at Optum, headquartered in Eden Prairie, Minn., Larsen values the life lessons that flying brings to

his work. Larsen was contacted by the commanding general of the Heritage Flight Foundation to involve Sierra Sue II and Steve Hinton in the flyover.

At Flying Cloud Airport where the Heritage Flight was staged, both runways 18-36 and 10L-28R were closed for aircraft parking, and the Metropolitan Airports Commission had designated overflow parking on the south side of the airport.

The control tower was open 24 hours a day on Sunday and Monday, and extended their hours for the days leading up to and after the Super Bowl.

CONTINUED ON PAGE 62



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Contact: Karl Kemper, PE Airport Services Manager kkemper@becherhoppe.com

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Civil Air Patrol Support of Super Bowl Air-Defense Operations

MAXWELL AIR FORCE BASE, ALA. – A demonstration of an airplane flying into restricted Super Bowl airspace was held January 30, 2018 with Minnesota Air National Guard F-16s intercepting a Cessna from the Minnesota Wing of the Civial Air Patrol. "CAP airplanes are used throughout the year to assist the Air Force with training to protect the skies across the country," said Col. James Garlough, commander of CAP's Minnesota Wing. "The CAP showed the media how it was done on February 4, 2018, around U.S. Bank Stadium in Minneapolis during Super Bowl LII." Since the terrorist attacks of September 11, 2001, the Federal Aviation Administration routinely implements no-fly zones, called Temporary Flight Restrictions (TFRs), around major events to ensure that no general aviation airplanes enter a specified radius. Air Force fighter aircraft enforce the TFRs during the time of the event.

The demonstration, hosted by the Minnesota Air National Guard's 148th Fighter Wing at Duluth Air National Guard Base, simulated an aircraft that enters the no-fly zone around the Super Bowl being intercepted. Air Force pilots flew alongside the CAP plane, made radio contact, and guided it out of restricted airspace.

This mission marks CAP's 16th year as a participant in North American Aerospace Defense Command air-defense exercises designed to protect the airspace over the Super Bowl. CAP is involved in similar exercises around the U.S. throughout the year to test airspace security. The air-defense exercises are carried out as part of "Operation Noble Eagle," coordinated by the Continental U.S. NORAD Region. The exercises are conducted in coordination with the FAA and other interagency organizations as appropriate.

The Civil Air Patrol, the longtime all-volunteer U.S. Air Force auxiliary, is the newest member of the Air Force's Total Force. In this role, CAP operates a fleet of 560 aircraft, performs about 90 percent of the continental U.S. inland search and rescue missions as tasked by the Air Force Rescue Coordination Center (AFRCC), and is credited with saving an average of 80 lives annually. CAP's 57,000 members also perform homeland security, disaster relief and drug interdiction missions at the request of federal, state and local agencies. CAP also plays a leading role in aerospace/STEM education, and its members serve as mentors to 24,000 young people participating in CAP's Cadet Programs (www.GoCivilAirPatrol.com).

Kansas & Missouri Aviation Industry News

Missouri Pilot Appointed Executive Director Of Malibu/Mirage Owners & Pilots Association

OVERLAND PARK, KAN. - The Malibu/ Mirage Owners & Pilots Association (MMOPA) has appointed Missouri native and pilot, Dianne White, executive director effective April 1. White follows Brian Cameron who is retiring. In addition, White will continue to serve as editor of *MMOPA Magazine*.

White has more than 30 years of marketing and business management addition to *MMOPA Magazine*, she is the



experience. In editor of Twin &

Turbine Magazine, a post she has cumulatively held for 15 years. Previously, White was owner and president of Kansas Aircraft Corporation, a factory-appointed Cessna propeller aircraft dealer and reseller in New Century, Kan., which she and her husband, Tim White, purchased in 2013 and sold in 2016. In addition, White worked as a vice president at Cessna Aircraft and has consulted for Beechcraft, Cessna and numerous other general aviation companies and aircraft owners' associations, including

the International Comanche Society, Cessna Owners & Pilots Association, and Citation Jet Pilots Association. White is an active instrument and multi-engine-rated pilot. Having grown up in an aviation-centric family, she has been flying for 26 incident-free years and owns several aircraft.

"MMOPA is a strong, growing organization that provides resources, tools and top-caliber events, such as the annual convention, to promote safety and help members get the most out of their aircraft," says White.

The Malibu/Mirage Owners & Pilots Association is a not-for-profit organization dedicated to the interests and safety of owners and pilots worldwide who fly PA46 derivative (Malibu, Mirage, Meridian, JetPROP, Matrix and M-Class) aircraft. MMOPA was founded in 1988, and now serves more than 1,000 members. Membership is available to any registered or prospective owner and/or operator of qualified aircraft or any qualifying individual or organization involved with or providing a service for the PA46 family of aircraft. MMOPA is not affiliated with Piper Aircraft, nor any other manufacturer/vendor (MMOPA.com).

New Approaches Published For Lee's Summit Municipal Airport (KLXT)

LEE'S SUMMIT, MO. - On February 1, 2018, the Federal Aviation Administration (FAA) published new instrument approach procedures (IAPs) for runway 18-36 at Lee's Summit Municipal Airport (KLXT), Lee's Summit, Mo. The new IAPs provide official confirmation from the FAA of the 5,501-ft. length of runway 18-36.

While the extension of runway 18-36 from 4,016 ft. to 5,501 ft. was completed at the end of September 2017, the publication of the new approaches is another important milestone. "The publishing of the new approaches means that Lee's Summit Municipal Airport, and its 5,501-ft. runway, is officially on the map," says airport manager, John Ohrazda.

"We have received many inquiries into the lengthened runway, but many pilots were not able to fly in until the approaches became officially published. We look forward to seeing new faces at the airport and we're ready to showcase the improvements and our exceptional customer service."

KLXT, located just minutes from Kansas City, Mo., provides full-service fixed base operator service. With quick and easy highway access, and close proximity to the Truman Sports Complex and downtown Kansas City, KLXT is in a great location for anyone flying into or out of the Kansas City metropolitan area. KLXT has two runways: 18-36 is a grooved concrete runway 5,501feet in length and 100 feet wide; and 11-29 is 4,000 feet in length and 75 feet wide. KLXT also has a 40,000-square foot enclosed heated hangar available for storage, concierge services, a new pilot's lounge, crew cars and more.

For more information about Lee's Summit Municipal Airport, visit LSAirport.net or call 816-969-1186.

Illinois Aviation Industry News

Abraham Lincoln Capital Airport Receives National Partnership Award



(L/R) Springfield Airport Authority Director of Operations and Public Safety, Tim Franke; Airport Commissioner, Dianne Barghouti-Hardwick; Springfield Airport Authority, Lieutenant Michael Buchele; Springfield Police Department, Chief Kenny Winslow; Sangamon County Sherriff's Office, Captain Cheryllynn Williams; Transportation Security Administration, Federal Security Director John Hursey; Transportation Security Inspector, Nicole Rush; Assistant Federal Security Director, Kenneth Jefferson; Transportation Security Manager, Karin Martin; Springfield Airport Authority Executive Director, Mark Hanna.

WASHINGTON, DC - The Transportation Security Administration (TSA) has selected Abraham Lincoln Capital Airport (SPI) in Springfield, Illinois, as the recipient of the agency's annual National Partnership Award.

SPI was recognized for the priority they place on security and the proactive efforts of the airport to collaborate with federal, state and local partners to advance the security mission.

"The airport and public safety leadership not only work tirelessly to maintain SPI as a security showcase,



but they are also leaders in the law enforcement and first responder communities at the local, state and federal level," said John Hursey, TSA Federal Security Director for Downstate Illinois. "I am proud to have SPI as a partner in our security mission."

SPI consistently champions activities, such as joint training, strategic planning and security-related partnership initiatives. Such events include joint reviews of security plans,

and upgrades of closed circuit television and access control features.

TSA's National Partnership Award recognizes industry partners whose accomplishments and excellence in performance distinctly benefit the interests of the United States and clearly advances TSA's mission to protect the nation's transportation systems while significantly enhancing TSA's ability to achieve its strategic goals (www.tsa.gov).

AOPA Withdraws FAA Complaint Against Waukegan Airport

FREDERICK, MD – In August 2017, the Aircraft Owners and Pilots Association (AOPA) filed three Part 13 complaints with the Federal Aviation Administration (FAA) over egregious FBO fees at three airports, one of which was Waukegan National Airport, just outside of Chicago. But following recent improvements, AOPA has withdrawn its complaint, acknowledging the steps taken by the airport to make it more accessible and friendlier to pilots.

AOPA President and CEO Mark Baker said, "Grant Farrell from the Waukegan Port District and Skip Goss, the airport manager, understand the value of general aviation and importance of competition. We thank them for listening to our concerns and taking proactive steps to meet federal grant obligations and improve access."

The airport management has made concerted and transparent actions to improve the accessibility of the airport to transient users by offering alternative ramp parking and facilitating lower fuel prices.

AOPA's complaint alleged that the sole fixed base operator on the field was using its monopoly position to force aircraft operators to buy unreasonably priced fuel and pay fees for services that were neither requested nor utilized.

In response, the airport announced in December 2017 that it would offer free tie-downs for transient aircraft and a pedestrian gate to access the ramp so pilots and passengers are not forced to go through the fixed base operation. The operator also reduced the price of self-service avgas from almost \$6 a gallon to \$4.81.

"This is just the sort of response we are hoping for," Baker said. "Our preference is that airport sponsors and FBOs themselves seek ways to give pilots choices when an FBO has a monopoly. We hope other locations can see Waukegan as a model. In the meantime, we will continue to press other locations to be more transparent with their fee structures and to provide pilots with choices when it comes to which services they choose to use at an airport."

AIRCRAFT

GAMA Announces 2017 Year-End Aircraft Shipment & Billings Numbers

WASHINGTON, DC - The General Aviation Manufacturers Association (GAMA) has released the 2017 year-end aircraft shipment and billings numbers. At a press conference held in February 2018, GAMA Chairman Phil Straub, Executive Vice President and Managing Director of Garmin Aviation, announced that airplane shipments globally increased 2.5 percent, from 2,268 units in 2016 to 2,324 units in 2017 from the same reporting companies. Conversely, airplane billings declined 4.2 percent, from \$21.1 billion to \$20.2 billion. Worldwide rotorcraft shipments rose 7.5 percent, from 861 units in 2016 to 926 units in 2017. Rotorcraft billings increased by 1.4 percent, from \$3.6 billion in 2016 to \$3.7 billion in 2017.

Notable from these numbers is that the rotorcraft segment stabilized after several years of declining deliveries. Piston rotorcraft experienced the largest increase of all segments at 264 unit deliveries, compared to 224 in 2016, a 17.9 percent increase. Preliminary turbine rotorcraft data also indicates an increase of 3.9 percent, to 662 aircraft delivered.

Business jet aircraft deliveries grew slightly, by 1.3 percent, rising from 667 to 676 units. Driving this growth are the several new aircraft models that entered into service in 2017. Turboprop deliveries slowed to 563 airplanes, compared to 582 deliveries in 2016; a 3.3 percent decline, while piston airplane shipments strengthened by 6.5 percent, to 1,085 units

GAMA is an international trade association representing over 100 of the world's leading manufacturers of general aviation airplanes and rotorcraft, engines, avionics, components and related services (www.GAMA.aero).

Piper Announces 23% Growth For 2017

VERO BEACH, FLA. - Piper Aircraft, Inc. has announced a 23% increase in aircraft deliveries for 2017, as well as a 27% increase in total billings.

The substantial growth was driven by a 50% year over year increase of single-engine primary trainer aircraft deliveries, as well as a 70% increase in deliveries of multi-engine trainers. Additionally, sales of Piper's flagship product, the M600, expanded by 59%, which helped drive Piper total billings up by nearly \$41M vs 2016. International deliveries of Piper products showed moderate growth of 5%, resulting in 25% of Piper products being shipped to countries outside of North America.

In addition to Piper's sales success, the company celebrated its 80th anniversary in 2017, as well as the completion of six

new amended type certificates. The continued rise in demand for Piper trainers has resulted in an order backlog into 2019, as well as a 25% increase in workforce.

"Piper's ability to level-load aircraft production has allowed us to meet solid financial growth and performance goals while expanding our worldwide sales visibility and efforts, especially in the pilot training realm," said Piper President and CEO Simon Caldecott. "As we look towards 2018, we are excited about the growth in demand for aircraft trainers and the resulting contracts that we have been awarded, which has helped create a backlog of orders. Additionally, working with our full-service dealers, we look to continue to grow M-class demand and sales," he added.

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

Piper Receives Largest Trainer Order In Company History

VERO BEACH, FLA. - Piper Aircraft, Inc. has received an order for 152 aircraft from Fanmei Aviation Technologies, Piper Aircraft's exclusive dealer in China. This is the largest single trainer order received by Piper Aircraft in company history. Fanmei Aviation Technologies is a subsidiary of Sichuan Fanmei Education Group Co. Ltd, which is a leading provider of aviation education in China.

The historic seven-year purchase agreement, valued at \$74M, includes 100 Archer TX single-engine trainers, 50 multi-engine Seminoles, one Seneca and one Piper M350. Deliveries began in March with the first aircraft going to the Fanmei Flight School in Sichuan province.

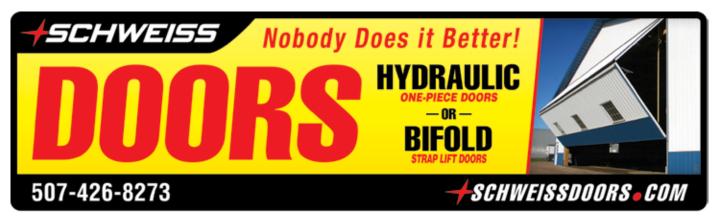
"We are very excited to have Fanmei Aviation Technologies in our dealer network," said Piper's Asia Pacific Sales Manager, Jeremy Prost. "Fanmei Education Group has a great vision for the future of General Aviation in China, and we believe that this vision and commitment will work in pair with Piper's 80 years of aircraft manufacturing experience to supply highquality aircraft and support to Chinese customers."

"The agreement and cooperation with Piper Aircraft is

the key element for our general aviation roadmap," said Don Li, President of Fanmei Aviation Technologies. "Everything else was already in place, including a quality training program with committed staff and outstanding facilities, and now we have added to our fleet, in my opinion, the premier training aircraft in the world with the Piper Archer and Seminole, which will help prepare our students for their continued success after graduation. In addition, as the exclusive Piper dealer in China, we look forward to serving our customers in the fast-growing general aviation market, not only with excellent Piper aircraft, but also with our most dedicated high-quality services."

"Just as we are making history with receiving this large order, so is Fanmei by establishing a prestigious pilot development program to meet the growing need for exceptionally trained airline flight crews," said Piper President and CEO Simon Caldecott. "This is a wonderful opportunity for both organizations as we work collectively to help address the global pilot shortage."

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



Textron Discontinues Production of The Cessna TTx

WICHITA, KAN. - Textron Aviation has decided to discontinue production of the Cessna TTx due to lagging sales of the world's fastest production piston single-engine fixed gear airplane. The aircraft started as a kitplane at Lancair, then through Columbia Aircraft, company founder Lance Neibauer, manufactured the Columbia 300 in 1998, and the Columbia 400 in 2000. Inefficient production, fierce competition, and an untimely hailstorm conspired to spell the end of Columbia, and Cessna bought the design less than a year after Columbia's 2007 bankruptcy. Cessna then renamed the airplane first as the Corvalis TT, which logged a handful of sales for the first few years, a total of seven in 2010, the first year the General Aviation Manufacturers Association began publishing such data, none in 2011, then 21 in 2013, after Cessna changed the paint scheme and renamed the aircraft

the TTX (later, the TTx).

Annual shipments reached their peak in 2015, with 44 TTx models shipped, according to GAMA data. That was 16 percent of all Cessna piston airplanes sold that year including all four piston models still in production then. By 2017, TTx sales slipped to 23 units, just under 10 percent of all Cessna piston sales, and a fraction of the 355 piston singles (SR20, SR22, and SR22T models) sold by Cirrus last year. Even the Beechcraft Bonanza (13 G36 Bonanzas sold in 2017) was starting to catch up, at least in terms of revenue. Textron meanwhile sold 129 Cessna Skyhawks, 46 Skylanes, and 40 Turbo Stationairs in 2017 – sales figures that reflect relatively steady performance for piston models, all designed decades before the TTx was even a Columbia 400.

EAA Air Venture Oshkosh 2018

Top Airshow Performers Commit To EAA AirVenture Oshkosh 2018



Airshow performer, Matt Younkin, flying his Twin Beech at EAA AirVenture Oshkosh. Built in 1942, the Beechcraft C-18 was retired by the military in 1947, and flown as a corporate aircraft for many years before it was purchased by a collector. Matt Younkin's father, the late Bobby Younkin, purchased the aircraft and converted it to perform aerobatics. The aircraft weighs 6,500 lbs., and is lighter and more maneuverable than the later model, Beech 18. With a wingspan of 49 feet, Younkin's Twin Beech is one of the largest aerobatic showplanes in the world!

OSHKOSH, WIS. – Many of the world's top airshow performers have committed to fly at EAA AirVenture Oshkosh 2018, July 23-29 at Wittman Regional Airport in Oshkosh, Wis. The afternoon airshows are presented by Quest Aircraft and Pratt & Whitney Canada, while the Saturday, July 28th, night airshow is presented by Oshkosh Corporation.

"We use the feedback collected each year to bring favorite performers back to Oshkosh, while adding exciting new acts and airshow attractions connected with particular aircraft, events, and anniversaries," said Rick Larsen, EAA's vice 56 APRIL/MAY 2018 MIDWEST FLYER MAGAZINE president of communities and member programs, who coordinates AirVenture features and attractions.

Among the performers and aircraft already planning to appear at Oshkosh in 2018 include the following: AeroShell Aerobatic Team (T-6s), Vicky Benzing (Extra 300S), Canadian Harvard Aerobatic Team (Harvards), Bob Carlton (SubSonex JSX-2), Kirby Chambliss (Edge 540), Matt Chapman (Extra 300LX), Class of '45 (P-51/Corsair), Kyle Fowler (Rutan Long-EZ), Kyle Franklin (Demon-1 Dracula), GEICO Skytypers (SNJ-2s), Mike Goulian (Extra 330SC), Rob Holland (MXS-RH), Jerry Kerby (RV-8A), Greg Koontz (Xtreme Decathlon/Piper J-3 Cub), Justin Lewis (FLS Microjet), David Martin (Beech Baron), Jessy Panzer (Pitts Special), Paradigm Aerobatic Team

(powered paragliders), Patriot Parachute Team (skydiving), Jim Peitz (Beechcraft F-33C Bonanza), Gene Soucy/Teresa Stokes (Showcat), Bill Stein (Zivko Edge 540), Skip Stewart (Pitts S2S Prometheus), Trojan Thunder (T-28 Trojan), Sean D. Tucker (Oracle Challenger III), Patty Wagstaff (Extra 330S), Scott Yoak (P-51 Mustang), and Matt Younkin (Twin Beech 18).

Airshow performers have long looked at performing at Oshkosh as the pinnacle of the career, and an opportunity to showcase their corporate sponsors. Flying the massive crowd line along runway 18/36 at Wittman Regional Airport is an

adrenaline rush for most pilots – something they really look forward to each year, or at least once in a lifetime.

In addition to these early confirmations, many more performers will be announced, including some only-in-Oshkosh performers and aircraft. Exact days for each performer and complete daily airshow lineups will be announced as they are finalized.

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 reservations, 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 2018 – The Year of the Tanker

OSHKOSH, WIS.

– The Air Force Reserve is celebrating its 70th anniversary at EAA AirVenture Oshkosh 2018, bringing its impressive fleet of military refueling aircraft as part of AirVenture's "Year of the Tanker."

The 66th annual Experimental Aircraft Association fly-in convention is July 23-29 at Wittman Regional Airport in Oshkosh, Wisconsin.



The McDonnell Douglas KC-10 Extender, used in aerial refueling, is the U.S. Air Force version of the DC-10 flown by the airlines.

forums and programs
highlighting the Reserve's
mission around the world
in support of military and
humanitarian operations.
"The 70th anniversary

"The 70th anniversary of the Air Force Reserve is a superb time to tell the story of our Citizen Airmen who provide a tremendous amount of operational experience to the Air Force mission and for aviation fans, there's no better place to demonstrate

that than at Oshkosh," said Lt. Gen. Maryanne Miller, Chief of Air Force Reserve, Headquarters U.S. Air Force, Washington, D.C., and Commander of Air Force Reserve Command, Robins Air Force Base, Georgia. "Innovation is in our DNA, and it comes from the diverse experience our Reserve Citizen Airmen bring to the mission from various communities across the nation."

Announcements of specific aircraft and programming during EAA AirVenture 2018 will be made as they are finalized (www.EAA.org/airventure).

The Air Force Reserve Command, which encompasses nearly 70,000 Citizen Airmen, will bring operational aircraft to Oshkosh in 2018 and participate in a unique display showcasing the past, present, and future of tanker aircraft.

"We are honored that the Air Force Reserve will mark its 70th anniversary at Oshkosh, as it is a perfect place to showcase the Reserve's aircraft and Citizen Airmen," said Rick Larsen, EAA's vice president of communities and member programs, who coordinates AirVenture features and attractions. "Its presence will make the 'Year of the Tanker'

possible, but it will feature other aircraft and programs during the week."

Air Force Reserve Command aircraft will participate in the daily airshows at AirVenture 2018, and be displayed on Boeing Plaza throughout the week. Reserve Citizen Airmen will also participate in "WomenVenture," creating opportunities for all to meet and connect in an event designed to encourage and inspire the next generation of women in aviation. In addition, there will be special



Calendar

Include the DATE, TIMES, LOCATION (CITY, STATE & AIRPORT NAME & I.D.), and CONTACT PERSON'S TELEPHONE NUMBER, as well as that person's address & email address for reference. First 15 words FREE. \$.75 for each additional word.

Go to "Calendar" at www.MidwestFlyer.com and post your aviation event.

You can also email: info@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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* INDICATES ANY NEW OR UPDATED CALENDAR LISTINGS SINCE THE PREVIOUS ISSUE,

APRIL 2018

- **7-8*** COLUMBUS, GA. Quick Silver P-51 Airshows with pilot Scott "Scooter" Yoak performing. runwayTHREE-SIX.com.
- **10-15*** Lakeland, Fla. Quick Silver P-51 Airshows with pilot Scott "Scooter" Yoak performing. runwayTHREE-SIX.com.
- 10-15* Lakeland, Fla. Sun 'n Fun International Fly-In & Expo. www.flysnf.org/
- 18-20 DULUTH, MINN. Minnesota Airport Conference at the Duluth
 Entertainment Convention Center 350 Harbor Dr. The conference,
 held in conjunction with the Minnesota Council of Airports annual
 meeting, also includes technical and safety presentations, an
 industry trade show, and an awards and recognition program.
 http://www.airtap.umn.edu/events/airportsconference/2018/
- 21 BLOOMINGTON, MINN. Minnesota Aviation Hall of Fame at the Hyatt Regency Hotel. Registration is available January 1. www.mnaviationhalloffame.org
- 21 WATERTOWN (KRYV), Wis. Cirrus Systems Firewall Forward Seminar presented by Dan Stammen 9am-Noon at Watertown Municipal Airport - Wisconsin Aviation. Lunch & Swag provided by Cirrus Aircraft.
- 24* Washington, D.C. Roundtable : Preventing Inflight Loss of Control in General Aviation through Training and Technology at NTSB Boardroom & Conference Center 8:30am-3pm. It will also be webcast live: https://www.ntsb.gov/
- 25 St. Paul, Minn. 7th Annual Minnesota Aviation Day At The Capitol. This event is open to people actively involved in aviation in Minnesota and believe in the importance of airports. Contact Tim Cossalter at timcossalter@outlook.com or 651-269-1221. See page 7 for info.
- 27-28 BLAINE (ANE), MINN. 2018 Great Minnesota Aviation Gathering www.mnpilots.org
- 28 Оsнкоsн (KOSH), Wis. French Toast Breakfast & explore the aviation training hangar and labs, visit with faculty and try out our full-motion Redbird flight simulators at S.J. Spanbauer Aviation & Industrial Center 8am-Noon. 920-236-6112, frost@fvtc.edu
- 28-29* MYRTLE BEACH, S.C. Quick Silver P-51 Airshows with pilot Scott "Scooter" Yoak performing. runwayTHREE-SIX.com.

Breezy Point Aviation Days - Saturday, May 5, 2018 Breezy Point, Minnesota (8MN3) - 10AM-2PM

- Pig Roast: Commander Bar Lot At 12 p.m.
- Pilots & Friends Social: Aircraft Displays
- Static Displays: City/County Emergency Vehicles & Medi-Vac Helicopter
- Classic Car Show: All Collector Cars Invited To Compete For \$500 Prize!
- Kentucky Derby: Live Broadcast

Static Displays Only. No Air Show or Aerobatics.

Breezy Point is a private airport. Pilots must call 218-838-3434 for permission to land and visit breezypointairport.com for a pilot briefing. CTAF: 122.9

MAY 2018

- 4-6 WAUKESHA (KUES), Wis. Bonanza & Baron Pilot Training (BPT) Clinic. Register 970-206-0182 or visit www.bonanzapt.com or call Mick Kaufman at 817-988-0174.
- 5* BREEZY POINT (8MN3), MINN. Breezy Point Aviation Days. Pig Roast starting at Noon. Classic Car Show & Static Display. Pilots must call 218-838-3434 for permission to land because it is a private airport. Pilot Briefing at breezypointairport.com CTAF: 122.9
- 5* Fond du Lac (KFLD), Wis. Young Eagle Rally, Airport Open House & Pancake Breakfast 7am-Noon.
- 5* St. Charles (KSET), Mo. Celebrate the start of seaplane season with Flying Fish at their first annual hangar hula luau! Event starts at 5pm. Get your tickets here, https://flyingfishseaplanes.com/hangar-hula-luau
- 5-6* Ft. Lauderdale, Fla. Quick Silver P-51 Airshows with pilot Scott "Scooter" Yoak performing. runwayTHREE-SIX.com.
- 6-8 WISCONSIN DELLS, WIS. 63rd Wisconsin Aviation Conference at the Wilderness Resort. wiama.org/conference/
- 12-13* TAMPA, FLA. Quick Silver P-51 Airshows with pilot Scott "Scooter" Yoak performing. runwayTHREE-SIX.com.
- 16* GRANITE FALLS (KGDB), MINN. Ray Fagen Memorial Airshow. Many rare WWII Reenactors and Camps, WWII Vehicles and more. www.fagenfighterswwiimuseum.org
- 19-20* Намртон, Va. Quick Silver P-51 Airshows with pilot Scott "Scooter" Yoak performing. runwayTHREE-SIX.com.
- 18-20 Brainerd, Minn. Minnesota Seaplane Pilots Association (MSPA) Safety Seminar, Madden's on Gull Lake. www.mnseaplanes.com
- 20 BRODHEAD (C37), Wis. Pancake Breakfast 7am-Noon. eaa431.org.
- 26* LAKIN (36K), KANS. Fly-In & Alrshow featuring Brian Correll at the Kearny County Airport gates open 9am. Car show, crafts, vendors, food trucks. fun run & concert. Free Admission.

JUNE 2018

- 2* MILNOR (4R6), N.D. Milnor June Fest Fly-In Breakfast & Fly-In. Rain or Shine 7am 11am. milnorairport.com.
- **2*** Manitowoc (KMTW), Wis. Secret Recipe Pancakes, Sausage, Beverage and Applesauce Breakfast 7:30-11am.
- 2-3* Blaine (KANE), Minn. Discover Aviation Days at Anoka County Blaine Airport. Breakfast & Lunch, aircraft displays, pilot seminars, many product and food vendors, many exhibitors, kids activities, aircraft & helicopter rides and more! PIC eat free. 7:30am to 4pm each day, like us on Facebook. www.DiscoverAviationDays.com info@DiscoveryAviationDays.com or 763-568-6072.
- 2-3* PATUXENT RIVEN, Mb. Quick Silver P-51 Airshows with pilot Scott "Scooter" Yoak performing. runwayTHREE-SIX.com.
- WILD Rose (W23), Wis. Pancake, Sausage & Egg Breakfast 7:30-11am and Pork, Beef Roast, Potato Salad & Beans 11:30am-2pm at the Wild Rose Idlewild Airport. Rain or Shine. 920-851-0271.
- **3*** AUDUBON, Iowa Breakfast 6:30-10:30am. 712-563-3780.
- 9 Eastport (59M), Mich. Torchport Fly-In Breakfast & Classic Car Show 8-11am.
- 9* St. Francisville (KAJG), Ill. Military and Civilian Aviation Careers

- showcased. Gates open at 8:30am and close at 6:30pm. Free Fly-In. Car Parking \$3.00.
- 9* Brainerd (KBRD), Minn. 2018 Grass is a Gas Poker Run. Start at KBRD, fly to 4 grass strips and pickup poker card in sealed envelope. Plenty of socializing at every stop. Return to Brainerd, play your hand for some great prizes. In addition to best hands, many nice door prizes, everyone goes home with something. New route this year, come fly the beautiful Brainerd Lakes area! Preflight briefing at 08:15, wheels up at 08:30 or after. 612-750-2981. winger701@gmail.com
- 9-10* NIAGARA FALLS, N.Y. Quick Silver P-51 Airshows with pilot Scott "Scooter" Yoak performing. runwayTHREE-SIX.com.
- 10* Rush City (ROS), Minn. Pancake Breakfast 8am-Noon. Afternoon food available until 2pm, Antique Warbirds, flight simulators, kids events. This event is open to the public!

15-16 Missoula, Montana - AOPA Regional Fly-In. www.aopa.org

- 16-17* Eau Claire (EAU), Wis. Chippewa Valley Airshow featuring U.S. Navy Blue Angels plus additional performers and static ground displays such as B-29 Doc.
- 17* Hutchinson (HCD), Minn. JC Water Carnival & Pancake Breakfast & Car Show. 612-516-9962.
- 20-22* SALINA, KANS. Summer Kansas Association of Airport (KAA) conference. kansasairports@gmail.com
- **24*** Macomb (MQB), ILL. Airport Open House & Pancake Breakfast 7am-Noon.
- 24* St. Cloud (KSTC), Minn. Pancake & Sausage Breakfast 8am-1pm at the St. Cloud Airport in Hangar 2. Classic Car Show.
- 30-7/1* BATTLE CREEK, MICH. Quick Silver P-51 Airshows with pilot Scott "Scooter" Yoak performing. runwayTHREE-SIX.com.

JULY 2018

- 1* Austin, Minn. Pancakes, SPAM, sausage, milk, coffee, juice Breakfast 7am-1pm. 507-440-6596.
- 6-7* PHILLIPS, Wis. Fly-In, Airshow & Float-In. 6th Evening Show. 7th Airshow 11am and Breakfast at Harbor View before show and Lunch following show with Live Band 8pm to Midnight. Performers Grant Nielson Cap 232, David Scott S1 Pitts, Mike Weinfurter L-19 Warbird, Don Arvold Helicopter Ride & Demo, Announcers Brittney Nielson & Jeff Overby, AirBoss Darrel Massman: 715-339--3701.
- 7 Starbuck (D32), Minn. Pancakes by Chris Cases, sausage, coffee & water 7am-Noon. Floatplanes welcomed to land on Lake Minnewaska. Held in conjunction with Heritage Days, a short 1/4-mile walk. Overnight camping with modern AD building with showers.
- 7* RIO CREEK (WI28), Wis. Porky Pancake Breakfast 7:30am. Brats, Burgers, Booyah, Beer & More. Band, Antique Cars & Tractor Show and more. www.riocreekairport.com. 122.9 Frequency, Runway 25 & 7 Turf 2800 ft. Elev 717'
- 7-8* Isle, (MY72), MINN. Isle Flying Club flight breakfast on Sunday 7/8/18 and Saturday night (7/7/18) Camp out. Held in conjunction with Isle City Days. Parade and fun in town Saturday evening. Eggs, sausage and pancake breakfast from 7 11am on Sunday. PIC's free! See the improvements at Isle Airport. Dave Retka 651-263-8614 daveretka@gmail.com
- 7-8* DULUITH, MINN. Quick Silver P-51 Airshows with pilot Scott "Scooter" Yoak performing. runwayTHREE-SIX.com.
- **14-15* G**ENESEO, **N.Y.** Quick Silver P-51 Airshows with pilot Scott "Scooter" Yoak performing. runwayTHREE-SIX.com.
- 21-22* Shiocton (KW34), Wis. Brats, Hamburgers, fries available both days. Sunday 7-11am Potato & Wheat Pancakes, Eggs, Sausage & Beverage. Bands Saturday & Sunday afternoon & Saturday evening.
- 19-21* EAU CLAIRE (EAU), Wis. American Barnstormers Tour for three days of open cockpit biplane rides, vintage biplane static displays and daily aerobatic demonstrations. Admission is free; Bi-plane

- rides are \$80.00/person https://www.facebook.com/tour2018/
- 21 Washington Island, Wis. Fish Boil serving from 11am-1pm. www.WashingtonIsland-wi.gov
- 23-29 OSHKOSH (KOSH), Wis. EAA AirVenture Oshkosh 2018. www.airventure.org 920-426-6510.

AUGUST 2018

- 9-12 MIMINISKA LODGE, ONTARIO, CANADA Canada Fishing Fly-Out 3-Night/2-Day Trip. FOR RESERVATIONS: Contact Lynette Mish at Wilderness North toll free: 1-888-465-3474.
- 9-14 MIMINISKA LODGE, ONTARIO, CANADA Canada Fishing Fly-Out 5-Night/4-Day Trip. FOR RESERVATIONS: Contact Lynette Mish at Wilderness North toll free: 1-888-465-3474.
- 12-15 MIMINISKA LODGE, ONTARIO, CANADA Canada Fishing Fly-Out 3-Night/2-Day Trip. FOR RESERVATIONS: Contact Lynette Mish at Wilderness North toll free: 1-888-465-3474.
- 18 GRINNELL (KGGI), Iowa Fly Iowa 2018 Grinnell RAP, the Jewel of the Sky. Breakfast, exhibits, youth activities & air show. Rain dte for air show 19th.
- 19 LINO LAKES (8Y4), MINN. Minnesota Seaplane Pilots Association Pig Roast at Surfside Seaplane Base.
- 25* Mattoon (MTO), ILL. Air Show '18. A day of family fun. Food vendors, rides, monster trucks and much more!
- **25-26*** YPSILANTI, MICH. Quick Silver P-51 Airshows with pilot Scott "Scooter" Yoak performing. runwayTHREE-SIX.com.

SEPTEMBER 2018

- 1* GLENCOE (KGYL), MINN. Sweet Corn & Bratwurst Fly-In 10am-2pm.
- 14-15 SANTA FE, N.M. AOPA Regional Fly-In. www.aopa.org
- **15-16* OWENSBORO, Ky. - Quick Silver P-51 Airshows with pilot Scott** "Scooter" Yoak performing. runwayTHREE-SIX.com.
- 18* WATERTOWN (KRYV), Wis. Open House & Pancake Breakfast.
- **10-15* Dulles, Va. -** Quick Silver P-51 Airshows with pilot Scott "Scooter" Yoak performing. runwayTHREE-SIX.com.

OCTOBER 2018

- 5-6 CARBONDALE, ILL. AOPA Regional Fly-In. www.aopa.org
- 7* CARBONDALE, ILL. Avidyne 8-Hour Mastery Training, following AOPA Great Lakes Regional Fly-In: www.AvidyneTraining.com. 800-284-3963.
- 13-14* Rome, Ga. Quick Silver P-51 Airshows with pilot Scott "Scooter" Yoak performing. runwayTHREE-SIX.com.
- **16-18** ORLANDO, FLA. 2018 National Business Aviation Association (NBAA) Business Aviation Convention & Exhibition. www.nbaa.org
- 26-27 GULF SHORES, ALA. AOPA Regional Fly-In. www.aopa.org NOVEMBER 2018
- 3-4* STUART, FLA. Quick Silver P-51 Airshows with pilot Scott "Scooter" Yoak performing. runwayTHREE-SIX.com.
- 10-11* Моное, N.C. Quick Silver P-51 Airshows with pilot Scott "Scooter" Yoak performing. runwayTHREE-SIX.com.

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AIRPORT MANAGER WANTED - The Tri-State Steuben County Airport in Angola, Indiana is conducting a search to fill the position of Airport Manager. This position is very "hands on." The successful candidate will have extensive knowledge in the business and operations of a general aviation airport serving a small community and will bring ideas to expand activity at the airport with aviation-related and other uses. Additionally, the successful candidate will possess personnel managerial skills to direct part-time labor and soft skills required to interact cordially with professional and private pilots, as well as local officials, media and the general public. Annual compensation is \$40,000 to \$50,000, plus county employee benefits. For a complete job description for this position, please connect to the following link: http://steubencountyairport.com/job-description/ Please send resume to: mailto:steubencountyairport@gmail.com

PILOT'S DREAM HOME FOR SALE - Hutchinson, Minnesota. Custom Timber Frame with heated hangar ~1400 ft. landing strip. 3 BR, 4 BA, 4000+ sq feet, 20 acres. Call **612-978-2424 (Steve Hahn, Broker).**

HANGARS FOR RENT at Southern Wisconsin Regional Airport (JVL), Janesville, WI. JVL is an all-weather, full-service airport with three runways, precision and non-precision approaches, conveniently located between Madison, WI and Rockford, IL. Glen Erin Golf Club and Cursing Stone Pub, an 18-hole public golf course and restaurant is located on the airport within walking distance of the main terminal. For hangar rates and availability, call **608-757-5768**.

HANGAR FOR SALE - Juneau, Wisconsin - Dodge County Airport (UNU) – 60W X 52D, Door 50W X 11.5H, \$82,000. Contact **Mary** at **920-386-2402 or Mary.Gasper@WisconsinAviation.com.** More details and photos available at **WisconsinAviation.com.**

HANGAR FOR SALE - Rhinelander, WI (KRHI) - Good looking 48 X 54 ft hangar with 42 X 14 ft clear opening Schweiss auto-latch door. Sewer and water stubbed in. \$62,500 OBO. **Steve Nimz: 312-550-0385 or nimzsteve@gmail.com**

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ASK PETE FROM PAGE 18

Q: I occasionally land my Cessna 150 on my dad's hayfield. But now I notice the grass is dying where I have been landing and driving my pickup truck. The same thing happens on my lawn when I drive my truck on it several times. Why doesn't this happen on turf runways at legitimate airports?

A: Dad's hayfield probably has legumes like alfalfa in it. Alfalfa makes great hay, but it damages easily, as do other crop grasses. Turf runway grasses are often a mixture of Kentucky blue grass, rye, fescue, etc., which are pretty hardy. Drainage is also important, and clay soil is your enemy, and it turns to muck when wet. You can find lots of information by doing an internet search for "Turf Runway Construction."

Q: Have you ever seen a ski plane land on grass? I mean on straight skis, not wheel ski combos or retractable skis?

A: The only time I have ever seen it done was by aviation

legend, Dale Crites, who landed a Cub equipped with skis on grass that had just been watered down by the local fire department. Dale told me that landing on grass with skis is a delicate and dangerous undertaking because you can easily end up on your back, with major damage to the airplane and possibly its occupants. DON'T TRY IT!!!

EDITOR'S NOTE: Contact Pete Schoeninger at pete. harriet@gmail.com with your questions for this column or for consultation on aviation business and airport matters. Pete has four decades of experience as a line technician, airplane salesman (300 aircraft sold thus far), appraiser, snow removal supervisor, airport manager, and as the manager/coowner of a fixed base operation.

DISCLAIMER: The information contained in this column is the expressed opinion of the author only, and readers are advised to seek the advice of others, and refer to the Federal Aviation Regulations, Aeronautical Information Manual, Pilot's Operating Handbook for the airplane(s) they fly, and other instructional materials before attempting any procedures discussed herein.

MINNESOTA EDUCATION FROM PAGE 47

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transfer courses, two-year AAS degrees in more than 60 areas of study, workforce training and education programs. NCTC is a member of Minnesota State, and is accredited by the Higher Learning Commission of the North Central Association. NCTC is an affirmative action, equal opportunity educator and employer. Visit NCTC online at www.northlandcollege.edu.

SUPER BOWL FROM PAGE 51

The same scenario played out at St. Paul Downtown Airport, where the crosswind runway was also closed for parking.

The National Football League used the "Prior Permission Required" (PPR) aircraft reservation system to get all 1,600 corporate jets in and out of the Twin Cities, so it helped when some of the traffic was diverted to nearby St. Cloud, Mankato, Rochester and New Richmond airports.

Weeks prior to the Super Bowl, St. Cloud Aviation President Bill Mavencamp diagramed how they would park and service aircraft. At all area airports, it appeared to be a tight squeeze, but thanks to good planning on the part of operators and airport managers, the Metropolitan Airports Commission (MAC), the Federal Aviation Administration (FAA), and conscientious line personnel, operations went smoothly.

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100th Anniversary of Royal Air Force To Be Celebrated At Oshkosh 2018

OSHKOSH, WIS. – The centennial year of the Royal Air Force will be commemorated with historic aircraft, flyovers, and special programming during EAA AirVenture Oshkosh, July 23-29, 2018 at Wittman Regional Airport, Oshkosh, Wisconsin. The RAF's 100th anniversary will be celebrated throughout the week, with a primary focus on the centennial on Tuesday, July 24 (www.eaa.org).



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