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AUGUST/SEPTEMBER 2020

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AOPA's Rusty Pilots Course, Good For Everyone!

by Dave Weiman

It was time to complete my biennial flight review (BFR), and my flight instructor encouraged me to first take AOPA's Rusty Pilots Online Course for three reasons: 1) it's an excellent review of regulations and procedures, 2) it meets the requirements of the ground training portion of the flight review, and 3) it's free to AOPA members!

Since the 1970s, biennial flight reviews have been required of all pilots who intend to act as pilot-in-command, as per Federal Aviation Regulation (FAR) Section 61.56.

The BFR consists of a minimum of 1 hour of flight training and 1 hour of ground training. It must include a review of the current general operating and flight rules of Part 91, and a review of those maneuvers and procedures that, at the discretion of the person giving the review, are necessary for the pilot to demonstrate the safe exercise of the privileges of the pilot certificate.

The review should be a proficiency evaluation accomplished in an economical and expeditious manner, while providing a learning experience, without the pressure associated with a check-ride. Still, if your flight instructor feels that you are not fit to fly, he won't sign you off.

Prior to the review, the pilot and flight instructor should discuss the flight review's basic content, including the elements to be covered in both the oral and flight portions. These elements should be understood by the pilot and the flight instructor prior to initiating any phase of the review.

Like many of you, I have been flying continuously for a very long time, and it has become second nature. Still, we all need to avoid becoming complacent, and practice on a regular basis to stay proficient.

Before now, I always looked at AOPA's Rusty Pilots Course as something good for pilots who have not been flying for a while, and it is. But now having taken the online course, I am convinced that it provides an excellent review for active pilots as well.

Short quizzes after each chapter test your knowledge and grasp of each subject area. The "Rusty Pilots Resource Guide" is also a very useful tool, and available online, and from AOPA at each of its in-person Rusty Pilots Seminars.

After you complete the online course, you receive a "Certificate of Course Completion" you can print out and show your flight instructor, and that will count towards the ground training portion of your biennial flight review, thus saving you time and money.

In addition to taking the Rusty Pilots Online Course, I reviewed my Pilot's Operating Handbook (POH) for my airplane, especially those chapters that cover normal and emergency operating procedures, short and soft-field takeoffs and landings,

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EMAIL:
dave@midwestflyer.com

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PHONE: 608-772-1776
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dave@midwestflyer.com

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EMAIL-OR-MAIL ALL ORDERS & CORRESPONDENCE TO:
dave@midwestflyer.com
MIDWEST FLYER MAGAZINE
6031 Lawry Court
Oregon, WI 53575-2617 USA
www.midwestflyer.com

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Dialogue From Page 5

and airspeeds, such as the best rate of climb (Vy) and best angle of climb (Vx).

During the flight portion of the review, my instructor simulated smoke in the cockpit, and I demonstrated how best to get the aircraft on the ground in the shortest amount of time. We also practiced loss-of-power-on-takeoff procedures, power-off emergency landings, and short-field takeoffs and landings.

Again, the Rusty Pilots Online Course is free to AOPA members, but donations to the AOPA Air Safety Institute are welcomed.

Here's a link to the course: **https://www.aopa.org/training-and-safety/lapsed-pilots/rusty-pilots/rusty-pilots-online.** Otherwise, you can go to www.aopa.org, select the Training & Safety Section, and then Lapsed Pilots and Rusty Pilots Seminars. There, you will find information on completing your flight review. For additional information, email rustypilots@aopa.org, or call 1-800-USA-AOPA.

Speaking of the importance and convenience of taking online courses, I want to remind you that if you haven't yet registered for a free online subscription to ***Midwest Flyer Magazine,*** I encourage you to do so without delay. Simply go to **www.MidwestFlyer.com** and click the ***"Subscribe Now"*** banner ad, or go directly to the signup page: **https://midwestflyer.com/?page_id=12844**

Thank you for reading ***Midwest Flyer Magazine!*** ❑

Disclosing Medical History On An FAA Application For Airman Medical Certificate Is Not Limited To "Diagnoses"

by Gregory J. Reigel

If you have applied for an FAA medical certificate, you know an applicant must complete FAA Form 8500-8GG via MedXPress and answer the questions on the form. The FAA uses the information disclosed on the application to determine whether an airman is qualified to hold a medical certificate issued under 14 C.F.R. Part 67.

Greg Reigel

Question 18 asks for information regarding various medical conditions and circumstances that could have an impact on an airman's medical qualification. The preamble to Question 18 asks the applicant in all caps whether he or she has "EVER IN YOUR LIFE BEEN DIAGNOSED WITH, HAD, OR DO YOU PRESENTLY HAVE ANY OF THE FOLLOWING?" The airman is required to answer "yes" or "no" and, if "yes," he or she must provide an explanation to the FAA.

Unfortunately, some airmen get hung up on the word "diagnosed" and either ignore or fail to consider the broader wording in the rest of the question. An example of this situation occurred in the case of *Administrator v. Smith.*

In *Smith,* the airman failed to disclose certain medications he was prescribed for fatigue and depression. And in response to Question 18(m) (asking about depression), the airman checked "no." After the aviation medical examiner ("AME") issued a medical certificate to the airman, the FAA learned about the medications. It also discovered that one of the conditions for which the medications were prescribed was depression. Not surprisingly, the FAA was not pleased.

Consistent with *Order 2150.3C, FAA Compliance and Enforcement Program,* the FAA revoked all of the airman's certificates for violation of 14 C.F.R. § 67.403(a)(1) (intentional falsification). After a hearing, the National Transportation Safety Board Administrative Law Judge affirmed the FAA's order of revocation.

On appeal to the full Board, the airman argued, among other things, that he did not know he had been diagnosed with a mental disorder because his doctors didn't share their formal diagnosis with him. However, the Board rejected this argument.

The Board held the airman's argument improperly attempted to narrow the scope of the preamble to Question 18 and, specifically, Question 18(m) (asking about "mental disorders of any sort; depression, anxiety, etc."). The Board stated:

> *[i]t is clear from the text of the form and both versions of the accompanying instructions, that item 18(m) is not limited to a formal diagnosis. Rather, any medical "condition" is to be reported. The existence of an underlying condition is not dependent on [the airman] being told the formal diagnosis or condition.*

It went on to conclude that even if the airman was not told of the formal diagnosis, he was still aware of an underlying condition for which he sought treatment. As a result, the airman's checking the box "no" in response to Question 18(m) was a false statement, and a violation of the regulations.

Unfortunately, this situation occurs more often than it should. And the FAA's response to falsification is predictable and unforgiving: revocation of all certificates.

When you are applying for a medical certificate, it is important that you read the questions carefully. If you are concerned about whether something should be disclosed, do your research first. Talk to your AME before you go in for

your examination. Or talk to an experienced aviation attorney who can help you understand the question and determine whether your circumstances require you to check the "yes" box.

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

SCHOLARSHIPS

AOPA Awards More Than $1 Million In Scholarships

FREDERICK, MD – More than 120 high school students and teachers, primary student pilots, and pilots working toward advanced certificates and ratings, have been awarded scholarships totaling more than $1.1 million through the AOPA Foundation, thanks to generous donations from the Ray Foundation and the pilot community.

Scholarships funded by the Ray Foundation went to 80 high school students and 20 high school aviation teachers, who will each receive $10,000 for training toward their private pilot certificate. Generous donations to the AOPA Foundation from the pilot community funded an additional 17 primary flight training scholarships and seven advanced rating scholarships of varying amounts.

The scholarships, which are available exclusively to AOPA members, are part of the AOPA You Can Fly program, a collection of initiatives to build a larger, more vibrant pilot community.

The primary flight training scholarships were open to members at least 16 years of age and range from $2,500 to $7,500 for training toward the private, sport, or recreational pilot certificate. Advanced rating scholarships range from $3,000 to $10,000 and can be applied toward the instrument rating, commercial pilot certificate, certificated flight instructor and instrument instructor certificates, and multiengine instructor certificate (www.aopa.org). ❑

(L/R) Parris Fromm accepts the Ray Foundation Scholarship from Martin (Marty) Towsley, who is the Ray Scholarship Coordinator for EAA Chapter 770, Springfield, Illinois. *John Salz Photo*

Aviation Scholarship Opportunity Presented To Springfield Resident by Local EAA Chapter 770

SPRINGFIELD, ILL. – Parris Fromm of Springfield, Illinois, has received a full scholarship for flight training, thanks to EAA Chapter 770, and the Ray Aviation Scholarship program, which is administered by the Experimental Aircraft Association. The Ray Foundation is furthering the legacy of James Ray, an EAA lifetime member, who was dedicated to aviation and youth education.

The Scholarship program provides up to $10,000 to young adults who are seeking a private pilot certificate by supporting them through both the written and practical segments of flight training. The Ray Foundation has provided $1.2 million of funding to improve the current flight training success rate from 20 to 80 percent for program participants. Each EAA chapter is responsible for identifying qualified youth and mentoring them throughout their flight training to ensure success.

In the program's first year, 105 scholarships were awarded and the success rate for recipients is expected to far exceed the goal of 80 percent.

Parris Fromm is EAA Chapter 770's second Ray Foundation flight training scholarship recipient. Now an EAA member, Fromm has committed to volunteering his services in support of the chapter's activities. He will be flying as a member of the Flying 20 Club based at Abraham Lincoln Capital Airport.

EAA Chapter 770 is one of 900 local chapters of the Experimental Aircraft Association (https://chapters.eaa.org/eaa770). ❑

Diabetes & FAA Certification

Dr. Bill Blank

by Dr. Bill Blank, M.D., Senior AME

The FAA has come a long way since I first became an Aviation Medical Examiner (AME). Then diabetics could not be certified. Recently the FAA announced it would certify insulin-dependent diabetics at the first and second-class levels. They had been doing so for third-class medicals since 1996.

Diabetes is characterized by a high blood-glucose level. Most of our energy comes from our body using glucose. Insulin, a hormone produced by the pancreas, permits glucose to enter our cells and be utilized. Type I diabetics do not make insulin and require treatment with it. Type I usually appears in childhood. Type II diabetics, either don't make enough insulin, or do not utilize it effectively and are generally treated with oral medications. Type II, previously called "adult onset diabetes," is occurring more frequently. This is related to the increase in obesity in our population.

We often think of diabetes in terms of the blood sugar level in our bodies. Treatment is based on trying to normalize the blood-sugar level and minimize fluctuations. We do this because elevated blood-sugar levels damage the small arteries going to various body organs interfering with the transport of oxygen to these tissues. This can result in diabetic eye disease (retinopathy), kidney disease, peripheral neuropathy (nerve damage), and heart disease. Diabetes, thus becomes a circulatory disease. With good blood sugar control, many of these complications can be minimized and/or delayed.

The FAA is mandated to establish a required level of safety for the national airspace system. An additional goal is to certify as many airmen as can be done safely. The certification policy for diabetics has evolved over time with these principles in mind.

An AME can issue a certificate for diabetes controlled by diet and exercise. A status report from the treating physician, and the results of a hemoglobin A1C level

done within the last 90 days, are needed. If you have been diagnosed with "pre-diabetes," your AME can still issue you a medical certificate, provided an FAA Pre-Diabetes Worksheet has been completed by your treating physician. Diabetes requiring treatment with oral medications or insulin requires Special-Issuance Certification. Further details can be found on the FAA or AOPA websites.

The major inflight risk for diabetics taking insulin is hypoglycemia or low blood sugar. This can lead to confusion and loss of consciousness. A technologic advancement called "continuous glucose monitoring" notifies the airman, in advance in real time, of predicted episodes of low or high blood sugar levels, giving the airman time to respond and prevent them from occurring. This development has given the FAA confidence to certify some insulin-dependent diabetics at the first and second-class levels. The FAA has done a good job of developing policies for safely certifying as many diabetics as possible.

Basic Med: You may not realize it, but Basic Med is celebrating its third anniversary this year. And as far as I can tell, there has not been a significant spike in aircraft accidents among Basic Med Certificate holders. The FAA is gathering statistics on Basic Med and is mandated to report the results to Congress within 5 years of the adoption of the program. Unless fatal accident numbers skyrocket, I think Basic Med is here to stay.

EDITOR'S NOTE: William A. Blank is a physician in La Crosse, Wisconsin, and has been an Aviation Medical Examiner (AME) since 1978, and a Senior AME since 1985. Dr. Blank is a retired Ophthalmologist, but still gives some of the ophthalmology lectures at AME renewal seminars. Flying-wise, Dr. Blank holds an Airline Transport Pilot Certificate and has 5600 hours. He is a Certified Instrument Flight Instructor (CFII) and has given over 1200 hours of aerobatic instruction. In addition, Dr. Blank was an airshow performer through the 2014 season and held a Statement of Aerobatic Competency (SAC) since 1987.

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 and FAA Aeronautical Information Manual for additional information and clarification. ❑

Avflight Opens New Operation In Grand Rapids

GRAND RAPIDS, MICH. – Avflight Corporation has opened a new operation at Gerald R. Ford International Airport (KGRR) in Grand Rapids, Mich., which serves both general aviation and the airlines. The 5,000 square foot office, and 30,000 square foot hangar, are located on five acres. Avflight is a full-service fixed base operation, providing fuel; aircraft washing, detailing and de-icing; catering; and 24/7 personal concierge services. Avflight is part of the Avfuel-branded network of 650-plus fixed base operations around the world. ❑

Using The "E-Word"

by Michael J. "Mick" Kaufman


Michael Kaufman

Many years ago, while walking through a flight school, I overheard an instructor briefing a primary student, and the instructor was telling his student "never use the E-word," referring to declaring an emergency.

As I am writing this article, aviation is almost at a standstill due to the pandemic. I am hunkered down at home, reading a book, browsing the news, watching a movie or playing the guitar. Yesterday, I flew the Bonanza for a few hours to make sure I still remembered how. I got a flash in my brain for my column and while still a fresh thought, this issue will deal with inflight emergencies, VFR or IFR.

In more than 50 years of flying, I have used the "E-word" seven times, and not once did I have a request to fill out paperwork or have a conversation with an FAA inspector, which we have been told is why we should never declare an emergency. To the contrary, the use of the "E-word" has saved my life in several occasions and allowed me to get help. In several of these situations, I give much credit to the great folks in air traffic control (ATC) and their response to my situation. I could write an entire book on this topic, but for this article, I will describe several situations I was in and how they were handled, and provide some tips to help you deal with challenges you may have in the future.

A famous aviation quote from many years ago: "A superior pilot is one who uses his superior knowledge to avoid situations that may require his superior skills." When I think of this quote, it reminds me of a check-ride I took with a General Aviation District Office (GADO) official near the beginning of my aviation career. I was younger then, less than 20 years old, and this inspector had a reputation of being the toughest, meanest inspector at the Milwaukee, Wisconsin GADO.

As I was trying to defend my case for which I was being critiqued using the aircraft flight manual and the FARs, he said, "Son, if you believe that, you will not live long as a pilot. There are two laws – the law of God and the law of physics –

the rest are rules; rules are made for pilots with no common sense by bureaucrats with no common sense."

I have found this advice to be an asset I have used many times in my flying career and often think of its application and how Captain Al Haynes (United Flight 232) and Captain "Sully" Sullenberger III (U.S. Airways Flight 1549) saved lives. There is no book or rule that is written for every possible situation we may face as pilots. That inspector further commented that we need to learn as much as we can about the airplane we fly, the weather we can expect en route, and have an alternate plan if the flight cannot be completed as planned.

As examples of some of the situations where I have had to use the "E-word," I will refer to three of them: 1) smoke in the cockpit, 2) loss of the alternator, and 3) loss of the vacuum pump, all in instrument meteorological conditions (IMC). I value your comments on this article, as there is nothing cast in stone when it comes to emergencies and emergency procedures. Emergencies are not preplanned and if they were, they would not happen. If you knew ahead of time you were going to have an emergency, you would never take off.

In the early 1980s, the company I was flying for purchased a Cessna 421C. Compelled to learn all I could about the aircraft, I decided to take training at Flight Safety in Wichita.

This was my first experience in a high-end, motion-based simulator. About the fourth day into the training, we dealt with inflight emergencies. It started with the loss of a gyro, then an engine fire, and everything imaginable eventually failed. I crashed the sim, so the instructor and I got out and called for a technician to reset it. I was embarrassed, but got back into the sim for more training that day. At the end of the day, my instructor was debriefing me on the items we did in the sim, but he never mentioned my horrendous crash. I then asked him to debrief the items I could have done differently leading up to the crash. He chuckled and said, "Everyone crashes the sim, as there are only so many items you can handle. The number one thing to remember is, don't forget to fly the airplane."

Smoke In The Cockpit

I had referred to this situation numerous times in my years as a columnist for *Midwest Flyer Magazine,* as there is a lot to be learned from this experience when flying approaches.

I was training a pilot for an instrument rating out of the Palo Alto, Calif. airport (KPAO) some 20-plus years ago in a Cessna 185. This was not just your average C185, as it had a two tube electronic flight instrument systems (EFIS), when almost no GA aircraft had such equipment. On day seven or eight of my 10-day training course, the syllabus had us do the 250 nm cross-country that is required for the Instrument Rating. The flight departed KPAO under rather low IMC conditions en route to Lake Tahoe (KTVL) on an IFR flight plan. Shortly after leveling off at our initially assigned altitude, the avionics displays started to flash on and off, and we had smoke in the cockpit. I assigned the task of flying the airplane to my student, while I troubleshooted the emergency. (It is great to have two pilots in the cockpit at times like this, but seldom is this the case.) We were talking with San Jose (KSJC) approach control at the time, and after the problem continued and we didn't have an obvious remedy for it, I used the "E-word" and described our situation. (Here is where there is something for you to learn and apply to everyday instrument flying.)

After explaining that we needed to get on the ground as soon as possible and needed an approach to the nearest airport, the approach given to us was an ILS 30L approach to the San Jose airport. I learned a lot about how helpful controllers can be at a time like this, as even with two pilots in the airplane, it is tough to try to find the approach chart for the necessary information to fly the approach. This is an ILS approach and all we wanted was vectors and the minimum information we needed to fly the approach. The controllers knew that and gave us exactly what we needed. This can apply to everyday instrument flying as well, and I teach this by having instrument students give me the approach chart after memorizing the necessary items I have listed below:

1. Heading to fly to intercept the inbound course (Vector).
2. Heading of the inbound approach course (ILS 30L should be about 300 degrees magnetic).
3. Frequency of the ILS, if not a GPS approach.
4. Altitude to intercept the glideslope or glidepath.
5. Decision altitude (DA) or missed approach point (MAP) should a missed approach be necessary.
6. Initial missed approach instructions should a missed approach be necessary.

So simple… all you have to do is fly headings and watch the needles, but not so with an emergency in progress and the outcome unknown.

The screens continued to flash, and the smell of smoke continued, until we touched down with fire rescue vehicles parked alongside the runway.

We rolled off onto a taxiway, shut off the engine and exited the aircraft. Several more puffs of smoke came out from underneath the cowling, as the fire crew watched with fire extinguishers aimed. No more smoke or flames, so the FBO was called and towed the airplane to the ramp.

After removing the cowling in the shop, the issue became apparent. A larger alternator had been installed to handle the larger electrical load of the EFIS, and the mounting bracket was bent allowing the alternator output post to short against the engine mount. No paperwork and no calls from an FAA inspector…only some paperwork from the fire rescue crew that assisted us when we cleared the runway.

I continue to emphasize the importance of using the "E-word" with my students and not to delay.

In 1998, a Beech 58 impacted the terrain while diverting

to Volk Field (KVOK), Camp Douglas, Wisconsin, after the airline transport-rated pilot had declared an emergency and reported smoke in the cockpit. The aircraft was destroyed, and no one survived. I remember that there was discussion that the declaration of the emergency should have been made sooner, but I was not there and I don't like playing Monday morning aviation quarterback.

Lost Alternator

My second example of using the "E-word" occurred on one of my many winter Bonanza trips to Florida. I delayed my early morning departure from Ocala, Florida (KOCF) due to low ceilings, both at Ocala and along 75% of the route back to Wisconsin. Weather reports showed I would be in IMC along the first quarter of the flight, then on top and clear at my destination. Alone in the aircraft, I departed mid-morning and was flying on autopilot (fat-dumb-happy) with nine hours of fuel on a six-hour non-stop flight. The first one and a half hours went fine in IMC until I noticed I was several hundred feet off my assigned altitude. Must have bumped the switch or something, I thought. I reset the altitude manually and re-engaged altitude hold on the autopilot. Another 10 minutes went by, and the altitude hold came off again. Now, I am beginning to wonder what is wrong with my autopilot, and figured I would need to hand-fly the plane for another four and a half hours. A few minutes later, the squelch on the nav/com started to give me static. It was then I noticed that my ammeter showed a healthy discharge, and I had a problem. I tried to contact ATC on my assigned frequency, but no response. They were not hearing me. I was too low on transmission power. Ah, the transponder, high power, low current, pulse technology… Let's try 7700 for a squawk code. It worked. ATC was calling me and by turning off their squelch, they could hear me as I explained my circumstances. Same circumstances and response occurred, as with my fire emergency. I received radar vectors for an approach to the nearest airport; this time it was Columbus, Georgia.

Here is where the thought process and knowing my aircraft came in handy, though I left my backup handheld radio in the luggage compartment.

I was navigating the ILS with what I knew was a very low battery and the fact that any unnecessary electrical load could cause an immediate loss of the radios. There was an immediate electrical load shed once I noticed I had no alternator, so I had to decide what was necessary equipment and what was not. All lights were off…one nav/com radio and the transponder were all that remained on. I acknowledged

all ATC communications using the ident button on the transponder. No voice transmissions on the nav/com. How about the landing gear or flaps? That electrical load would kill the radio I was using for the ILS for sure. I was ready to make a gear up landing if necessary, as the task of hand-flying the ILS in moderate turbulence and cranking down the gear by hand would be very difficult. There was no time to crank the gear down before intercepting the localizer, and should I have the gear down and needed to go missed with no navigation capability, I would not have the fuel to fly to VFR conditions where a landing could be made. One missing bit of information was the weather at Columbus, Georgia, and not wanting to take a chance of keying the transmitter, I did not ask. I got lucky on that one as I broke out of the clouds at about 1,000 feet with several miles of visibility, so I circled the airport while I cranked the gear down and landed with no flaps. Same situation as in San Jose except I taxied to the FBO under my own power and signed a document for the fire department that followed me in.

In summarizing this situation, again "THANK YOU ATC" for understanding my situation and for providing the necessary support for a safe landing.

It was interesting that after getting the airplane in the shop, we measured the battery voltage, which was 8.8 volts on a 12-volt battery. That old KX-175 nav/com never let go, which would not be true of many of our modern avionics today. That old KX-175 is still in my Bonanza today as my backup.

Vacuum Pump Failure

Another situation which required the "E-word" dealt with loss of a vacuum pump in IMC while doing student training. When an instrument student is ready, and the situation presents itself, I like them to fly actual approaches before taking the check-ride. This was one of those situations that just happened and a great time to give the student a chance to handle a real emergency.

I have developed a technique of flying timed approaches, and even though this student had not gotten to the point of needle, ball and airspeed approaches, we needed to do it. Some would argue that they would not declare an emergency for this situation, but I like to get whatever help I can from ATC. Some tips I will share if you are ever needing to do a needle, ball and airspeed approach are as follows:

1. Select an approach to the south if possible, as the magnetic compass will amplify your heading changes while on final approach.
2. Make a long final approach, as it allows you time to fine tune your heading prior to increased needle sensitivity.
3. Make all turns standard rate and time every turn 3-degrees per second.
4. For small heading corrections 45 degrees or less, count out loud 45 degrees is 15 seconds.
5. For larger heading changes (on a course reversal), I use a digital timer or a clock with a sweep second hand.
6. Know and fly your airplane by the numbers.
7. Get a no-gyro approach from ATC where possible.

Our approach went as planned with a VOR A approach to Tri-County Regional Airport, Lone Rock, Wisconsin (KLNR), and it was great to have ATC on hand should another problem have occurred.

After reading this article, many of you may wonder why we did not use the GPS or all of the great features on our ForeFlight App to assist us during these emergencies. What about the backup electrical system during the alternator failure? The answer is, it was not invented yet or we did not have one.

Today, the modern pilot has so many safety enhancements in his airplane that he thinks it could never happen to him. Wrong!!!!! A broken wire, a failed circuit breaker, or an internal short in a piece of avionics are all still possible.

When teaching instrument flying, I begin with the basics and then move to the sophistication of the equipment being flown. "Know your equipment well" keeps coming back to me from that old GADO inspector, and don't hesitate to use the "E-word."

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

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 instructional materials before attempting any procedures discussed herein. ❑

Landings Can Be Dangerous, But They Do Not Have To Be

by Bob Worthington
www.BobWorthingtonWriter.com


Bob Worthington

As I write this column, it is days after the disastrous ending of Pakistan International Airlines Flight #8303. At 2:40 pm on May 22, 2020, an Airbus A320 aborted a landing at Jinnah International Airport in Karachi, Pakistan, attempted a go-around and crashed on its second approach to landing, killing 97 of the 99 crew and passengers aboard.

What happened is not in dispute. I watched videos of this event and listened to tapes of radio transmissions between the pilots and air traffic controllers (all in English). It was daytime VFR weather. The plane was terminating an uneventful flight. It radioed descending from 3500 feet to 3000, 5 miles out, reporting being established on ILS 25 Left. For some reason, the gear was never lowered. The twin turbofan engines are mounted on pylons forward and below the wings (lower than the fuselage).

Flight #8303 landed on its engines almost half-way down the 11,155-foot runway, touching down twice 1,000 feet apart before initiating a go-around. Attempting to climb for a second approach to 25 Left, the pilots radioed that they were unable to get above 2000 feet. Struggling to fly, it seems the engines lost thrust as they were no doubt damaged when the engine pods scrapped the runway. The aircraft crashed into a housing area, only 4,462 feet short of the runway.

I discussed the accident with a good friend, an aircraft accident investigator (he holds Air Transport Pilot, Flight Instructor, and Airframe and Powerplant Certificates) who is familiar with this accident. He pointed out that the aircraft was too high on approach and too fast and did not drop its gear, so he believes the crash was pilot error. In the available audio with Air Traffic Control, the pilots are very calm with their transmissions and, more importantly, made no indications they had any gear issues. Yet a gear warning signal is heard in the background. Yet, they did not declare an emergency or request emergency vehicles for a belly landing. Hopefully, when the black boxes are recovered, the conversation inside the aircraft will tell the rest of the story of a mysterious belly touch down.

What happened is known, but "why" is not. Did the pilots lose focus on final? Why were they over 1300 feet high when reporting established on the ILS? Did the gear fail to drop? Did the plane encounter mechanical problems? Until the investigation is complete, we will not know the "why." And these were professional pilots. Clearly, landings can be dangerous.

The FAA reports for 2019 that "loss of control" is the number one reason for general aviation (GA) accidents. Number nine is "low-altitude operations." "Landings" fall into both categories. Additionally, over 50% of accidents are the result of the pilot either not doing something right or doing something wrong: "pilot error."

The transition from flight to horizontal movement on the ground can be tricky and at times difficult for veteran pilots. It requires total focus by the pilot, and that many things must be done simultaneously, quickly, and correctly. And if the plane has retractable gear, this just adds another component to the equation.
Additionally, things may happen that require your immediate attention and take your focus away from landing. This is when problems can occur.

As a new pilot, I was practicing night landings in my Cessna 172 on 12L (today 13L) at San Antonio International Airport, San Antonio, Texas (KSAT). The runway is the shorter of the two, being around 2600 feet long. I told the

tower after my next landing, I would taxi to parking. Tower told me to land on the 8500-ft. 12R because my hangar was alongside that runway. As I turned onto base, I could see the landing lights of an airliner, on final to 12R. I radioed the tower, describing the plane lined up for 12R. The tower said I was cleared to land on 12R.

I was touching down as the airline pilot complained to the tower that a plane was on the runway. The airliner could not land. I was ready to veer left and taxi into the grass separating the two parallel runways when the tower told the airliner to go around. I taxied to my hangar.

Another time I was in my Mooney 231, IFR, landing in Louisville, Kentucky (KSDF), when on short final, I was told to abort and immediately go around. Gear and flaps up, I initiated a quick left turn to get back on the ILS to land. Apparently, a Cessna 182 from out of nowhere, had landed right in front of me and was not talking to the tower.

I intercepted the localizer again, and while on short final, I went through my mental landing checklist, which includes "gear down," which it was not. I then put the gear down. Ever since I had a retractable gear airplane, I always, on short final, confirm that the gear is down and locked.

Another time, I had departed an airport on a two-day cross-country flight. I could not get the gear up in my Mooney. The airport I just departed from had no maintenance facilities, so I decided to continue to my destination airport, which had a Mooney service center. Talking to approach control, I explained my situation, indicating that I had no idea if the gear was locked or in some position between down and locked or up.

The tower reported my gear looked fully extended. To thwart trouble, I was met at the end of the runway with two emergency vehicles, one a fire truck. The gear held and I taxied to the service center where the problem was identified and repaired. Sometimes a precarious landing can be instigated by air traffic controllers.

On another occasion, I was on an instrument flight east of San Diego, Calif. and cleared to land at Lindbergh Field, now San Diego International Airport (KSAN). I was told to intercept the localizer for Runway 9 and broke out of the clouds, but the tower would not permit me to go lower due to traffic. When allowed to descend, on short final, the rapid descent was too fast to safely land. Telling the tower, "I am too fast to land and going around," I made an easy landing on the second try.

At the fixed base operator, I called the tower and explained that I was held too high, too long to slow down enough to safely land. I asked what I should have done. The man I spoke to indicated that it is my job to fly and land safely, and it is the air traffic controller's job to ensure aircraft separation. I was told the next time to tell the tower I must get lower to slow down enough to land, and it is then the controller's problem to deal with the traffic. The tower should accommodate what I need to land safely.

One of the most difficult airports to land at is the former Williams Air Force Base, now Phoenix-Mesa Gateway Airport (KIWA) in Mesa, Arizona. It was shut down as an Air Force base in 1993 and re-opened as Gateway a year later. The airport has three long parallel runways (9,300, 10,201 and 10,401 feet). Due to its heavy traffic – mostly GA – it averages a landing every 6 minutes.

Approach control is constantly talking, so getting permission to land can be challenging. But I finally secured permission to land (on the center runway). On short final, the tower said that the aircraft in front of me was not off the runway and asked if I could side-step to my right and land. I replied "yes," and did just that.

The fixed base operator was at the end of the runway and off to the left, so I had over a mile to taxi. I noticed a police car with lights on following me on the taxiway. I pulled in, parked, and shut down my engine and beside me was a Mesa police car, with roof lights pulsing away. As I exited my aircraft, a police officer came over with a big notebook.

He demanded to know why I did not land on the runway I was supposed to. He said that I deviated from my correct flight path, presenting a clear danger. I was perplexed. Why is a police officer questioning my landing? I explained that the tower told me to land on the right. He didn't believe me and asked if I had the proper approach plates and airport diagram to land where I did. I had everything on both paper and my iPad, which I showed him. He glanced at my material, grunted "thank you," and left. That was a first for me, to be pulled over by a police car, while taxiing in my airplane.

All of these disruptions occurred upon landing. All could have been the cause for me to lose focus and botch a landing. One time it took me five approaches to land at a short country airport in New Jersey. The airport was surrounded by tall trees with the runway terminating at a lake. A normal landing could not be accomplished

as the tall trees obscured the runway. If one landed too long, the plane would end up swimming. On every approach, I was too high and too fast to safely land, so I went around.

My wife was becoming apprehensive as I just could not land the plane. I was a VFR-only pilot at the time and it was getting dark and the weather was getting worse, so I needed to land. Finally, I was able to set up the approach properly and make a successful landing. While it took five attempts to land safely, I finally made it.

All of these events reflect what can happen during the landing phase of flying an airplane. Every flight had the possibility of ending like Flight #8303, but did not. Why? Training!

As a pilot I have invested quite a bit of time practicing how to handle emergencies. I would fly with a safety pilot or flight instructor and he would create a safety issue where I would have to decide to either land or clean up the plane and go around. Early on as a pilot, I purchased a flight school grade analogue desktop flight simulator where I would practice missed approaches under IFR conditions. Therefore, if the real situation occurred, I was prepared for it. I did what I trained for, remained focused and flew the airplane. Training for the unusual instills confidence and improves proficiency. Some GA pilots are not that into continuous recurrent training, but those who do, have a better chance of safely handling emergencies or making every landing a benign one.

EDITOR'S NOTE: Pilot, Viet Nam veteran and former university professor, Bob Worthington of Las Cruces, New Mexico, is the author of "Under Fire with ARVN Infantry" (https://mcfarlandbooks.com/product/Under-Fire-with-ARVN-Infantry/), and producer of the 2019 film "Combat Advisor in Vietnam" (www.borderlandsmedia.com). Facebook: Bob Worthington Writer (www.BobWorthingtonWriter.com).

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Politely Quiet Airports

by Harold Green


Harold Green

Usually this column is devoted to subjects related to piloting techniques with an emphasis on safety. However, in this column the emphasis is on piloting techniques which contribute to our ability to continue flying from our favorite airport. As an example, we'll look at the history of the airport from which I fly, Middleton Municipal Airport - Morey Field (C29, because I am very familiar with its features and history. However, the issues are not unique to C29. Some even apply to those operating from private airstrips out in the country.

Every airport or airstrip has some history. In the case of C29, the airport was established in 1942 as a privately-owned airport. At the time it was a couple of miles from the Village of Middleton. It served as a training center for the Civilian Pilot Training Program (CPTP) during World War II. Flight training, charters, maintenance and aircraft sales were provided. The airport operated with minimum problems until the late 1990s. Noise complaints were minimal.

As the cost of taxes, maintaining and improving the airport became greater, the Morey family sold the airport to the now City of Middleton. Before, and at the same time, housing developments grew near the airport, principally to the south and west. At this time the pattern for Runway 30 was modified to call for a climb straight out to pattern altitude, throttle back, then turn onto crosswind. The city had also built up east of the airport.

When the airport was sold to the city, a new 4,000 ft. paved runway was built, and its heading was changed from 30 to 28, which made the departure path just barely north of a housing development. This housing development is mid upscale with most homes valued at between $400,000 to $700,000. The development begins about three-quarters of a mile west and slightly south of the departure end of Runway 28. Prior to the change, noise complaints were occasionally heard, but they became vastly more frequent and strident with the new runway. A noise complaint hotline was established to provide a convenient means for people to lodge complaints.

People were concerned that jet noise would disturb them. Recently one resident complained that they were afraid the F-35s, which are slated to be based at nearby Dane County Regional Airport in Madison, Wis., would be operated out of the 4,000 ft. runway at C29. This was no more ridiculous than the person who was afraid that scheduled airlines would begin operations at C29. Of course, one of the more frequent concerns were that corporate jets could now operate from the airport, which they do, but the small corporate jets tend to be quieter than some of the high-performance piston aircraft that use the airport. That does not deter the folks who are concerned about jets.

In an attempt to inform the public, numerous meetings were held with officials from the FAA, staff from C29, and members of the airport commission. It became apparent that logic had little to do with the concerns of our neighbors. The FAA was involved on more than one occasion and representatives of the concerned citizens contacted our United States Senator.

The FAA cleared the airport and its operations. The Senator responded twice, first to assure constituents that the FAA would be consulted. The second time the Senator responded that the FAA had found everything to be within prescribed conditions and operations, but that if future concerns arose on other issues, to please contact his office.

For the moment, the issue was closed as far as the federal government was concerned. That, however, was not a deterrent to those dedicated to winning their battle. This had apparently become a matter of ego for some. Consequently, several things happened which were relayed to me.

First, following a night IMC approach to Runway 10 by a twin-engine aircraft, a resident felt it was too low and proceeded to drive to the airport, watched the pilot put the plane away, then followed the

pilot home. Police were called and the resident was warned that his actions were illegal and prosecution would follow should there be another incident.

Second and perhaps the most amusing was the lady who called in to complain about the green plane that had been flying around for a couple of hours and threatened to call the FAA if the airport did not stop it. She was nonplused when told we would provide the telephone number, so she could complain about the green King Air that the FAA was using to calibrate the instrument approaches at the airport. Of course, complaints were received from other areas as well, but the predominant area was as described above.

Numerous public meetings were held and people were heard at the monthly meeting of the airport commission. Their protestations were received respectfully, but no further changes were forthcoming. In order to be good neighbors, the pattern at C29 was modified and training was changed to conduct touch and goes at outlying airports when practical to do so.

The departure pattern for Runway 28 was modified to call for a turn to the north of about 20 degrees as soon as possible after takeoff. When remaining in the pattern, pilots should climb to pattern altitude before turning crosswind and then throttle back to reduce noise levels. Essentially this was the same pattern that was flown for the old Runway 30.

It must be noted here that when applied to Runway 28, this is an inherently dangerous procedure. Meaning that if an aircraft departs closely behind another aircraft and does not observe the right turn on departure procedure, the first aircraft now on crosswind will pass directly across the later or second departing aircraft. This can be scary because not everyone is dedicated to the noise abatement procedure, either because of ignorance or they just plain don't give a darn.

The departure for Runway 10 was modified to call for an early turn to crosswind to avoid flying over residences. While occasionally noise complaints are received from this area, there are far fewer complaints than off Runway 28. This whole process has taken about two decades to reach this state.

There are now preliminary considerations underway to extend Runway 10/28 by 1,000 feet. This has resulted in a flurry of concerns again. So here we go again with concerns about jet fighters and scheduled airline operations from a blacktop runway which would then be 5,000 feet long.

Now, on the other side of this there are problems with pilots who either are not aware of the noise abatement procedures or who just don't care. These instances are rare, but when they occur, they just reinforce the emotional response of the complainers. There have been cases of people departing Runway 28, holding a low altitude to build up speed and then rotating to climb at full power with the noise

blasting at the houses west of the airport. Other aircraft have turned over the airport when taking off on Runway 10 to fly over a group of houses just off the northeast corner of the airport.

While the emphasis here has been on C29, a non-towered relatively busy airport, even those with private airstrips have problems, principally with pilots using their airstrips without permission causing noise issues. These private airstrips are usually in the country where life is generally quiet except for an occasional automobile and even less frequent farm equipment. Often and wisely, these owners have held discussions with their neighbors regarding the airstrip and the impact on them before they established the airport. Then when people use the airstrip to practice short-field or rough-field takeoffs and landings, the neighbors become irate because of the noise. This is frustrating for the airstrip owner, as well as the neighbor. It should be mentioned that some farm animals become extremely agitated when unusual noise or shadows that could be a hawk are encountered. That includes some fowl and mink in particular.

Recognize that the attitude of the neighbors to both airport types is often not really based on logic, but rather on emotions and a lack of knowledge. Therefore, there is little to be gained by direct confrontation since that only reinforces emotions. The best approach is to be mindful of the concerns of neighbors and fly with courtesy and consideration. Confrontation only hardens positions and brings ego into the picture.

Most people are genuinely concerned and will listen to an objective and professional explanation from pilots and operators. Therefore, polite listening, coupled with reaction that shows that their concerns are being respected, is the best approach. Further, it behooves all of us to be aware of noise abatement procedures wherever we fly and to follow them. Usually these will be listed in the NOTAMS and chart supplements (AFD for us old-timers) for each public airport. If there are any concerns, and multiple landing and take-off operations are anticipated, call ahead to find out what procedures may exist and follow them. If just traveling through, it is probably not important to check ahead for your quiet landing, the path of which is usually dictated by physics, but do check before the noisy departure, even if you are flying a light sport aircraft. And for heaven's sake, check with the owner of a private airstrip before using it. (In this case, there are legal and insurance issues you may want to consider as well.)

AOPA, EAA and the FAA all have advice and support for maintaining good neighbor relations and practices to help conserve airports. It is a good idea to become aware of these activities, and if you feel you can maintain your emotional equilibrium, become involved. In dealing with noise complaints, it is wise to remember that courtesy and consideration for others will go a long way toward keeping your airport active and out of the hands of the developers.

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 instructional materials before attempting any procedures discussed herein. ❑

Twin Cities Reliever Airports Continue To Provide Essential Services

While the number of flights taking off and landing at the MAC's six reliever airports has declined during the COVID-19 pandemic, essential flights – including those supporting important medical services – still occur daily at the airports.

Joe Harris

"Operators continue to offer charter services, including transporting healthcare workers and managers who are traveling related to the pandemic," said Joe Harris, director of the MAC's reliever airports.

Due to the impacts of COVID-19, overall personal and leisure flying has declined.

Still, the four reliever airports with control towers combined have experienced as many as 1,100 landings and take-offs per day during the COVID-19 outbreak.

Medivac flights – which provide emergency transportation for a wide range of medical issues – continue at the airports, as do flights for Lifesource at Flying Cloud Airport in Eden Prairie.

"General aviation airports provide essential services for the region and are key assets year-round, including during times of crisis," Harris said.

In addition to Flying Cloud, the MAC reliever airports include Airlake Airport in Lakeville, St. Paul Downtown Airport, Lake Elmo Airport, Anoka County-Blaine Airport and Crystal Airport. ❑

Restore Or Update Or None of the Above?

by Pete Schoeninger


Pete Schoeninger

Q: What do you hear about current airplane sale market conditions?

A: Airplane salesmen I know tell me that for three weeks or so, the market just froze in place, but now (June 15, 2020) activity seems back to almost normal. Some folks have noted a bit less demand for used airplanes, but they have also noted less new listings. Put those facts together and you have a relatively unchanged market.

Q: When you were an airplane salesman, were there some months that were better or worse than other months for sale activities?

A: Yes! September, followed by May, were usually two good months. August and January were always the toughest.

Q: In the June/July 2020 issue of Midwest Flyer Magazine, there was a discussion in your "Ask Pete" column, about a $75,000 Piper Comanche. Aren't Comanches usually worth less than that?

A: Yes, most are worth less. But when you look at 50 and 60-year-old airplanes, condition and equipment mean a great deal. It would be possible to put over $150,000 into a Comanche restoration as follows: new paint and interior, $25,000; rebuilt engine, $40,000; new three-bladed heated prop, $18,000; and new autopilot and all new glass panel avionics and instruments, $75,000. If you did all this, you would have an airplane worth much less than you just invested. Analyzing these numbers also helps to explain why old, non-flying retractable airplanes that need lots of work/restoration, are continuing to decline in value. The cost of restoration is way beyond their restored value.

Q: Should I update my avionics before selling my airplane?

A: Usually not. The reason is, the cost of newly installed avionics is not returned in airplane value, and also you don't know if a new prospective buyer is going to be flying hard IFR into the very busy East Coast area, or counting cows in the middle of Nebraska. You can make a negative into a positive by stating in your classified advertisement that your asking price reflects older avionics.

Q: My friend and I each own Maule MX-7s. His is a 180 hp version, and mine is a 235 hp version. We have each flown each other's planes, and we both feel that mine is much more difficult to maintain during rollout after landing. Could the fact that my engine is heavier than his have anything to do with my aircraft having nasty runway manners?

A: Probably not. I highly suspect your tailwheel needs attention. Your 235 hp airplane should be as well-mannered as your friend's 180 hp airplane. Tailwheel assemblies take lots of abuse and are often neglected by owners. They have bushings that wear out, springs that lose their tension, and other problems. Ask your mechanic to take a close look at your tailwheel. If no problems are found, it is possible your main gear is out of alignment. This can be caused by a hard landing, previous damage, or a ground loop.

Q: Charles Lindbergh's "Spirit of St Louis" had a tailskid, not a tailwheel. That seemed common on airplanes of that vintage (late 1920s). Is there ANY advantage that a tailskid has over a tailwheel?

A: In an airplane with marginal, or no brakes, a tailskid can help stop the airplane with an application of full aft stick, putting as much weight on the tailskid as possible, to dig into the ground as a primitive brake. Remember that back in the

1920s, most runways were grass fields, or at best cinder paths.

Q: I have found a Piper J-3 Cub that has been in a barn (literally!) for 37 years. The owner has kept his registration current with the FAA, and a title search revealed that he owns it free and clear. But the fabric is falling off, there are numerous mouse nests in it, and the engine looks very rusty. My friend who is an A&P mechanic suggested I not purchase the airplane because the cost of restoration could be more than the airplane will ever be worth. Is he correct?

A: Yes! After you remove the fabric, you should have the fuselage lightly sand blasted. You will probably find numerous rust holes in the airframe. At that point, you may decide that it is more economical and safer to buy a replacement fuselage. You'll need new pulleys, new windshield and side glass, new floor panels, etc., etc. You will also need to rebuild the tailwheel. The wings may or may not be shot as well. If your engine is rusted, it too may not be worth rebuilding. It might be cheaper to buy a replacement engine. You didn't mention if the prop is wood or metal. If it is wood, it may be shot as well. You can end up putting $75,000 and 1-2 years of work into this rebuild, and end up with a $50,000 airplane. Most folks are far better off just buying an airplane in good flying condition and enjoying it from day one. See the other question in this column about Piper Comanches.

Q: I am learning to fly in my husband's new (to us) Cessna 172 Skyhawk. For short-field takeoffs, the Pilot's Operating Handbook (POH) recommends one notch of flaps. But my hubby says our 172 climbs better with flaps up. I am confused. Can you help?

A: I'll try. You are correct… Cessna does recommend one notch of flaps for a short-field takeoff in a 172. But your hubby is correct too… the RATE of climb is better in a 172 (and almost all other light planes) with flaps retracted. In high density altitude situations, it is possible for a light plane to lift off with flaps in ground effect, but then be unable to climb. With flaps retracted, there would be a longer takeoff run, but maybe a bit of climb available. Spend a little time reviewing your POH and pay attention to suggested airspeeds and techniques and you'll do fine. And as always, consult with a flight instructor with experience in make and model.

Q: A friend of mine is a retired Army pilot. He says that he was taught for short-field work in Cessna L-19 aircraft to approach at a speed just a couple of miles per hour over stall, and to use added power alone to break the descent into a reasonably good landing. They had to add power to flare and land because if they increased back stick input any more (increased angle of attack), the airplane would immediately stall. The POH for my Cessna 172 does not recommend this technique, nor does my instructor. Both indicate that a speed of 1.3, or at an absolute minimum, 1.2 times stall speed, is best for short-field approaches. What do you think?

A: I would follow the POH and your instructor's advice. The Army method will produce a slightly shorter landing, but at substantially more risk of a crunch. Unless you're going into tiny jungle strips, stick with "the book." And remember, regardless of how good you are at short-field landings, almost all airplanes need more room to take off than land, so a super short landing is usually not required.

Q: My friend showed me a picture of an airplane and bet me a beer plus dinner that I could not identify it. I quickly identified it as a Cessna 140. My friend said I was wrong, that it was a Cessna 170. I'll attach a photo to this email and wait for your response.

A: Your friend is right. The very first 170s (1948) had a fabric-covered constant chord (not tapered) wing. They closely resembled a big Cessna 140. The 170A quickly followed, with an aluminum tapered wing. For another interesting fact, do an internet search for a Cessna 140A… which had a tapered wing!

Q: What (if any) airplanes from major manufacturers were only built for one year?

A: The Piper PA-16 Clipper was only manufactured in 1949. It was a short-wing 115 hp airplane with up to four (4) small seats. It was followed with the very similar 1950 Piper PA-20 Pacer with 125 hp. Horsepower was slowly raised from 125 to 135 to 150 to 160, and along the way, a nosewheel was added, becoming the popular PA-22 Tri Pacer.

Another airplane manufactured for only one year was the 1973 Piper Challenger. It was basically a Cherokee 180 with more legroom, a slightly extended wing, and a bigger cabin door. In 1974 and 1975, it was renamed the Archer. In 1976, Piper added a tapered wing, and it became the popular PA-28-181 Archer.

A third aircraft manufactured for only one year was the 1968 150 hp Cessna Cardinal. Performance was a little weak, so in 1969, a 180 hp engine was added, and in 1970, a better airfoil and a constant speed prop were added to make it an even nicer airplane.

Q: Here is a Piper history question for you? The Piper Vagabond was made in PA-15 and PA-17 versions. Was there a difference in the airframes? (I know various engines have been installed in them over time.)

A: Yes, the PA-15 was the "Econobox" of the two. It had only controls on the left side, and no shock absorption for the landing gear. The tires took all the shock of landing. The PA-17 had dual controls and bungees for smoother landings. They were made in 1948 and 1949.

Q: What is involved with an FAA "ramp check?"

A: Sometimes the feds do "ramp checks" at random, rather than for cause, like a traffic stop. This usually involves an FAA inspector approaching you, identifying themselves, and asking for your pilot and airplane credentials. You are obligated to

show them your pilot and airplane credentials – or to any law enforcement officer – on demand. Providing you can comply with their request, and nothing else seems out of order, the ramp check is usually over. If you think they are after you for a serious problem, show them your credentials, shut up, and consult an aviation attorney. (Several good ones write for and advertise in this publication.)

EDITOR'S NOTE: Pete Schoeninger appraises airplanes for estates, divorces, and partnership buyouts. He is a 40-year general aviation veteran, starting out as a line technician as a teenager, advancing through the ranks to become the co-owner and manager of a fixed base operation, and manager of an airport in a major metropolitan community. For aircraft appraisals, contact Pete at PeterSchoeningerLLC@gmail.com or call 262-533-3056 (peterschoeningerllc.wordpress.com).

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Share and Enjoy: ❑

Ryan Thayer Named Executive Director of Fargo Air Museum

Ryan J. Thayer

FARGO, ND – The Fargo Air Museum has named Ryan J. Thayer executive director, replacing Jackie Williams who departed in January. Thayer is responsible for guiding the museum into the future by transforming it into a must-see tourist destination.

"I am eager to work with other area destination attractions and community members," said Thayer. "Fargo has grown a lot since I left the area, so I am excited to see how the museum can take advantage of new opportunities. I have slowly been meeting members of the board of directors, as well as long-term volunteers. We look forward to working together to make the Fargo Air Museum a premier event center and tourism destination."

Thayer has over 15 years of business ownership, sales and marketing, and managerial experience. His past experience comes from diverse roles at various financial, insurance and real estate firms, and from having built eight different businesses from the ground up. Thayer earned a Bachelor's of Business Administration with an entrepreneurial focus at the University of North Dakota, where he ran multiple small businesses while in college. He currently holds a Private Pilot Certificate.

The Fargo Air Museum was founded with the nonprofit mission of promoting aviation through education, preservation, and restoration. The museum is home to aircraft of all eras. James P. Sweeney is chairman of the museum (www.fargoairmuseum.org). ❑

The more things change

Amid challenges to aviation, resiliency is a constant

by Mark Baker
AOPA President and CEO


Mark Baker

The human body is incredibly resilient. With the ability to respond to a variety of changing environments, be they biological or cultural, our species is said to be the most adaptive. For centuries, humanity has been able to acclimate to various regions and changes over time. Adaptation is especially important today, as this year has proven to be quite tumultuous and uncertainty still lies ahead.

Before anyone ever heard the term COVID-19, the aviation industry was thriving—so much so that we were in the midst of an unprecedented pilot shortage. Aircraft dominated the skies with some 8,000 to 20,000 flying at any given moment; an average of 2.7 million airline passengers passed through our nation's airports every day. Glancing at FlightAware, I was never surprised by the enormous cluster of icons slowly moving about the map—it was normal, and it was routine, but it was also then.

In the early months of the COVID-19 outbreak, and at its worst, the picture looked drastically different. Air traffic was down dramatically, aerospace industries were cutting staff, and even fuel sales were tanking compared to one year prior. If you turn on the television, chances are you'll hear media personalities referring to our time now as the "new normal." Like a lot of industries in 2020, aviation has been turned on its head. We're waiting to see what happens next, but there may be reason for optimism. In fact, experts remain bullish on the state of the industry, and general aviation has fared much better than our commercial counterparts overall. GA operations at the top 77 airports continue to increase and are averaging less than 10 percent below the seasonal norm.

I've been fortunate enough to stay safe, maintain social distancing, and still spend some time in the sky—although late July just won't be the same. It's a strange feeling to be social distancing at home instead of surrounded by hundreds of thousands of pilots and aviation enthusiasts at the annual EAA AirVenture gathering. But despite having to miss the world's greatest aviation celebration this year, I am glad to see so many of us continuing to get airborne.

In fact, many of you have taken advantage of some unique opportunities. Videos of single-engine pistons landing at Class B airports, news of more Skyhawks in the sky than Boeing 737s, and Alaska's Anchorage International Airport briefly designated the world's busiest airfield feel like some sort of parallel universe, albeit one tailored for a GA pilot.

Sure, flying may look a bit different now as many of us are incorporating more sanitization into our preflight checks or opting to go solo. When shoulder to shoulder with students, CFIs might wear face masks, and others have bottles of disinfectant stashed in baggage compartments. Because of local ordinances, some of us still haven't flown, and that's why it's important to keep up with skills and review safety materials online so we can continue to be proficient AOPA pilots.

Whether you've logged 50 hours or five hours in the past few months, there's no better time for our aviation community to band together and support each other. AOPA's You Can Fly team has created "Don't Get Rusty"—a series of webinars to help pilots get back in the air when restrictions ease or pilots feel comfortable taking off again. The AOPA Air Safety Institute drafted two guides to help pilots and operators return to safe operations. The Return-to-Flight Proficiency Plan (airsafetyinstitute.org/returntoflight) reminds pilots to expect a different level of performance after extended time on the ground. The guide has profiles for VFR and IFR pilots and is designed to give a step-by-step approach to sharpening skills. ASI also issued the COVID-19 Flight Operations Guide (aopa.org/covid19-flightops) tailored for flight schools, flying clubs, FBOs, and other operators detailing factors to consider when making the decision to reopen.

If there's one thing I've come to know during this time, it's that resiliency will always be general aviation's most powerful asset. We've faced challenges before, just like we will face them again. But day by day, I'm hearing much more positive news on the state of the industry and although I can't say just what this new normal really is, or means, I am confident that we will rise to the top—as we always do. ❑

Big Win For GA Despite COVID-19

by Kyle Lewis
Regional Manager
Government Affairs & Airport Advocacy / Great Lakes
Aircraft Owners & Pilots Association
www.aopa.org

2020 changed almost overnight. COVID-19 wreaked havoc on industries and economies throughout the world. As we all know, aviation was no different with some aspects of commercial aviation hit the hardest. From the onset of the stay-at-home orders, travel restrictions, and other business shutdowns, AOPA was still advocating on behalf of its members.

It was a quick realization that even general aviation was being restricted on some levels, mostly on flight training operations.

Myself, and the other regional managers, became involved in tracking the rapidly changing landscape of executive orders passed down by governors and health directors in nearly every state. (North and South Dakota were the most relaxed in my region with no direct travel restrictions or stay-at-home orders). These orders changed on a regular basis, and the intent of each order affected general aviation differently in each state.

While recreational flying was never outright restricted, perhaps leaving your home to drive to the airport was not considered essential and made recreational flying off limits. Overall, the work is still ongoing even into these summer months, and we are constantly monitoring the crisis. The concern now is to determine what will be the impact to state budgets and the funding of aviation programs from sales tax revenues and general fund dollars. Many states have begun cutting budgets and the outlook is bleak over the next couple years.

The airport in Isle, Minnesota – a small town that sits on the southern edge of Mille Lacs Lake (approximate population 750) – was struggling before the pandemic and the pandemic didn't help. The airport is owned by the city, but operated by the Isle Airport Association (IAA). The airport features a 2,460 ft. turf runway. Essentially, the airport is "private use" and pilots must be a member of IAA or have permission to fly in. I found out "from various sources" that the airport was going to be closed due to an unsafe condition – trees growing in the approach path. The closure was slated to be sooner, rather than later, as the Minnesota Office of Aeronautics was on the verge of pulling the operating certificate for the airport, unless the city enforced its easement to clear the trees from private property adjacent to the airport. This was in early 2020 when I began working with the airport association, Minnesota Pilots Association (MNPA), and the Recreational Aviation Foundation (RAF) on a strategy to keep the airport open.

IAA had been involved with the issue for several years, and there were tensions between property owners, the city, and IAA. It was decided that the best strategy, given the short timeframe before a city council vote on the easement, was to hold a town hall meeting. Obviously, we wanted pilots and users of the airport on hand, but more importantly, we wanted members of the community to be involved.

Dave Retka, IAA President, started the legwork of inviting residents, business owners, city council members, and airport users to the meeting. I made plans to be there in person to speak on behalf of AOPA members, and to give a short presentation on the value of small community airports and how they are funded. IAA also completed a survey of how much and where its members were spending money in Isle

when they would fly in and visit the community. Those results were very helpful to the argument that the airport DOES contribute to the community financially. Over $50,000 was spent in 2019 on goods and services by pilots flying into Isle. It was hard to argue with real data!

I made the trip to Isle in early March 2020, just before the coronavirus shut down the world! I spent a couple days in town and was impressed by the hospitality and beauty of Mille Lacs Lake. It helps when you can see the community from the air!

The town hall meeting garnered attendance from nearly 75 people, some coming as far away as Rochester, Minnesota! MNPA, RAF, IAA and local citizens all spoke on behalf of the airport. I made it a point to say that AOPA, or any other aviation organization, cannot tell the city council what to do – that is the job of the residents.

Remember, this airport has taken no federal or state grant dollars over the years, so there are no obligations for the airport to remain open. That is why this decision was purely what is best for the community. The town hall meeting was mostly positive. Some folks did ask if there were more valuable uses for the land, such as an RV park. In truth, if the land were used for any other useful purpose, there would be a much higher cost associated to the city, more so than the operating cost of the airport in its current form.

Fast forward to June 2020, the vote had been delayed by the city council from April to June due to coronavirus restrictions. IAA was given time on the agenda to speak in favor of the airport and enforcing the easement. MNDOT was also on hand to answer questions on zoning and grant dollars.

Given some difficulties with zoning requirements that would have created an eminent domain situation to remove residences near the airport, it was not likely that the city would pursue public-use status for the airport. The city council did vote to enforce the easement, with the understanding that IAA will cover the cost of removing the trees.

This is a big win for the airport and its supporters. The airport will remain private-use and IAA will still lease the airport for the remainder of the current terms. IAA does have the funds to cover the tree removal, which is slated to occur in fall or winter of 2020. The airport is to remain open, and this is a reminder that it does take a community to keep an airport alive. Thanks to Isle, Minnesota for a good news story, and thanks to all of those who made it happen!

I hope everyone is staying healthy and finding ways to enjoy aviation in these challenging times.

It is a privilege to serve you!

(kyle.lewis@aopa.org) ❑

FAA To Extend Pandemic SFAR Beyond June 30

The FAA has a rule in the works to extend for a second time airman medical certificates that expired during the coronavirus pandemic and then had their expiration dates extended to June 30, 2020 under a special federal aviation regulation (SFAR) issued in April.

FAA Deputy Administrator Daniel Elwell announced that development June 18 during an online General Aviation Safety Town Hall meeting on which AOPA President Mark Baker served as a panelist. Baker noted that action on the SFAR was GA pilots' "number one issue" as the aviation sector adjusts to the unique challenges posed by the pandemic.

Baker added that interest is also running high among pilots working to stay safe and proficient, with many using AOPA's online educational materials to keep sharp during the crisis.

Elwell said he expected to offer "a more firm response" about the FAA's plans for an SFAR extension soon. He voiced the FAA's concerns about how to eventually "unravel" the SFAR and its workarounds for regulations governing pilot proficiency, training, and medical certification.

The panel, "Pandemic Impacts – Today and Into The Future," was moderated by Elwell, and included Baker, Experimental Aircraft Association CEO Jack Pelton, Jet Aviation Vice President of Flight Services David Dalpiaz, and Air Methods CEO JaeLynn Williams.

Operations at major airports were down 92 percent between March and June, lending credibility to flight-tracking data showing that Cessna 172s frequently outnumbered the number of Boeing 737s in the air (AOPA). ❑

Isle Airport Receives New Lease On Life

The Isle, Minnesota airport IS NOT closing! On Tuesday, June 9, 2020, the Isle City Council voted to enforce the air-easement to clear the tall trees off the south end of the runway. The Minnesota Department of Transportation, Office of Aeronautics had given the city an ultimatum in December 2019: either enforce the easement and clear the trees or face airport closure! Although this is the short and sweet version, the flight arriving at this destination was a bumpy ride, and filled with much turbulence.

The Isle Airport Association, formerly the Isle Flying Club, a Minnesota non-profit, 501c4 organization, has been working on improvements at the airport for more than 8 years. The goal established at that time was to regain "public-use" status. The Isle airport was initially licensed public when it opened in 1956, but became a "private-use" airport in the mid-1980s (more on that later). The Minnesota Office of Aeronautics visited the airport 8 years ago – at the airport association's request – to look at the possibility of re-designating the airport public. Tall trees were the biggest issue, along both sides of the runway and off both ends. Over several years, a small group of volunteers got busy, and using funds from the association, removed the trees. They hired a local bulldozer operator to push back trees along both sides of the runway, and organized several work parties to cut the trees off the ends of the runway. The association completed everything required by the state, up to the property line to the south, but unless the trees to the south – on private property – were removed, the airport would not be eligible for a public-use license.

The association's efforts in negotiating with the property owners led nowhere. In fact, these efforts were very unpleasant and put the association in a bad position with both the city and property owners.

About that time, one member of the association suggested they look at the courthouse to see if any air-easements existed. In doing so, the association discovered that when the airport was being established in the early 1950s, the city did in fact obtain an air-easement along the south border of the airport.

It was a very straight forward document, prohibiting any object – natural or man-made – from extending into the airspace, creating a hazard to safe flight, and giving the city the authority to "enter the land and cut to the stump" any offending trees or other objects. The association thought their troubles were over, but they were not. Over the next 3 years, the association battled hard to convince the city to take action. While the easement gave the city the authority to remove the trees, it did not obligate it to do so.

In 1954, several aviation-minded citizens from Isle applied for and received a grant from the State of Minnesota, allowing cities to obtain tax forfeited land to be used for constructing airports. The land that the Isle airport sits on today was acquired by a deed dated July 1, 1954, which forever transfers the land to the city, so long as it is used as a municipal airport, and "upon condition that if such use shall ever cease, the land reverts back to the State of Minnesota." Additional grants were received to help fund the construction of the turf runway, which was completed and licensed for public use in 1956. The airport was initially operated by the city and received state funding, as all public-use airports do.

According to research completed by the association at the Minnesota Office of Aeronautics during the past year, the city began receiving notice from the state in the mid-1970s that trees to the south were becoming a problem and that soon the state would be implementing a new 2500 ft. minimum runway length rule at all public airports. At that time, the runway was only 2300 feet in length.

The communication about the trees and the new runway length rule went back and forth for several years. The state even issued several waivers for its public-use license, allowing time for the city to comply. The air-easement was never mentioned in any of the documents the association researched. Finally, in 1980, the airport was ordered closed by the city and state until corrections were completed. Pilots continued to use the airport even though it was officially "closed," according to documents found. By 1983, the Isle Flying Club (now the Isle Airport Association), which was formed in 1967, had drafted a lease with the city taking over operation of the airport and applied for a private airport license from the state. The state approved the private license, as the requirements are less restrictive for private airports than for public airports. The first private license was issued for the Isle Airport in 1986. Since 1986, the Isle Airport Association has maintained and operated the airport, with no outside funding, including paying 50% of the city's liability insurance for the airport.

So, back to the December 2019 meeting and ultimatum given by the state. At that meeting, the state had given the city until April to decide on enforcing the air-easement or face immediate airport closure. What followed was a four-month whirlwind of activity. Isle Airport Association President Dave Retka visited many EAA chapter meetings and airport groups around the state to spread the word, increase the association's membership, and to get a letter-writing campaign started. The association worked with AOPA, and with their help, presented a townhall meeting to educate the community of the benefits of the airport. The association distributed information packets on the doorsteps of all Isle residents and businesses, and members visited with the city council members who would be making this decision. Then the association began to hear that the city wanted to use the airport property as an RV park. But wait, what about the deed and that the property must remain an airport? Several consultations with a property attorney revealed something called "the 30-year law." With the 30-year grant assurance expired, the city was now actually able to do whatever it wanted with the property, so this took a lot of wind out of the sails of the airport association.

The association met several times with the city and the state hashing out details. Their whole emphasis during this time was to re-establish the airport as a public-use facility with the benefits of unrestricted use and state funding. The state reviewed what needed to be done and what their funding contribution would be. Members of the association knew that the trees had to come down, but also learned that zoning and an "airport layout plan" would be required, funded by the state at 95%, with the association picking up the remaining 5%. The association assured city officials that there would not be any financial burden on the city. Then the coronavirus pandemic hit causing cancellation of both the April and May city council meetings and created a few other difficulties for the airport association.

With only a few days before the June 9th city council meeting, the state informed the airport association that several homes were in the "clear zone," an area within 1000 feet of the runway threshold, and would need to be removed to meet public airport status. Not many people, including Retka, were in favor of removing homes to re-establish the airport as public.

The Isle City Council approved that the airport would remain open, but will continue to be a private-use airport and funded solely by the Isle Airport Association with membership dues, donations and proceeds from the annual fly-in breakfast.

NOTE: The Isle Airport Association wishes to thank everyone for their support. The letters written, the phone calls pilots made and the encouragement provided, all made a huge difference. The association could not have accomplished this without these joint efforts.

"We cannot stop here, however," said Dave Retka. "We must continue to grow our membership and increase the traffic flying into Isle. Please consider joining or renewing your membership in our association." Contact Dave Retka at **daveretka@gmail.com**.

A Go Fund Me account has been established to raise the money needed to remove the trees: GoFundMe: **https://gf.me/u/x8syy5 or via PayPal: https://www.paypal.me/isleAirport** ❑

Concurrent use and land release: risks, rewards, and what you should know

Small airports across Minnesota are often looking for new ways to cover their costs. One alternative revenue source might be right on the airport's property—in the form of excess or underutilized land. Development could benefit the airport and surrounding community as a whole. But first, if an airport is federally obligated, it will need FAA approval for non-aeronautical use. Stephanie Ward, manager of aviation planning at Mead & Hunt, offers advice for airports considering their options. But first, if an airport is federally obligated, it will need FAA approval for non-aeronautical use.

During a session at the 2019 Minnesota Airports Conference, Stephanie Ward, manager of aviation planning at Mead & Hunt, discussed the process and offered advice for airports considering their options.

Stephanie Ward of Mead & Hunt, Inc.

Land adjacent to or in the immediate vicinity of an airport must be compatible with normal airport operations. How the FAA defines non-aeronautical use can often dictate what an airport can and cannot do, Ward explained. "Put simply, if you propose a use and it needs the runway to function, then it's an aeronautical use. If you can close the runway tomorrow and that business can still exist, then it's non-aeronautical," she said.

First, it's critical that the airport references and understands what is shown on its airport layout plan (ALP) and its Exhibit A property map. A sponsor must determine if the property under consideration is federally obligated. "This could mean you've used federal funds to purchase the property, but it can also mean that if you've shown the property on either one of those documents inside your property line, then technically it's obligated," Ward said. Federal obligation means certain conditions and assurances must be met as a condition of the airport accepting federal money.

The FAA has traditionally denied non-aeronautical use requests, Ward said. If property is designated for the airport, then it generally wants to reserve it for the airport; however, there are more and more demands from airports to generate revenue and land releases are becoming more frequent.

The FAA Reauthorization Act of 2018 (Section 163) could give airports more flexibility to develop non-aeronautical uses. The Act limits the FAA's authority to directly or indirectly regulate non-aeronautical property transactions at an airport except to ensure the safe andp efficient operation of aircraft or the safety of people and property on the ground and to ensure the receipt of fair market value, Ward explained. But she cautioned that more guidance on implementing this is expected within the next few years from the FAA.

Airports considering a non-aeronautical use should be prepared to answer three key questions: 1) Should we do this? 2) Where could we do this? 3) How do we do this?

"The type of development is going to greatly change what you can and can't do. So, you have to put a lot of thought into this," she said.

The new solar farm at Middleton Municipal Airport – Morey Field (C29), Middleton, Wis., is an example of "concurrent land use" of airport property.
Skot Weidemann Photo

When considering non-aeronautical use, airports have three options: a Section 163 request, concurrent land use, and land release. The Section 163 option is still untested and a bit ambiguous since there is no guidance on what to submit or the process that the FAA will use to consider the request, Ward said. Consequently, a concurrent land use or land release request might provide a more defined approach to a non-aeronautical use. There is no guarantee that the Section 163 will be faster or slower than the more traditional request process, nor is there any assurance that the requests will be approved for any of these three options.

Concurrent Land Use

Concurrent use is the use of dedicated airport property for a compatible non-aviation activity while simultaneously serving the primary purpose for which it was acquired. For example, portions of land needed for approach zone purposes could also be used for agriculture. Other concurrent uses include road right-of-way easements and utility easements.

"Concurrent use approval [for agricultural use] has historically been an area where few airports have asked for formal approval," Ward noted. "In Minnesota you may want to touch base with the FAA [Airports District Office] to confirm if it wants a formal request to document what is being done."

Concurrent use requires FAA approval, but no formal release is necessary.

Land Release

Airports can also request from the FAA a release of land from obligations incurred under agreements with the federal government. Land may be released if it is no longer needed for

aviation-related use, encroachment or approach protection, or noise compatibility. A release could then allow an airport to sell or lease property it owns for non-aeronautical use.

A land release can take significant time, effort, and money, Ward said. "It has to be shown on your ALP as unnecessary for aeronautical purposes first. It's really focused on that long-term transition," she said.

Twenty years ago, it was a much different environment; now the FAA is looking for a specific use. "That really has become a challenge because the speed at which the land release process happens does not work at the speed of development," Ward said. "The days of a blanket release are well behind us."

There are two types of land release. In the "release from aeronautical use," the airport retains ownership of the land, but the land is no longer required to be used for aeronautical purposes. With a "release and removal of dedicated property," the airport usually sells land and is no longer responsible for maintaining it as dedicated airport property.

When requesting a release, an airport will need to address the proposed purpose, history of the property, environmental factors, and financial aspects. Based on her experience, Ward said the "why" and the "what" are most critical—why is the request being made (e.g., excess property), and what are the benefits of releasing it compared to the airport maintaining the property in its existing condition.

The history of the property is critical, because surprises could surface upon closer examination, Ward continued. It will be important to know what the deed actually says, how the airport originally acquired the property, what state or federal requirements need to be carried forward in any agreements, what specific property or facilities are involved, and what the present condition of the property and its current use is. Federal surplus property and former military property are more complicated, she added.

Preparing financial information for a land release will require a fair market value appraisal of the property, which can be expensive and time consuming. "We have lost more than one proposed developer because of the time it took," Ward said. The airport will also need to evaluate the return on investment, what proceeds are expected, and how they will be used (e.g., for capital improvements or operations) and include a summary of intangible benefits (e.g., existing revenues, future revenues).

For the environmental aspects of land release, a categorical exclusion (CATEX) is usually sufficient, Ward said. However, FAA Standard Operating Procedure 5.0 has greatly increased the cost and time for a CATEX. Knowing as much as possible about the proposed land use will help address potential environmental impacts that can complicate the process.

Ward urged airports to determine what they're trying to do before they get too far down a path. Key aspects to consider up front are:

- Documentation (location and review of historical documents; extent of environmental documentation necessary; agreement language and duration).
- Costs (benefits of the release vs. cost to obtain release). Determine who will pay for the release and the associated elements—for example, the airport or the developer.
- Timing. How early can you ask for the release? How long will FAA approval take—and will a developer wait for the process? Expect 12 months at a minimum, Ward said, and "Be prepared that the developer will be appalled at how long it will take."

And there's no guarantee the FAA will say "Yes." The agency will consider if the request is reasonable and practical, how it will affect needed aeronautical facilities and future development, and whether it's compatible with the needs of, and will benefit, the airport and civil aviation.

Finally, if an airport buys property without federal funding, it should think carefully about whether to show that property on its ALP, Ward cautioned. The airport could be tying federal obligations to something that wasn't intended. "Whether it's been federally funded or not, there's going to be a criteria review on it…Do you want to obligate it? That could make a difference in how you go through this process."

Airports should also consider that when they receive money for selling land, if applied toward a federally funded project, those funds usually cannot be used towards the local match of federal funds. The land release funds must be applied to the primary project costs, before federal funds are considered. A long-term lease might be a better option, Ward said, since funds generated by a lease can usually be used for operations and maintenance projects, as well as capital projects, which affords the airport more flexibility.

For more information: FAA grant assurances No. 4 (Good title), No. 5 (Preserving rights and powers), No. 21 (Compatible land use), No. 25 (Airport revenues), No. 29 (Airport layout plan/Exhibit "A"), and No. 31 (Disposal of Land)

- FAA Order 5190.6B: Airport Compliance Manual
- FAA Policy and Procedures Memo 5190.6, "Guidance for Leases, Use Agreements and Land Releases"
- ACRP Report 176: Generating Revenue from Commercial Development on or Adjacent to Airports

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Accelerated Aviation Instruction Moves To Owatonna

After years of steady growth, Accelerated Aviation Instruction (AAI) has moved their operation from Albert Lea Municipal Airport (KAEL) in Albert Lea, Minnesota to Owatonna Degner Regional Airport (KOWA) in Owatonna, Minnesota. AAI president and chief flight instructor, Jim Jacobson, said "We simply outgrew the facilities at Albert Lea. We now have four times the classroom space, larger offices and a heated hangar connected directly to the flight school."

(L/R) Clayton Peterson and Jim Jacobson with the Accelerated Aviation Instruction Partenavia.

The move to Owatonna not only provided the much-needed space, it also allowed Accelerated Aviation Instruction to upgrade its fleet of training aircraft and modernize its avionics. Accelerated Aviation Instruction's newest purchase is a Sport Cruiser with dual Dynon displays and a Garmin 650, fresh from the factory.

"The Owatonna Planning Board and the Owatonna Airport Commission, along with airport manager, Dave Beaver, have been great to work with," said Jacobson.

Owatonna is a great training airport as it has an ILS, the Halfway VOR, and RNAV GPS approaches. Both are great navigational aids in instrument training. Jacobson comments, "I know that we take more of an old school approach to flight training, but I don't want to create more children of the magenta line. With instrument training, it is much easier to go from round gauges to glass than the other way around."

Owatonna is less than an hour from Minneapolis/St. Paul for gaining experience in Class B airspace, and within close proximity to Rochester International Airport for Class D experience. As a somewhat quiet airport, pilots are usually number one for takeoff, negating time-consuming delays on the taxiway. The airport is just north of the city of Owatonna on Interstate 35. At the entrance of the airport are three T-38s in U.S. Air Force Thunderbirds colors in a starburst formation.

Flight training is not a new venture for Jim Jacobson. He was a flight instructor and adjunct faculty member at Minnesota State University (MSU), Mankato in the late 1990s. While at Mankato, he also coached the MSU flight team and was a member of the Mankato Squadron of the Civil Air Patrol. Jacobson instructed at MN Aviation, located in Albert Lea in early 2000, then in mid-2000, he flew freight for PacAir out of Oshkosh, Wisconsin. In 2007, he rejoined MN Aviation as chief pilot and general manager. He took over the flight school in Albert Lea in 2015 and rebranded it Accelerated Aviation Instruction.

As the business grew, Jacobson found it increasingly challenging to instruct full-time and also attend to all the other issues of running a business. In May of 2019, Clayton Peterson became a partner as business director and part-time flight instructor. Peterson has remained an active CFI for over 30 years.

When Peterson was in college, his two loves were aviation and agriculture. At that time the job market was so tight it was almost impossible to find a job as an airline pilot. His business experience, combined with his knowledge of aviation, makes him an invaluable asset to the company.

As you walk into AAI's new facilities, you enter from the parking lot, directly into the reception area which includes a large classroom and flight planning area. Down the hall to the right is a spacious room for their flight simulator, a Redbird LD. This flight simulator can be configured as a twin-engine

AAI's Partenavia

airplane with the traditional gauges and a Garmin 430 and 530, or it can be set up as a Cessna 172 with a Garmin G1000. The Redbird LD simulator has been authorized by the FAA as an Advanced Aircraft Training Device (AATD). The hours logged in this simulator can fulfill up to 20 hours needed for the Instrument Rating, and for up to 50 of the 250 hours required for the Commercial Pilot Certificate. Just down the hall from the sim is a room with cubicles for individual ground instruction. To the left from the grand room are Jim and Clayton's offices, then down the hall is another large classroom. This room is many times used for CFI classes. Continuing on from there is a large common area with a great view of the airport. Another great feature of the Owatonna facilities is there's room to grow!

Jim Jacobson is a big believer in accelerated training. He has experienced both hourly training with his time at Minnesota State University and with accelerated training at the former MN Aviation, and now with his own flight school, Accelerated Aviation Instruction.

Jacobson comments: "I have taught flight training both ways – the slow, part-time method over a period of several months, and the accelerated format. I prfer accelerated training much more!

"Progress is so much faster when you can work with the student all day, every day. They have dedicated the time and money to achieve their next milestone in aviation. Students

AAI's Light Sport Cruiser

isolate themselves from all the distractions that life and family can throw at them (at least for a short while). This is the way the airlines and the military have successfully trained pilots for decades, so it just makes sense that general aviation does as well."

Jacobson does caution students that they cannot just take one of the accelerated courses and forget it. "They must keep reviewing, practicing and honing their aviation skills to stay safe and proficient."

Accelerated Aviation Instruction can help alleviate some of the obstacles to completing flight training.

Time: One of the main reasons people drop out of flight training is that it takes too long going the conventional route. Students either lose interest, or they do not feel like they are making progress. If there's too much time between flight lessons, they have to repeat lessons previously learned, which significantly adds to their training time and cost. The FAA requirement for the Private Pilot Certificate is 40 hours of flight time. The national average is 75 to 80 hours. At Accelerated Aviation Instruction, the average is 45 hours, with 50 hours on the high side.

Cost: You don't have to be a genius to realize as the number of hours of flight and ground instruction increase, so do your costs increase. Many people quit because the cost of the flight training greatly exceeds the amount they budgeted for. AAI's price structure is based on their years of experience.

Scheduling: A recent student completed his flight training at AAI because at his previous flight school, either his instructor or the aircraft was not available. The more training is delayed, the more lessons that will have to be reviewed or repeated.

Distractions: To use an old cliché, "Life sometimes gets in the way." As important as family, friends and work are, many times interruptions are unavoidable. Because the training at AAI is concentrated, daily distractions can be avoided.

To borrow a quote from Steven Covey, "A goal is a dream

with a time limit." We don't always hit our time limit, but we are much closer than if we say, "Someday, I am going to do this," and we never get around to doing it. As we all know, "Someday" is the essence of procrastination."

In aviation, as well as life in general, the most successful people are the ones who are Contrarians. In short, when everyone walks, you run, and when everyone else runs, you walk. Currently in aviation, it looks like there's a big slowdown in hiring. So now is the time you should be working to get all the ratings and certificates you need to be competitive in the job market when things start to rebound, and they will.

(L/R) A student trains on the Redbird Flight Simulator with CFI Devon Natalie.

Minnesota Aviation Trades Association – Investing In The Future!

Congratulations to NATHAN WURST of Chaska, Minnesota, who was selected to receive the 2019 MATA Scholarship!

Nathan is working on his private pilot certificate at Thunderbird Aviation at Flying Cloud Airport in Eden Prairie, Minnesota, and has been accepted at the University of North Dakota John D. Odegard School of Aerospace Sciences beginning this fall.

To help pay for his education, Nathan started working as a line service technician at Thunderbird Aviation in the fall of 2018 while a senior in high school. Nathan stated: ***"I believe in hard work and focus in order to succeed as a pilot. I see the aviation community as bonded over its love of flight… It is a community that I am proud to be a part of for the rest of my life."***

To be eligible for the MATA Scholarship, applicants must be currently enrolled in a flight training curriculum at a Minnesota flight school that is also a member of MATA, and write an essay on why they want to learn to fly or continue their training. The applicant's ability to communicate their current position and future goals is very important. The scholarship application, details, updates and requirements can be found at **https://www.mata-online.org/**

One of the goals of the Minnesota Aviation Trades Association is to help create tomorrow's aviation professionals, while supporting member flight schools.

Aviation businesses interested in becoming a MATA member and supporting the organization's efforts to promote and represent the industry before government, should contact **Nancy Olson at 952-851-0631 Ext 322 or email ngo@thunderbirdaviation.com.**

MATA – The Choice & Voice of Aviation Businesses Since 1945

Why we fly them, and how we make them fly?

EAA's B-17 "Aluminum Overcast."
EAA Photo

by Sean Elliott
Vice President, Advocacy and Safety
Experimental Aircraft Association

EDITOR'S NOTE: On October 2, 2019, a Boeing B-17 Flying Fortress owned by the Collings Foundation crashed at Bradley International Airport in Windsor Locks, Connecticut. Seven of the 13 people on board were killed, and the other six people, as well as one person on the ground, were injured. The aircraft was destroyed by the ensuing fire. An investigation of the accident revealed that there may have been safety breaches in key personnel, operations and maintenance, and as of March 2020, the FAA revoked the Collings Foundation's permission to carry passengers.

I have had the opportunity to take flights on a number of warbird aircraft, from single-engine prop and jet trainers, to the four-engine B-17 Flying Fortress, and while I have enjoyed these flights immensely and would go on them again if given the opportunity, I will admit the age of some of the pilots flying the aircraft, and/or not knowing how well the aircraft have been maintained, have been considerations. I have been least concerned with the possibility of losing the aircraft, as I feel our museums have plenty of non-flying aircraft for future generations to see.

The following article written by EAA Vice President Sean Elliott, who is in charge of flight operations at EAA, discusses the debate of why and how we should continue to fly warbirds. The article is being published here with permission of EAA, where it was initially published in March 2019. After reading this article, I welcome your feedback at **dave@midwestflyer.com**. Thank you!

Dave Weiman, Editor/Publisher
Midwest Flyer Magazine

One of never-ending debates regarding vintage and warbird aircraft is the flying-vs.-display discussion (sometimes argument). There are those who maintain that airplanes are meant to be flown; others are just as convinced that keeping them grounded in museums prevents possible tragedies that would destroy a priceless aircraft forever. It would be easy to break that debate into pilot vs. historian camps, but the sides are more nuanced than that.

I'll remove all the suspense from my position. With a very few exceptions, fly them. These airplanes, such as the B-17 bomber and Ford Tri-Motors we (Experimental Aircraft Association) fly on tours in North America, or the vintage aircraft we fly at our museum's Pioneer Airport, are living experiences. No book, no video, no social media virtual reality snippet will tell the story as well as being part of the flight experience.

Sean Elliott, vice president of safety and advocacy at EAA in Oshkosh, Wis., in the left seat flying EAA's B-17 "Aluminum Overcast," with Ken Morris of Poplar Grove, Illinois, in the right seat. Morris is a volunteer B-17 commander and pilot. *EAA Photo*

Let's take our B-17 Aluminum Overcast as an example. For the past 25 years, our national tours have enriched the lives of people, whether or not they experienced a combat mission where the bomber was initially used. This is especially important as time marches away from the people who are the direct connections to the World War II era. It never ceases to touch me at the deep emotional connections that emerge from those who tour or fly aboard our airplane. Often people leave in tears because of the enormity of the experience and the thoughts of a loved one – a dad, grandfather, uncle, or such – who endured the harsh environment of combat missions.

The B-17 is tight as far as quarters go. It is Spartan. Only by moving around in the airplane during flight can one get the sense of squeezing along the walkway and through the hatches, while hearing the engines roar and feeling the air coming through the openings. One can only think of the young men (all men, at the time), who were flying toward hostility in a freezing, lumbering aircraft, knowing that their day would either end very badly or, at best, with a sense of relief. There is no artificial intelligence game that can match that.

Making the experience possible on a daily basis is also why I'm so impressed with the volunteers who fly, maintain, and host the airplane during our tours. They are EAA people at heart and hold themselves and the aircraft to the highest standards.

That holds true for the pilots, to begin with, who follow a five-year path to become a lead pilot on the aircraft. It's not just finding the "Ace of the Base" as pilots go. We have numerous pilots apply to fly the B-17, but only about half of them succeed. That could be for several reasons: The skills are not quite to the standards we require, or they don't handle themselves well as part of an EAA team, or we discover they are in it more for themselves than for those who come to see the airplane and the organization that provides the opportunity.

We use many lessons learned from the airlines' Cockpit Resource Management (CRM) in our training. We give pilots the opportunity to succeed over a five-year pathway to aircraft commander. They begin as a co-pilot in the right seat, then advance to co-pilot in the left seat under an aircraft commander. After earning a type rating in the third year, the fourth and fifth year is spent as a near-equal to the aircraft commander, in a flying partnership instead of a hierarchy.

Our pilots, and ground crew as well, must work as a unit as it becomes a barnstorming team for two weeks at a time. They become problem-solvers and they become family. Most important, however, they become the people who can convey the stories of those who flew in combat to those who are here today, some 75 years later. We tell of one of the most difficult times in our nation's history, when the threat was real and the outcome was not assured.

When I was teaching at Embry-Riddle Aeronautical University, people told me about this guy named Paul Poberezny in Oshkosh who was EAA's founder and president, but could often be found picking up chairs or mopping floors. When I arrived at EAA two decades ago, Paul taught me the importance of leading by example, shoulder-to-shoulder with volunteers. I have had some of my best tour experiences when we have staff and volunteers working together, learning each other's perspectives. When united for a common goal, we can successfully go on tour, and tell the story of these airplanes and the people who flew them in combat – including those who made the ultimate sacrifice.

That goes back to my initial point of flying these historic aircraft. An airplane is a machine, but I believe each one also has a soul. That soul soars when it is flown and its story becomes real and shared.

That is why we fly them.

To read more about EAA's B-17 "Aluminum Overcast," go to EAA's Aviation Adventure Speaker Series

"History of the B-17,"

presented by Sean Elliott:

https://www.eaa.org/videos/4078216022001 ❑

The Person Who Gave EAA Its B-17 – Bill Harrison

November 2,1933 - June 24, 2019

Bill Harrison
EAA Photo

EAA's B-17 "Aluminum Overcast."
EAA Photo by Connor Madison

The late William (Bill) E. Harrison, EAA Lifetime Member (16556) and Warbirds Member (261), is the person who generously donated the B-17 "Aluminum Overcast" to the Experimental Aircraft Association (EAA) in 1983. Harrison was a longtime member of EAA and its Warbirds of America Division, and had an indelible impact on the warbirds community. He served as a director of both organizations, president of Warbirds of America, and chairman of the EAA Museum Committee.

Born and raised in Waco, Texas, Harrison went to medical school in Houston before joining the U.S. Army. He served as a captain with the 101st Airborne Division during the Vietnam War. After the war, he settled in Tulsa, Oklahoma, and practiced as an orthopedic surgeon at hospitals and, eventually, at his own practice.

Harrison learned to fly at age 16, and over the years he flew various warbirds to Oshkosh, ranging from bombers, to helicopters, to jets.

In addition to his work with EAA and Warbirds of America, Harrison served on the board of directors of the National Biplane Association and the Tulsa Air and Space Museum, and as president of the Unlimited Division of the National Championship Air Races in Reno. He established his own warbird aircraft restoration and sales businesses, Condor Aviation and Bluegoose Aviation. Harrison is enshrined in the EAA Warbirds Hall of Fame and was named "Oklahoma Aviator of the Year" in 1995.

Bill Harrison, 85, died peacefully, June 24, 2019 in Tulsa, Oklahoma, surrounded by family. ❑

Aerospace Industry Mourns Passing of Rudy Frasca

Rudy Frasca with one of his many flight simulators that bears his name.
Photo Courtesy of the Frasca family.

Rudy Frasca with his Curtiss P-40 Warhawk.
Photo Courtesy of the Frasca family.

URBANA, ILL. – The international aerospace community is mourning the passing of aviation icon, Rudy Frasca, 89, who created the "Frasca" flight simulator." Frasca passed away May 11, 2020 of natural causes.

Frasca was born on April 19, 1931 in Chicago, Illinois. He was one of six children of Anthony and Jenny Frasca. He and his wife, Lucille (Matern), were married in 1955 and moved to Champaign, Illinois where Frasca started his business, and where he and Lucille raised their eight children.

Frasca began taking flying lessons at the age of 14 and soloed shortly thereafter. In 1949, he joined the U.S. Navy and was stationed at Glenview Naval Air Station, where he worked as a flight instructor teaching pilots on the early Link trainers.

After the Korean War, Frasca left the Navy to attend the University of Illinois, where he did research in aviation psychology and honed his interest in the field of flight simulation. The more he worked with the early generation of flight training devices, the more he realized that there had to be a better way.

In 1958, putting together everything he had learned in the Navy and the university, Frasca built his first flight simulator at home in his garage and Frasca Aviation was founded. The company was later renamed Frasca International to reflect the emerging character of the business.

Over the years, Frasca collected many unique and vintage aircraft, including a P-40, Spitfire, Wildcat, SNJ, T-34, Fiat, and a Japanese Zero replica. He loved all airplanes, but had a special place in his heart for his Piper J-3 Cub.

Rudy Frasca's love of grassroots aviation and passion for flying, fueled the growth and success of his flight simulator company.

Frasca was active in many aviation organizations. He has loaned several of his aircraft to the EAA Museum in Oshkosh, Wisconsin, over the years, for the benefit of the general public. He was also a benefactor of collegiate aviation (NIFA, SAFECON & UAA).

Those who knew Rudy Frasca admired his friendly, outgoing personality, his sense of humor, his strong work ethic, and his faith. He had a way of always looking for the good in people, and took great interest in getting to know them, whether a family member, employee, fellow pilot, or aviation enthusiast.

"Whether it was greeting pilots at Frasca Field or at the Frasca booth at EAA AirVenture, watching his sons perform in airshows, or giving people personal tours of his factory, Rudy was everything aviation and more," said Dave Weiman, Editor and Publisher of Midwest Flyer Magazine. *"He will be missed, but his contributions to aviation will live on."* ❑

CAF's Rescue of the B-29 Superfortress "FiFi"

The B-29 Superfortress known today as "FiFi."
CAF Photo

The B-29 Superfortress known today as "FiFi" was built by Boeing-Renton and delivered to the United States Army Air Forces (USAAF) on July 31, 1945. Having come off the assembly line shortly before the end of the war, the aircraft's first assignment was as a training aircraft at Smoky Hill Field in Kansas, followed by assignments at Dalhart, Texas and Grand Island, Nebraska. In late 1947, the aircraft was put into storage at Pyote AFB in Texas.

The aircraft was returned to full bomber configuration for the Strategic Air Command in October 1952. After spending a year back in Kansas, the aircraft again became a training aircraft in 1953, this time at Randolph AFB, Texas. In late 1956, the aircraft was delivered to the China Lake Naval Weapons Center in California to be used for weapons testing.

In the early 1960s, the Commemorative Air Force (then Confederate Air Force) began looking for a B-29 to add to its collection. In 1971, CAF member, Roger Baker, flew over China Lake and saw B-29s parked on the ground, and reported this back to CAF Headquarters. Sponsored by CAF member, Vic Agather, a crew was dispatched to recover one of the airplanes and deliver it to CAF Headquarters. The aircraft arrived in Harlingen, Texas in August of 1971 following a 6-hour 38-minute flight, having been in open storage for nearly 15 years without any preservation. Following a three-year restoration, again sponsored by Vic Agather, the aircraft returned to the sky in 1974 and was named "FiFi" in honor of Vic Agather's wife.

In 1976, "FiFi" began touring the United States, the first warbird to do so, bringing flying history to different locations around the country. Over the next 30 years, "FiFi" told the story of the B-29 and World War II aviation history to countless people. For most of that time, the aircraft was the only B-29 most people would ever see in the air, or on the ground. In 2006, the decision was made to ground the aircraft for some much-needed maintenance, including replacing the original B-29 engines with later, custom-built engines.

In 2010, with the engines now replaced, "FiFi" returned to the Airpower History Tour to pay tribute to the men who flew and maintained B-29s, and to the women who built them. ❑

CAF Photo

Warbird & Airline Pilot, Randall Lee Sohn

February 1, 1934 - April 1, 2020

The pilot who helped fly the B-29 bomber, later known throughout the world as "FiFi" from Naval Air Weapons Station China Lake, California to Harlingen, Texas in 1971, where the Commemorative Air Force (CAF) was first headquartered, Randall (Randy) Lee Sohn, 86, of Savage Minnesota, passed away April 1, 2020 due to COVID-19.

Sohn was nothing less than a warbird legend in the eyes of anyone who knew and respected his flying abilities and knowledge of warbirds. Sohn flew most every World War II military aircraft, and flew them better than most. He was a wonderful teacher and generously passed along his warbird knowledge in the form of his warbird notes, according to those who knew him best.

Sohn was born to be a pilot in Lake Park, Iowa on February 1, 1934, but became a longtime resident of Minnesota.

Sohn was a complex man who rose above a fairly pedestrian background, exercising his creativity, determination and ingenuity to achieve extraordinary things. He went from his first flying lesson in January 1953, to the Air Force in August that same year, to graduate as an aviation cadet at Reese Air Force Base in 1955. In other words, Sohn wasted no time to build flight time and experience in military aircraft.

Randy Sohn flying a PBY at Oshkosh, Wisconsin, the weekend that he and the aircraft owner, Connie Edwards, learned to take off and land on water.

Jim Hughes Photo

(L/R) Randy Sohn getting Paul Tibbets of B-29 "Enola Gay" fame current in the B-29 Superfortress "FiFi" with Vic Agather in the background. Tibbets hadn't flown a B-29 since 1950. *"Paul flew flawlessly and the banter before and after the flight between he and Randy was wonderful,"* says photographer Bill Crump, who took the photograph he believes in 1976. *"The guys were great, respectful friends. It was an honor to know Paul and be a close friend to Randy. I will miss Captain Sohn."*

Bill Crump Photographer, Inc.

(L/R) Paul Tibbets and Randy Sohn.

Bill Crump Photographer, Inc.

Sohn became a flight instructor for multi-engine aircraft in 1958, and added most World War II aircraft to his logbook as a member of the Commemorative Air Force.

Sohn and his first wife, JoAnn, married in 1956, had their daughter, Sari, at Reese Air Force Base in Lubbock, Texas, and son, Mike, at Offutt Air Force Base in Omaha, Nebraska. The family settled in Minneapolis where Sohn became a pilot for North Central/ Republic/ Northwest Airlines beginning in May 1960 and retired flying DC10s and Boeing 747s in 1994.

Sohn married his second wife, Judy, in August 1991, and moved to a quiet lake home with a multitude of storage buildings for his collection of cars, magazines, and books.

Sohn was inducted into the EAA Warbirds Hall of Fame in 1998, and was an enthusiastic participant in numerous aviation foundations, interest groups, and forums, as a pilot, instructor, check airman, tractor aficionado, mentor, raconteur and writer.

Sohn is survived by his wife, Judith Joy Sohn, daughter Sari (Jim) Hughes, son Mike (Luwela) Sohn, and grandson Dayne Sohn. He was preceded in death by his parents, Casey and Molly Sohn, and sister Patty. ❑

Bob Taylor with the 1941 Interstate Cadet he soloed in 1946, and which his grandson, Ben Taylor, soloed and learned to fly in 1998.
AAA Photo

Antique Airplane Association Founder & President, Robert Leo Taylor

July 2, 1924 – June 20, 2020

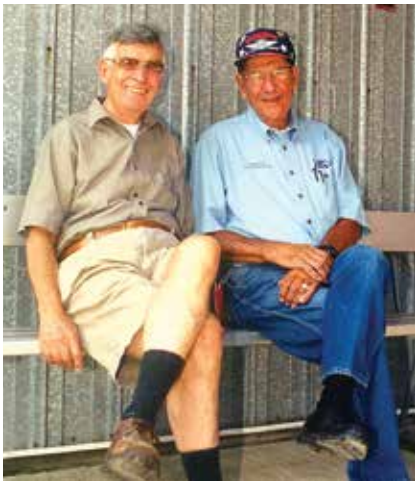
OTTUMWA, IOWA – Robert (Bob) L. Taylor, 95, founder and president of the Antique Airplane Association (AAA), and cofounder and chairman of the Airpower Museum (APM), passed away June 20, 2020. In addition, Taylor shared ownership of Antique Airfield (IA27) in Blakesburg, Iowa, the site of the annual AAA and APM fly-in and convention held Labor Day weekend.

In 1941, Taylor soloed and served in both World War II (U.S. Army Air Forces) and the Korean War. He has worked as an aircraft mechanic and airport manager in addition to buying and selling airplanes and restoring them. An expert in vintage aircraft, Taylor was often called upon in the production of television commercials and motion pictures, as both a consultant and pilot.

In 1994, Taylor was inducted into the Iowa Aviation Hall of Fame having founded the Antique Airplane Association in 1953. In support of AAA and APM, Taylor published "The Antique Airfield Runway" magazine, which features articles and stories about the peculiarities, the mystique, the nuts and bolts, and the joy of rebuilding, maintaining and flying antique airplanes.

AAA currently has more than 20 chapters throughout the world which help promote antique aircraft "type" clubs, including the Interstate, Culver, Corben, Fairchild, Great Lakes, Pietenpol, Rearwin, Parrakeet, Hatz and Travel Air.

From the sidelines, many people may have viewed Taylor and the founder of the Experimental Aircraft Association (EAA), Paul H. Poberezny, as fierce competitors, and nothing could be further from the truth. Taylor and Poberezny may have been friendly rivals, but were also friends and respected one another, held memberships in each other's organizations, and would often attend one another's fly-ins at the invitation of the other.



(L/R) Bob Taylor with Paul Poberezny.
AAA Photo

Taylor is survived by his sons Barry Taylor and Brent Taylor (Marcy); daughter Holly Taylor; granddaughters Nicole Helm (Rich), Dr. Whitney LeFevre (Nick), and Taylor Beck, and grandson Benjamin Taylor; great-grandchildren John and Joseph Helm, and Aidan LeFevre; and numerous nieces and nephews. He is preceded in death by his wife Eleanor Lorraine (Swanson) in 2006.

For additional information about Robert L. Taylor, and the Antique Airplane Association and Airpower Museum, visit www.antiqueairfield.com. ❑

An overview of our route in ForeFlight and our happy faces.

Image Courtesy of ForeFlight

Wedding In Eleuthera

by Yasmina Soria Platt

Yasmina Soria Platt

When one of our old friends announced he would get married in the Bahamas in February of 2020, my husband and I immediately said we would fly GA there. It was too good of an excuse to pass up. We had flown to the Bahamas in 2016 and loved it. We were excited to do it once again and visit different islands.

This is a summary of a longer blog post. If you want to read about our trip in its entirety, you can do so at **www.airtrails.weebly.com/bahamas.**

While the main focus of the trip was flying around the Bahamas, we also had to make a work-stop and visit the groom and bride in Pompano Beach where they live. The timing could not have worked better!

Trip preparation and execution was much easier this time around. Here are some reasons why and some other thoughts from the trip:

Destinations

- We filed all flight plans (including the international/ICAO ones) using an application.
- We filed all CBP manifests using "FlashPass," a new-to-us application, but the trip's MVP.
- Clearing customs at Fort Pierce was even easier than last time. An officer met us at the airplane. Using biometrics (taking a picture of us), he cleared us in without having to leave the ramp or having to get our luggage out. In and out in 2 minutes!
- One still needs to carry plenty of cash, plan the fuel stops carefully, fly with more fuel than needed, and fly with some basic aircraft supplies (like chocks, oil, a funnel, and windshield spray).

Since the Abaco Islands were destroyed by Hurricane Dorian, and Great Harbour does not have many lodging options, we visited Bimini and South Eleuthera's Rock Sound on the way to Governor's Harbour in Central Eleuthera.

The weather and winds aloft (sometimes giving the Piper Archer a groundspeed of 150-160 kts) to the final destination were awesome! We weren't quite as lucky on the return flight, with headwinds, low ceilings, fog, and rain cells the entire way back from Fort Pierce on.

Legs 1-3: Houston, TX (KTME) to Pompano Beach, FL (KPMP)

Legs 1 to 3 can be summarized by a delicious lunch on the beach in Destin and a beautiful sunset and successful "Rusty Pilots" seminar in Plant City. We spent two fun days of sun, boating, wedding prepping, and, mostly, great company in Pompano Beach before jumping to the islands.

Leg 4: Pompano Beach, FL (KPMP) to South Bimini, Bahamas (MYBS)

Bimini offers the quickest, shortest jump from the Florida coast. The flight was a distance of 67 nm for us, "door to door." We spent more time climbing and descending than at the filed altitude of 7,000 feet.

Clearing customs and immigration, paying the $50 inbound fee, and obtaining our ferry permit in Bimini was easy. They did not charge us any landing, parking, or security fees and they don't sell fuel.

Jared and I are always happy to stop in Destin, and this time, it was a great first stop based on trip planning and rumbling stomachs. The "seafood diet" started right away… with a yummy lunch on the beach.

The sunsets on the way to and upon our arrival at Plant City (known for its strawberry festival) were the absolute best of the trip.

The normal condition of runways in the Bahamas.

Bimini is divided into two islands. The airport is on the southern island, while most everything else is on the northern island, from Alice Town to the Hilton resort. Once we dropped off our luggage, we rented bicycles to get around the island. Radio Beach is said to be the best beach they have, but the Hilton's beach is just as good and it is more secluded.

Bimini is divided into two islands. The airport is on the southern island, while most everything else is on the northern island, but there's a combo bus/ferry for the transfer.

Radio Beach is said to be the best beach they have, but the Hilton's beach is just as good and it's more secluded. We also enjoyed biking to the southern tip.

Leg 5: South Bimini (MYBS) to Rock Sound, Eleuthera (MYER)

Some of the things we as pilots get to see from the air are just simply spectacular! Nature is truly unbelievable. The "sand art" we saw just west of Rock Sound was unexpected and stunning.

Once on the ground, we rented a car and enjoyed visiting the Ocean Hole, Lighthouse Point, and the Boiling Hole, although we probably enjoyed exploring places that did not

The view just north of Andros.

The wedding was at the Cocodimama Charming Resort, and charming it was. We also had a bit of extra time to explore some more of the island. We had lunch in Governor's Harbour, visited the Hidden Beach, Hatchet Bay Cave, and the Glass Window Bridge (although, we got the best view of it from our airplane), and experienced the island's Friday Fish Fry.

Some of us dove with sharks that were as big as us (if not bigger)! The ground school prior to the actual diving was, honestly, the scariest ground school I've ever attended. I'm used to training scenarios where I mostly have control (engine failures and other systems failures, for example), but sharks… who can control sharks but themselves? Thank goodness, the diving was not scary at all.

The resort we stayed at was just south of the airport, so we flew a celebratory/goodbye flyby before heading north to North Eleuthera (MYEH) to drop off a friend and get gas.

On approach to North Eleuthera (MYEH), which is a very busy airport with airline service from the United States.

have signs, and businesses and people, even more.

We did not have to pay any fees at MYER, and they also don't have fuel, but they do have the friendliest people.

Leg 6: Rock Sound, Eleuthera (MYER) to Governor's Harbour, Eleuthera (MYEM)

This short, 25 nm leg had some of the most beautiful sights. In addition to seeing the "sand art" again, we also saw lots of reefs.

The biggest surprise of the trip came when I asked for a "top off" and the line service guy told me they didn't have avgas. Thankfully, we planned conservatively and we had enough gas to make it to North Eleuthera (another 25 nm or so flight) to fill up.

The wedding was at the Cocodimama Charming Resort, and charming it was. We had the best time and the resort (except for its terrible sand flies) definitely helped make it so.

Additionally, we had lunch in Governor's Harbour, visited the Hidden Beach, the Hatchet Bay Cave (armed with flashlights and all), and the Glass Window Bridge (although, we got the best view of it from the airplane), and experienced the island's "Friday Fish Fry."

Oh yeah, and some of us dove with sharks that were as big as us (if not bigger)! The ground school prior to the actual diving was, honestly, the scariest ground school I've ever attended. I'm used to training scenarios where I mostly have control (engine failures and other systems failures, for example), but sharks… who can control sharks but themselves?

Leg 7: Governor's Harbour, Eleuthera (MYEM) to North Eleuthera (MYEH)

The resort we stayed at was just south of the airport, so we flew a celebratory/goodbye flyby before heading north to MYEH to drop off a friend and get gas.

The "Glass Window Bridge" is quite the sight and is located at the narrowest point on the island (30 feet wide), and is a place you can compare the rich blue waters of the Atlantic Ocean on one side of the road, and the calm Bight of Eleuthera on the other. We also got a good view of Harbour Island's pink sand beaches, although I still favor the beaches in Bermuda.

After dealing with a dangerous jet-blast situation and filling up, paying the $29/person departure fee, and having our ferry permit stamped for the last time, was easy.

And, with this, we had now visited all three airports in Eleuthera!

Leg 8: North Eleuthera (MYEH) to Fort Pierce, FL (KFPR)

This return leg had us flying over water the most amount of time. It was uneventful, and there wasn't much sightseeing due to cloud layers.

After clearing customs at KFPR, we wanted to fly as far as possible to get back home. However, the weather had been very foggy in the mornings and until about 2:00 pm every day, so continuing on early the next day was not going to be possible. Therefore, we decided to stop at Crystal River. We had been wanting to visit the manatees for a while and this was a good time of the year to do it (best between mid-November and late March). At least we could still enjoy our vacation while waiting for the weather to clear.

Leg 9: Fort Pierce, FL (KFPR) to Crystal River, FL (KCGC)

Great unexpected stop! In the morning, we visited "Three Sisters Springs," not too far from the airport, before departing again. It was full of Florida's gentle giants.

As a helicopter pilot, one of the highlights of the flying portion of the trip came from seeing the Spencer Naval Outlying Field (KNRQ) near Pace, Florida, from the air. The airport is part of Naval Air Station Whiting Field, home of Training Air Wing Five. It has eight runways and multiple square and triangle areas. Fellow pilots tell me it is still used to train new U.S. Navy, Coast Guard, and Marine Corps chopper pilots in any wind direction/condition (especially crosswinds).

Legs 10-13: Crystal River, FL (KCGC) to Houston, TX (KTME)

At least 80% of these legs were in IMC, but there's something magical about that as well. As expected, we could only fly between about 2:00 and 8:00 pm for the next two days due to weather.

I said that the last time we flew to the Bahamas and I will say it again… we (pilots) sure are privileged! This trip would not have been possible without GA, so go fly and experience all this on your own! Not much else is better…

EDITOR'S NOTE: Yasmina Soria 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), in addition to articles on pilot destinations for *Midwest Flyer Magazine*. Pilots can locate articles Yasmina has written by going to www.MidwestFlyer.com and typing in her name in the search box. ❑

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What are PFAS? And is your community prepared?

by Ryan Gaug


Ryan Gaug

This past January, just before COVID-19 became widely known and the world would change in ways we could never imagine, I was on a flight to Washington D.C. preparing for the Transportation Research Board (TRB) Annual Meeting. I'm honored to serve on TRB's Standing Committee on Intergovernmental Relations in Aviation, or AV010 for short. AV010 focuses on important aviation research and this meeting is one of my favorite work events to attend.

Not long before my D.C. trip, but well before I was paying attention to COVID-19, a very different kind of risk to public health came to my attention. It is called PFAS, or Per- and polyfluoroalkyl substances. While PFAS impacts are not fully understood, they do have health impacts, and they are readily found in the water we drink, among many other places. I chose to spend most of one day in D.C. learning what is known, and not yet understood, about the impacts these manmade substances could have on human health, along with their connection to airports, aviation, and government budgets everywhere.

What exactly are PFAS and why would someone working in aviation spend an entire day learning about them? PFAS constitute a family of more than 4,000 industry-made "forever chemicals" (they do not break down) first invented in the 1930s and began appearing in non-stick, stain-resistant, and water-resistant consumer products in the 1940s. In the 1960s and '70s, PFAS were used to make aqueous film-forming foam, a substance that is very effective at suppressing petroleum-based fires, such as those that may occur following an accident at an airport.

PFAS-containing foams are so effective that they are required by the FAA to be used for Aviation Rescue and Firefighting (ARFF) at commercial service airports. PFAS are also found in the fire suppression foams that are a standard for some hangars. And it is likely that foams with PFAS are used much more widely by municipalities. The FAA is reviewing and researching non-PFAS containing alternatives, though it was not clear from the session I attended, when they may be available.

One challenge here in Minnesota is that while use of foams containing PFAS have recently been banned for all training or testing purposes starting July 2020, this may result in a conflict between FAA requirements and Minnesota's laws. Minnesota's new law allows use of these foams in emergencies, but any use after June 30, 2020 must be reported within 24 hours.

One concern, of many, is that when these foams are discharged, they can find their way into our ground water. Just last year the Bemidji Regional Airport made headlines because PFAS was found in its ground water wells which are located right next to the airport where aqueous film-forming foam was known to have been used for some time. The financial impacts to that community, which decided to dig new wells, will be substantial. The health impacts are not yet known.

I am far from being the expert on PFAS or its impacts, nor am I an alarmist, but I do think we have only begun the public conversation on this topic.

During my day of PFAS learning in D.C., one of the presenters speculated to the roughly 25 attendees (of an estimated 14,000 in attendance at the conference) that there would likely be many more PFAS-related sessions at next year's TRB meeting. He also speculated they would draw many more attendees due to an expected increase in awareness in the coming year.

Why am I writing about this topic and what do I hope you'll take away from reading this article?

First, I'd like to help increase awareness. I think it's only a matter of time until we've all heard of PFAS and communities will be working to understand potential risks.

Second, I hope you will consider starting a conversation about PFAS in your community, if it hasn't already begun.

Is your community ready for the conversation if questions are asked about your airport and aqueous film-forming foam use? One panelist from the New Hampshire DOT described how the identification of soils contaminated with PFAS resulted in substantial cost increases to an otherwise typical road-widening project due to required PFAS mitigation. Will PFAS mitigation strategies, and their costs, become another new normal?

If you are interested in learning more about PFAS, the Minnesota Department of Health has information. Also, nearly every panelist at the session I attended cited the Interstate Technology and Regulatory Council as being an excellent source for information, and having the tools and resources needed to inform others about PFAS and their risks. ❑

Pilot Culture Modifies A Procedure, Leading To A Mishap

by Tony Fernando

At 10:45 am on April 13, 2018, a U.S. Air Force F-22 Raptor started its takeoff roll at NAS Fallon in Nevada. NAS Fallon is the home of the famed TOPGUN fighter pilot training course, and the Air Force fighter was scheduled to fly in a one-on-one graduation exercise against a TOPGUN student who would be flying an F/A-18. The F-22 accelerated to 120 knots and the pilot rotated. At 135 knots, recognizing visual cues that the fighter was airborne, he retracted the landing gear.

nothing in his training or service record suggested he was struggling with the demands of being a fighter pilot assigned to an elite squadron. Fatigue was not an issue; he was only three hours into his flight duty day and had ample rest over the preceding several days. There was no indication of drugs, alcohol or other substances playing a role. Why would such a pilot make such an elementary mistake?

All of the F-22 bases except for Nellis AFB are located at or near sea level, while NAS Fallon has a field elevation of 3,934 feet. Aircraft engines, jet or piston, provide less power at higher elevations. After the accident, the investigators

A USAF F-22 Raptor.
Photo by Chris Bildilli - SPI-Photo.com
For Illustration Only!

Unfortunately, the fighter was not airborne, although enough weight had been taken by the wings for the weight-on-wheels switch to allow the gear to retract. When the landing gear retracted, the fighter settled back onto the runway, sliding 6,514 feet before stopping. Fortunately, there was no fire and the pilot was not injured. The accident report does not state how much damage was done to the $150 million fighter jet.

Using the prevailing conditions at NAS Fallon that morning, accident investigators determined that the correct rotation speed should have been 143 knots, and the fighter would have been airborne at 164 knots. Rotating early increases induced drag during a critical phase of flight.

In one sense, this is clearly a pilot error accident. A correct procedure existed and the pilot didn't follow it. However, USAF fighter pilots are amongst the most highly trained pilots in the world. The pilot was highly qualified, and

analyzed the flight data recorders from 73 previous sorties by F-22 pilots. The investigators found that 52% of F-22 pilots rotate at 120±5 knots regardless of the calculated rotation speed, and 80% of F-22 pilots were becoming airborne five knots or more before the calculated takeoff speed. When looking at F-22 takeoffs from high elevation airports (e.g. Colorado Springs), 91% became airborne 5 knots or more before the calculated takeoff speed; 54% were airborne 20 knots or more before the correct calculated speed. At those high elevation fields, 81% of F-22 pilots had retracted the landing gear before takeoff speed.

Given these statistics, the accident described here was inevitable. The F-22 pilot community had internalized a procedure of rotating early, thus becoming airborne early. This practice worked fine at the sea level airports from which the F-22 is normally flown, but greatly increased risk at high elevation airports. The accident board was not able to

determine where the early rotation practice originated or how it spread through the pilot community, but by the time of the accident, it clearly had been culturally accepted.

Culture develops in any group of pilots. General aviation is no exception. Pilots who routinely operate out of grass strips, or fly a specific type of airplane, develop habits that are passed from one pilot to another. Culture is not inherently a bad thing. Aircraft manufacturers can hardly anticipate every scenario their aircraft might be placed in. The hazard is when we allow culture to override established procedures. We might takeoff over gross because we "know" the aircraft can handle it, or because we don't feel the need to get the actual weight of our passengers. We might forgo doing a takeoff distance calculation because we've internalized that the airplane has enough performance to meet the demands we ask of it. We can get away with these practices until the conditions are outside what we've experienced (e.g. high elevations, hot days, strong crosswinds, poor braking action, etc.). A raft of accidents suggest that pilots are not great at identifying when not to apply procedures developed through hangar flying.

Can an accident involving a very high-performance military fighter jet be relevant to general aviation? As pilots we learn a lot from hangar talk and tribal knowledge. But as pilots, we have also been trained and tested on proper procedures. This summer, as we fly to new and unfamiliar airports, pay attention to how you calculate your takeoff performance numbers, especially at high elevation fields out west. Follow the procedures in your aircraft's manual. There's no reason for you to be the pilot who has an accident from using an informal, culturally-developed procedure under the wrong conditions.

All speeds reported as knots calibrated airspeed (KCAS).

Reference: Trigler, J. 2018. F-22A Mishap, Naval Air Station Fallon, NV. United States Air Force Accident Investigation Board Report. 29 pages. ❑

Minnesota Airport Construction Projects 2020

For public-use airports in Minnesota, the 2020 construction season is going to be busy, with numerous projects continuing in process and planned, in spite of the current health difficulties. Upcoming projects include several significant runway reconstruction projects. Some of the projects that will affect airport flight operations are described in this article, as well as a link with information about the CARES Act. Please check with your airport destination and monitor NOTAMS for specific information. Let's all Stay Safe in the air and on the ground.

Baudette (BDE)

The Baudette International Airport will be reconstructing Runway 12/30 (5499' x 100') beginning late summer and continuing through fall of 2020. Reconstruction of Runway 12/30 is required as it has reached the end of its useful life. Construction cranes used for the replacement of the Rainy River International Bridge in 2020 will cause approach obstructions and make the instrument approach temporarily unavailable. The runway reconstruction is being condensed to 60 calendar days and timed to coincide with the bridge work. The project includes the removal and replacement of the existing runway bituminous pavement and reconstruction of two connector taxiways, as well as rehabilitation of the apron near the terminal building.

Detroit Lakes (DTL)

Runway construction continues with Phase 3 in summer of 2020, consisting of the reconstruction and widening of existing Runway 13/31. This work will require a full closure of Runway 13/31 for a period of eight weeks in the summer of 2020. At press time, the eight-week closure was tentatively scheduled to begin Monday, June 1st through July 27th. The new Runway 14/32 (5200' x 100') is anticipated to be open to traffic on July 27, 2020, and the new GPS approaches are anticipated to be published in late 2020 or early 2021. During the eight-week closure, turf Runway 17/35 will remain in operation, except for a 1-day closure expected June 1st. A temporary taxiway will be paved off the northwest end of the existing apron to provide access to the north end of the turf runway. Phase 4 of the project will involve installation of airport perimeter fencing, and is anticipated to begin late September 2020.

Duluth Sky Harbor (DYT)

Runway 14/32 is in the process of reconstruction by being shortened and relocated by rotating the 32 end 5 degrees into Superior Bay, to remove obstructions while protecting natural resources. In addition, a parallel taxiway is being constructed with this phase. This is the final phase of a three-phase project, which was initiated in 2017. At press time, the anticipated runway/taxiway closure period was to be May 11 through June 13, 2020.

International Falls (INL)

The 2020 project will include the design for the reconstruction of Runway 13/31, and reconstruction of Taxiway A. Taxiway A will be prepared to temporarily be used as Runway 14/32, to allow operations during future reconstruction of Runway 13/31. This project will also require short-term closure of Runway 4/22. At press time, the temporary runway (taxiway) construction was anticipated to start in June, 2020.

Princeton (PNM)

The 2020 project is to reconstruct Runway 15/33 (3,900' x 75') and partial taxiway pavement at the Princeton Municipal Airport, which has reached the end of its useful life. The project also includes runway and taxiway connector edge lights, PAPIs and REILs. At press time, the Princeton runway reconstruction project was to occur between May 20th and July 29th, 2020.

Winsted (10D)

The project is to reconstruct turf Runway 9/27 (3220' x 200') and construct a turf taxiway. The runway was closed on May 11th, 2020 for pipeline removal and at press time, the runway reconstruct was to have started on June 8th, with an anticipated completion date of October 2020.

The CARES Act

The Covid-19 pandemic creates challenges and opportunities for airport project construction and funding efforts. Many people have questions about what the CARES Act is and how it will affect funding.

The Coronavirus Aid, Relief, and Economic Security (CARES) Act (H.R. 748, Public Law 116-136) (PDF), signed into law by the President on March 27, 2020, includes $10 billion in funds to be awarded as economic relief to eligible U.S. airports affected by the prevention of, preparation for, and response to the Covid-19 pandemic.

The CARES Act provides funds to increase the federal share to 100 percent for the Airport Improvement Program (AIP) and supplemental discretionary grants already planned for fiscal year 2020. Under normal circumstances, AIP grant recipients contribute a matching percentage of the project costs. Providing this additional funding and eliminating the local share will allow critical safety and capacity projects to continue as planned regardless of airport sponsors' current financial circumstances.

Additional information about the CARES Act can be found on the web at
https://www.faa.gov/airports/cares_act/ ❑

From The Frying Pan, Into The Fire: PFAS/PFOS Concerns For Airport Operators

by Brad Maurer, JD, CPCU

Airports have long been concerned about environmental quality. Ever since we have understood the impact of fuel and degreasing solvent releases to the ground and the groundwater, airports have taken extra measures to prevent them as best as they reasonably can.

There is a surprising recent development in the world of environmental protection and it directly impacts airport operations – the adverse health effects and omnipresence of perfluoroalkyl substances (PFASs), mainly Perfluorooctanoic acid (PFOA) and Perfluorooctanesulfonic acid (PFOS). Collectively deemed the "forever chemicals," PFASs have been used for decades in common consumer products due to both their durability and surfactant qualities.

PFOS is the main ingredient in waterproofing/stain resisting chemicals applied to carpet and furniture, as well as clothing items like raincoats and shoes. PFOA is used commonly in food-contact materials, such as fast food wrappers, pizza boxes, microwave popcorn bags and even as a component of non-stick cookware. It is no wonder that nine (9) out of every 10 Americans have some level of PFOA/PFOS in their bloodstream with all of the products that use these materials.

For those in the aircraft industry, there are two important facts about PFASs that you need to be aware of: 1) Together, they are ingredients for aqueous film forming foam (AFFF); and 2) They are currently being considered by the United States Environmental Protection Agency (USEPA) to be regulated as hazardous substances.

AFFF is an effective fire suppressant, particularly for high intensity fires, such as those involving jet fuel and aircraft. The surfactant qualities of PFASs make them so effective that only AFFF that contains it meets military specifications (MIL-PRF-24385). This compounds the problem for airports that operate under a Part 139 Certificate, as they must provide Aircraft Rescue and Fire Fighting (ARFF) services that must be routinely tested.

While fires at airports are infrequent, training and testing of ARFF capabilities are not, and the training currently involves the dispersal of AFFF.

In January 2019, the FAA issued guidance for certificated airports to meet the ARFF training requirements using non-fluorinated AFFF alternatives. This is a smart move for environmental protection, as it reduces the amount of PFASs that is released into the environment, while at the same time maintaining ARFF readiness. Even non-certificated airports should consider this practice for the firefighting services they employ. When PFOA/PFOS-containing foam is necessary for training, its containment and removal is worth the effort, considering the next important fact about these substances.

USEPA is starting to regulate PFASs. Human PFAS exposure has been linked to six major health impacts: kidney cancer, testicular cancer, ulcerative colitis, thyroid disease, hypercholesterolemia (high cholesterol), and pregnancy-induced hypertension. Despite years of information about the adverse health effects of PFASs, it wasn't until February 2019 that USEPA officially announced a plan to deal with these substances. Even as of today, there is no federal drinking water standard for PFASs, but it is coming soon.

Currently, USEPA has issued a health advisory of 70 parts per trillion for drinking water. This is an extraordinarily small amount, as most drinking water standards are measured in parts per billion. In the absence of a federal standard, many states have issued their own – some as low as 20 parts per trillion. It is estimated that 16 million Americans have above-standard PFASs in their drinking water, and this number will increase as more communities test their water supplies.

What Does This Mean For The Airport Industry?

The most important concern is the inevitability that USEPA will classify PFASs as "hazardous substances." That is item number two in its 2019 February 2019 Action Plan. There is an administrative process for this to occur, but once it does, all PFAS contamination will be subject to the Comprehensive Environmental Response, Compensation, and Liability Act (AKA "Superfund"). The Superfund law holds parties liable for, among other things, the cleanup costs of hazardous substances that are released at a facility that they own or operate. The key word here for fixed base operators is the term "operate." You need not own the airport to be

responsible for PFAS contamination cleanup under the Superfund law.

The frightening thing about the Superfund law is that it applies not only to events from now on, but also in the past.

Past releases of AFFF and hazardous substances, no matter how lawful they were at the time of the release, can become the source of liability for both past airport owners and operators, as well as the current ones.

Many airports may be familiar with the Superfund law because, although it exempts petroleum, it applies to volatile organic solvents which are used extensively in aircraft repair and maintenance.

Many airports, particularly large commercial and military bases, have incurred some sort of cleanup under the Superfund law. Smaller airports will likely not escape responsibility under the Superfund law for PFASs, since they are likely to be located closer to drinking water sources than major ones. A site does not need to be declared a "Superfund Site" for the law to apply. It only takes a release of a hazardous substance.

Considerations & Summary

It's a Catch-22 for an airport to be required to use AFFF and yet be held liable for its release. The best practice is to eliminate or at least contain and limit the use of PFAS containing AFFF that is dispersed at the airport for training. Insurance-wise, almost all insurance policies have an exclusion for "pollutants." Even though PFASs are not currently regulated as a hazardous substance, it is reasonable to presume that it would qualify as a "pollutant" for insurance purposes.

There are special types of insurance that do cover liability for PFASs. Contractors Pollution Liability (CPL) insurance can be purchased for businesses that provide services at airports, as well as services anywhere else.

Environmental Impairment Liability (EIL) insurance can be purchased by owners and operators of airport facilities.

The restriction with CPL coverage is its use of a retroactive date – typically the date the airport or operator first purchase the insurance, which is carried through the subsequent years the policy is renewed. EIL insurance can either have a retroactive date (and then only cover pollution conditions that first occur from the first date of purchase forward), or it can be devised to insure against past releases that may have happened, but are unknown as of yet. This is called EIL insurance with full retroactive coverage – something airport operators may wish to consider with the impending laws that will soon regulate PFASs.

The time to manage risk is now! While those of us in the environmental protection industry have known about these contaminants for a little while now, the 2019 major motion picture "Dark Waters" starring Mark Ruffalo has raised national attention to the issue. In that movie, local landowners sued a product manufacturer for various claims arising from PFOA that it manufactured at its plant. Another PFAS manufacturer has settled with the State of Minnesota for $850 million for PFASs issued in the state and currently is in litigation with six other states – just for PFAS products in general. That manufacturer and other PFAS manufacturers now face 190 class action lawsuits arising from their manufacture of AFFF.

And there you have it. While the manufacturers are the first to face litigation, soon those who released the products will follow. When a community discovers PFASs in their drinking water, where are they first to look if there aren't any manufacturers of the product nearby? Airports.

About the Author

Brad Maurer (JD CPCU) is an environmental insurance expert with American Risk Management Resources Network LLC based in Middleton, Wisconsin. As a former environmental scientist working on Superfund sites, Brad Maurer has been specializing in managing environmental risk for clients for over 25 years. Maurer@ARMR.Net (www.ARMR.Net).

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Aeronautics Report

Wisconsin Bureau of Aeronautics
P.O. Box 7914, Madison, WI 53707-7914

David M. Greene, Director
(608) 266-3351

www.wisconsindot.gov

Preparing For The Unexpected

by Hal Davis
WisDOT Bureau of Aeronautics


Hal Davis

Airports and pilots alike take pride in their preparedness for emergency situations. We have our index of checklists and practice them regularly. But what happens when there's no checklist for the situation you are facing? How many of you had a checklist titled "pandemic" before this year? In those cases, we use our instincts and listen to expert advice. Mistakes may be made, but hopefully important lessons are learned. Now is the time to draw from that experience and create a better plan for the future. For an airport manager, that means dusting off the airport emergency plan.

Get To Know Your First Responders

The Federal Aviation Administration (FAA) requires airports serving air carriers to have a formal airport emergency plan which describes how the airport will respond to different emergency situations. Though not required, some form of airport emergency planning is highly recommended at airports of all sizes. A small general aviation airport might have less air traffic, but also probably has far fewer resources when responding to an emergency. Ultimately, no airport has the ability to respond to every type of emergency on its own. Therefore, every airport must depend to some degree on the resources of its surrounding community.

A portion of any airport's emergency plan should be dedicated to identifying critical community resources, establishing lines of communication, and working with and training those resources so that they are familiar with the airport and can be relied upon in an emergency.

In a recent survey of Wisconsin fire departments, respondents were asked to identify the airports they serve. Several Wisconsin airports were unaccounted for in this survey, leading us to believe that there is a need for airport managers to reach out to their local fire department. Simply calling 911 in the event of an emergency is not adequate. Proactively building and maintaining relationships with first responders can dramatically improve emergency response at airports and reduce the severity of the incident.

Airport Emergencies

While emergencies can seldom be predicted, they can be anticipated and prepared for. The types of emergencies an airport should prepare for will vary from airport to airport. Identifying those potential emergencies and hazards is an important step in the development of an airport emergency plan. In general, all airports should have a plan for responding to:

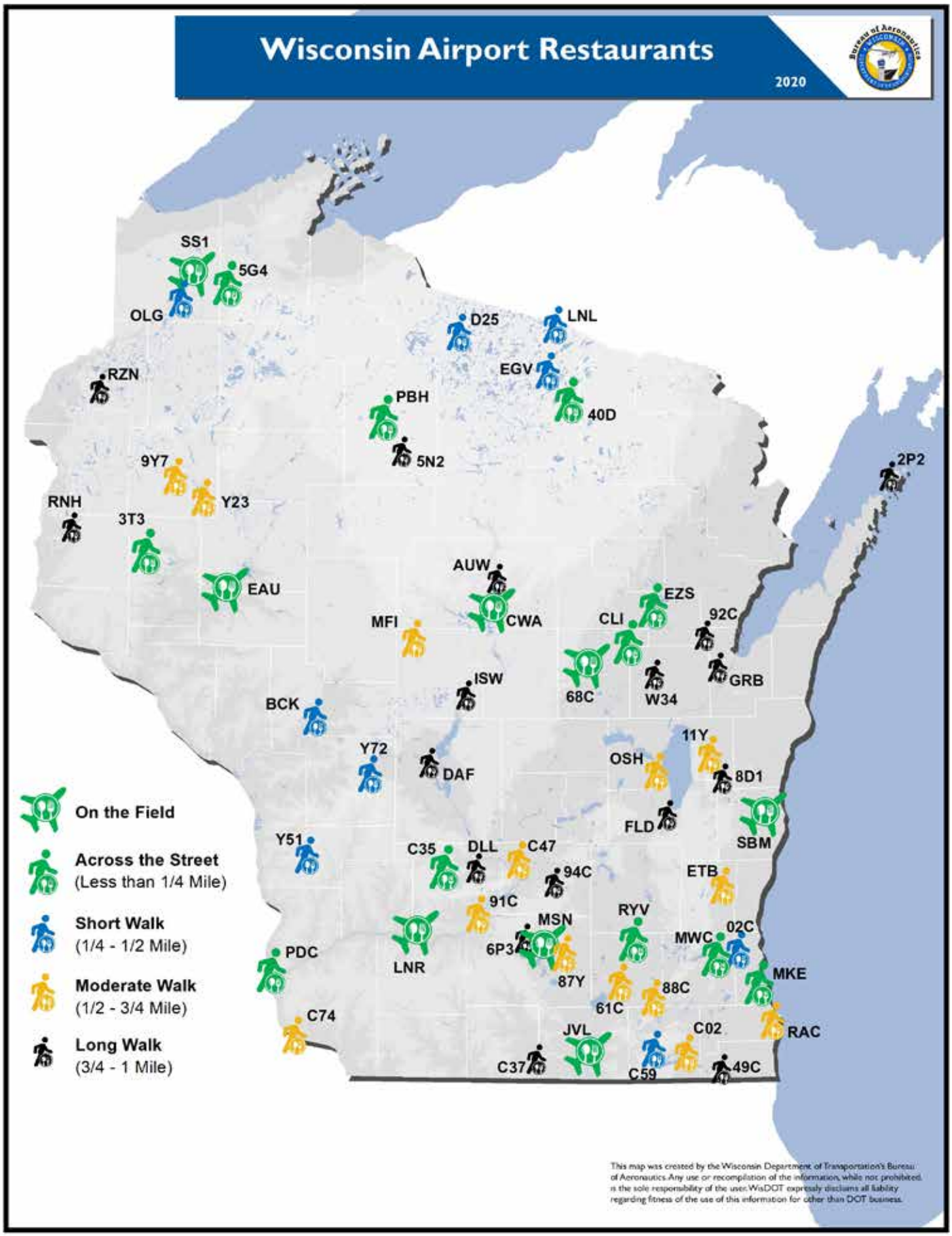
- aircraft accidents,
- structural and fuel fires,
- hazardous material spills,
- power outages, and
- medical emergencies.

Airports should also plan for natural disasters, such as severe weather and flooding. After September 11, 2001, planning for security incidents and terrorism became obvious as well. More recently, it has become apparent there is a need for emergency response planning for suspicious or hazardous drone operations near airports and of course, pandemics.

Fortunately, many emergency situations have a low probability. For that reason, emergency planning can easily be overlooked or ignored. Now is the time to make emergency planning a priority and create or update the airport emergency plan. For help and guidance, refer to FAA advisory circular 150/5200-31C or give us a call at 608-266-3351. ❑

Restaurants Near Wisconsin Airports

In the June/July 2020 issue of *Midwest Flyer Magazine,* we announced the creation of a new comprehensive list and map of Wisconsin airports with convenient food options, but ran out of space to include it in the magazine. Without further ado, on the opposite page you will find the map which depicts airports that are within a mile of at least one restaurant. On the back of the map, you will find a list of those restaurants sorted by airport, along with the one-way walking distance between the aircraft parking area and the restaurant. We hope you will cut out this map and keep it in your flight bag. You can also view and download a digital copy of the map from our website: **https://wisconsindot.gov/av-pubs**.


Wisconsin Airport Restaurants
2020
SS1
5G4
OLG
D25
LNL
EGV
RZN
PBH
40D
5N2
9Y7
Y23
2P2
RNH
3T3
AUW
EAU
EZS
92C
MFI
CWA
CLI
GRB
68C
W34
ISW
BCK
11Y
Y72
DAF
OSH
8D1
FLD
SBM
Y51
C35
DLL
C47
94C
ETB
91C
RYV
MSN
02C
MWC
PDC
LNR
6P3
MKE
87Y
88C
61C
C74
JVL
C02
RAC
C37
C59
49C
On the Field
Across the Street
(Less than 1/4 Mile)
Short Walk
(1/4 - 1/2 Mile)
Moderate Walk
(1/2 - 3/4 Mile)
Long Walk
(3/4 - 1 Mile)
This map was created by the Wisconsin Department of Transportation's Bureau of Aeronautics. Any use or recompilation of the information, while not prohibited, is the sole responsibility of the user. WisDOT expressly disclaims all liability regarding fitness of the use of this information for other than DOT business.

Airport Name	ID	Restaurant	Distance* (Miles)
Alexander Field-South Wood County	ISW	Subway Jim's Barb-ie-Q Shack	0.9 1
Baraboo-WI Dells Regional Airport	DLL	Ho Chunk Casino	0.8
Barron Municipal Airport	9Y7	A&W Restaurant	0.5
Batten International Airport	RAC	Richard's Bar & BBQ Infusino's Pizzeria & Restaurant Stone Corral Mexican American	0.5 0.6 0.8
Black River Falls Area Airport	BCK	R&R's First & Last Chance	0.3
Blackhawk Airfield	87Y	Oakstone	0.5
Bloyer Field	Y72	Quiznos	0.3
Boyceville Municipal Airport	3T3	Subway Main Street Nutrition Buckshot Bar Fat Boys Emporium	0.2 0.3 0.4 0.5
Brodhead Airport	C37	Subway	0.9
Burnett County Airport	RZN	A&W Restaurant	0.8
Camp Lake	49C	Kickstand Tavern	0.8
Capitol Airport	02C	Jake's Restaurant Culver's	0.1 0.2
Carter Airport	92C	Cousins Subs China Wok	1 1
Cassville Municipal Airport	C74	Anker Inn Smokehouse	0.5
Central County Airport	68C	Central County Flyers (Friday Only)	On Field
Central Wisconsin Airport	CWA	Blind Rooster Kitchen + Bar	On Field
Chetek Municipal-Southworth	Y23	Red's Eating & Drinking Establishment	0.5
Chippewa Valley Regional Airport	EAU	Hangar 54 Grill	On Field
Clintonville Municipal Airport	CLI	Linda's County Inn	0.2
Dane County Regional Airport	MSN	Jet Room Restaurant	On Field
Eagle River Union Airport	EGV	Bortolotti's Cin Cin Gordo's Leif's Café	0.3 0.5 0.5
Eau Claire Lakes Airport	5G4	Maki's Place Cedar Lodge Steakhouse & Grille	0.1 0.2
Flying Feathers Airport	11Y	Hickory Hills Country Club	0.5
Fond du Lac County Airport	FLD	Rolling Meadows Restaurant Pizza Hut	1 1
Fort Atkinson Municipal Airport	61C	The Edgewater Supper Club Lou's Riverview	0.5 0.5
General Mitchell International Airport	MKE	The Packing House Nite Owl Ice Cream Parlour & Sandwich Shoppe Amelia's Brass Monkey Milwaukee Pub & Grill	0.1 0.1 0.1 0.2
Gilbert Field	94C	Hometown Café Grissy's Bar	0.7 0.7
Grand Geneva Resort Airport	C02	Grand Geneva Resort	0.6
Green Bay-Austin Straubel International Airport	GRB	Oneida Casino	0.7
Kings Land O'Lakes Airport	LNL	Dawson's Pier Pine Cone Café Redman Supper Club	0.4 0.6 0.9
Lake Lawn	C59	Lake Lawn Resort Burger King Culver's Chili's Grill & Bar Panera Bread Yo Sushi	0.3 0.6 0.6 0.6 0.6 0.7
Lawrence J. Timmerman Airport	MWC	El Greco Cousins Subs Buddy's Pizza & Steak	0.4 0.5 0.5
Manitowish Waters Airport	D25	Jerry Florian's World Loppet	0.4
Marshfield Municipal Airport	MFI	Libby McNeill's Food & Drink	0.5
Necedah Airport	DAF	Subway Bohica's Pub and Grub Everybody's Poor House	0.9 0.9 1
New Holstein Municipal Airport	8D1	Twisted Tap Bar & Grill	1

Airport Name	ID	Restaurant	Distance* (Miles)
New Richmond Regional Airport	RNH	Pete's Pizza	0.8
North Country Seaplane Base	SS1	Higgins Lakeview Lodge Bar & Grill	On Field
Palmyra Municipal Airport	88C	Main Street Family Restaurant Genoa Pizza Hot Rods Bar-N-Grill CJ's Coffee & Cream Squidy's Bar Sassy's Kettle Hill Grill T & D's Grill Subway	0.5 0.5 0.5 0.5 0.5 0.5 0.6 0.6
Portage Municipal Airport	C47	B&B Hitching Post Sal's Pizza	0.5 1
Prairie du Chien Municipal Airport	PDC	Jones' Black Angus LLC China Buffet Acapulco Bar-Grill Culver's Huckleberry's Restaurant	0.1 0.7 0.7 0.7 0.7
Prentice Airport	5N2	Ripsaw Saloon	0.8
Price County Airport	PBH	Harbor View	0.2
Reedsburg Municipal Airport	C35	Taco Bell KFC Milo's Sandwiches Golden Buffet Pizza Hut Subway McDonald's J's Pub & Grill Marty's Steakhouse Culver's Cancun Bay	0.1 0.1 0.1 0.1 0.2 0.2 0.2 0.2 0.2 0.3 0.3
Sauk-Prairie Airport	91C	Prairie House Food & Spirits	0.6
Shawano Municipal Airport	EZS	The Launching Pad Lighthouse	0.1 0.3
Sheboygan County Memorial Airport	SBM	Fuel Café	On Field
Shiocton Airport	W34	Hometown Grill	0.9
Solon Springs Municipal Airport	OLG	Paul's Pour House Bar & Grill	0.3
Southern Wisconsin Regional Airport	JVL	Bessie's Diner	On Field
Three Lakes Municipal Airport	40D	Sunset Grill Jake's Bar & Grill	0.2 0.4
Tri-County Regional Airport	LNR	Piccadilly Lilly Diner	On Field
Viroqua Municipal Airport	Y51	Great Wall Chinese Pizza Hut Subway McDonald's	0.3 0.4 0.4 0.5
Washington Island Airport	2P2	Fiddler's Green Bar & Grill	0.7
Watertown Municipal Airport	RYV	Taco Bell Pancake Café Culver's Pizza Ranch El Mariachi Sake House	0.2 0.2 0.3 0.3 0.4 0.7
Waunakee Airport	6P3	Zoe's Pizzeria	0.8
Wausau Downtown Airport	AUW	Lee's Famous Recipe Chicken Pro Players Sports Bar and Grill Eagle's Nest Family Restaurant	0.7 0.8 0.8
West Bend Municipal Airport	ETB	Subway	0.6
Wittman Regional Airport	OSH	O'Marro's Public House Subway Chester V's	0.6 0.8 0.8

* Distance provided is the one-way, realistic walking distance from the nearest aircraft parking area.

Bureau of Aeronautics WISCONSIN DEPARTMENT OF TRANSPORTATION

Dorothy Cochrane To Receive 2020 Katharine Wright Trophy

WASHINGTON, DC – The National Aeronautic Association (NAA) has selected Dorothy Cochrane, curator at the Smithsonian's National Air and Space Museum, to receive the 2020 "Katharine Wright Trophy." The trophy was established in 1981 and is awarded annually to an individual who "… has contributed to the success of others or made a personal contribution to the advancement of the art, sport, and science of aviation and space flight over an extended period of time." Cochrane is being recognized for devoting over 40 years as a curator at the museum, collecting and preserving historical aviation artifacts that educate and inspire the general public about the importance of flight.

Cochrane joined the Smithsonian Institution in 1977 as one of the first female curators. She oversees the collections of general aviation aircraft, flight material, aerial cameras, and the history of general aviation and women in aviation. Throughout her career, Cochrane has become most notable for her acquisition of priceless aviation artifacts, as well as the creation of entire galleries in the aeronautics department.

As the curator responsible for the Barron Hilton Pioneers of Flight Gallery, as well as the General Aviation, Business Aviation, Aerobatic Aviation, and Aerial Camera exhibit stations and cases, Cochrane has acquired at least a dozen aircraft for the Smithsonian collection, including a Fleet Model 2, Cirrus SR-22, Grumman Ag Cat, Beechcraft King Air, and Cessna 152 Aerobat. Her acquisitions also include aircraft seen by millions of airshow spectators, including Patty Wagstaff's Extra 260 and Bob Hoover's Shrike Commander. Cochrane was also responsible for the restoration of Betty Skelton's Pitts, "Little Stinker," which is the first aircraft seen by visitors as they enter the Steven F. Udvar-Hazy Center at Dulles International Airport. This restoration was made possible due to Cochrane's efforts in finding volunteers and the exact parts necessary to complete the restoration and her vision to locate the aircraft in such a prestigious area.

Not only does Cochrane preserve aviation history through the procurement and display of aviation artifacts, she also communicates it artfully. Her encyclopedic knowledge is sought after the world over through media interviews and speaking engagements. She also serves as the aeronautics liaison for the museum's General Electric Aviation Lecture Series, as well as the Charles A. Lindbergh Memorial Lecture and is the museum's leading scholar on Anne Morrow Lindbergh and Amelia Earhart's life and disappearance. Recently, Cochrane was the primary investigator for the Military Women Aviators Oral History Initiative, which conducted and archived oral and video interviews of 15 trailblazing retired and active duty military women pilots.

Cochrane currently oversees the creation of a pair of new galleries as a part of the National Air and Space Museum's seven-year revitalization and transformation project that will inspire a new generation of aviation and space pioneers.

Dorothy Cochrane

The Katharine Wright Trophy will be presented to Cochrane on a date and location to be determined. For more information or to view a complete list of previous recipients, visit www.naa.aero.

The National Aeronautic Association is a non-profit membership organization devoted to fostering opportunities to participate fully in aviation activities and to promoting public understanding of the importance of aviation and space flight to the United States. NAA is the caretaker of some of the most important aviation awards in the world, and certifies all national aviation records set in the United States. ❑

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.

Midwest Flyer Magazine is not responsible for the accuracy of, or reliance on, any information published.

* Indicates any new or updated calendar listings since the previous issue.

Due To The Coronavirus Pandemic, A Number of the Events Listed Below Have Either Been Canceled or Postponed, *So Call Ahead Before Going!*

AUGUST 2020

2 Longville (KXVG), Minn. - Pancake Breakfast 8am-Noon. 218-821-0779.

2 Aitkin (KAIT), Minn. - Pancake Breakfast 8am-4pm coinciding with Aitkin Riverboat Days.

6-8 Ames (KAMW) , Iowa - Youth STEM Aviation Rally (6th), Fly-In/ Drive-In breakfast, pilot safety seminar, exhibits, displays and airshow (8th). Chuck 515-964-1398 chuckdsmcc@aol.com

8 Ames (KAMW) , Iowa - Fly Iowa 2020. Youth STEM Aviation 515-292-9056 www.centraliowaair.com

8 Cameron (KRPD), Wis. - Pancake, eggs, sausage etc from Boy Scouts. Lunch from food trucks. 7am-2pm. Parachute Drop, RC Flying, Motorcycle Speed Run. Airplane and Helicopter rides. Kids candy drop from Helicopter. 715-458-4400

9 Paynesville (KPEX), Minn. - Paynesville 2020 Airshow 10am to 3pm. Airshow at 1pm. Free lunch to pilots in command www.pexfriends.com for more info.

9-15 Miminiska Lodge, Ontario, Canada - **Canada Fishing Fly-Out** - GROUP TRIPS ARE BOOKED. But for reservations for going on your own, contact Lynette Mish at Wilderness North toll free: 1-888-465-3474.

11 Juneau (UNU), Wis. - **Flying Social - Taco Tuesday** 5-7pm at Wisconsin Aviation, Dodge County Airport. 920-386-2402 / 800-319-0907.

15-16 Chicago, Ill. - Chicago Air and Water Show. The show can be viewed along the lakefront from Fullerton to Oak Street, with North Avenue Beach as the focal point.

20 Watertown (KRYN), Wis. - **Flying Hamburger Social** 5-7pm at Wisconsin Aviation Watertown Municipal Airport. 920-261-4567.

30 Juneau (UNU), Wis. - **Lions Club Pancake Breakfast** 8am-Noon at Wisconsin Aviation, Dodge County Airport.

30 Boscobel (KOVS), Wis. - Pancake, bacon, sausage, scrambled eggs, hash-brown casserole, juice, coffee & milk breakfast. 608-375-5232. Airport will use Ground Communications Frequency 121.9 on Fly-In Day.

SEPTEMBER 2020

5* Glencoe (KGYL), Minn. - Glencoe Ultralite Flyers annual sweet corn and bratwurst feed fly-in, 10:00 a.m. to 2:00 p.m: 320-583-8367 or 320-238-2376. Stuart. selchow@gmail.com. www.eaaul92.weebly.com

11-12 Rochester (KROC), New York - **2020 AOPA Fly-In.** CANCELED- www.aopa.org

12 Oshkosh (KOSH), Wis. - Pancake Breakfast & Airport Expo. 920-810-1046.

12 Superior (KSUW), Wis. - Fall Pancake Breakfast & Young Eagles Rides 7:30am-Noon. 320-250-2163.

12 Brainerd (KBRD), Minn. - 5th Annual Grass is a Gas Poker Run. Start at Brainerd, fly to 4 grass strips to pickup cards, return to Brainerd to play your hand. Food, fellowship and great flying. Registration opens at 7:00 am, get there early, limited to 52 players, first come first served. 612-750-2981.

13 Watertown (KRYN), Wis. - **Pancake Breakfast & Aviation Community Day** 8am-3pm at Wisconsin Aviation, Watertown Municipal Airport. 920-261-4567.

13-16 Greenville, South Carolina - The 89th Annual NASAO Convention & Trade Show will be held September 13-16, 2020 at the Hyatt Regency. (www.nasao.org

18-20 Brainerd, Minn. - **MN Seaplane Spring Safety Seminar** at Madden's. For additional information 952-484-9457 or email steve@penguinflight.net. www.mnseaplanes.com/contact/php

OCTOBER 2020

10* Greenville (KGRE), Ill. - Airstravaganza is still scheduled to be held, 9 am to 4 pm, subject to virus restrictions. B-25 Mitchell Bomber is scheduled to attend and will be giving rides. Scale model flying, food, static displays. Call 618-664-0926 or Ken Kopp @ 501-366-5273 for info and to schedule B-25 rides in advance. Get more info at the Greenville Illinois Pilots Association/EAA 1382 Facebook page.

25 Juneau (UNU), Wis. - **6th Annual Pumpkin Drop Contest** 9am-3pm at Wisconsin Aviation, Dodge County Airport. 920-386-2402 / 800-319-0907.

NOVEMBER 2020

7 Minneapolis/St. Paul, Minn. - **Minnesota Aviation Hall of Fame at the MSP Intercontinental Hotel. Email MAHOFBanquetReservations@gmail.com or call 952-906-2833.**

DECEMBER 2020

11 Oshkosh, Wis. - **Wright Brothers Memorial Banquet.** www.eaa.org

Uncertainty Surrounding Coronavirus Forces Cancellation of EAA AirVenture Oshkosh 2020

OSHKOSH, WIS. – The continuing uncertainty surrounding the coronavirus/COVID-19 pandemic has forced organizers of the world's largest fly-in convention, EAA AirVenture Oshkosh, to cancel its 2020 event at Wittman Regional Airport in Oshkosh, Wisconsin. The 68th annual event was scheduled to be held July 20-26.

Jack J. Pelton

"We looked at every possibility over the past six weeks (prior to May 1), as to how EAA could move forward with AirVenture this year, because it is such an important reunion for the aviation community," said Jack J. Pelton, EAA CEO and Chairman of the Board. "The current status in Wisconsin is that it is still under a stay-at-home order until May 26, which completely eliminates our ability to start grounds preparation May 1. The reopening of the state also has no specific dates, creating uncertainty about mass gatherings in July. Ultimately, preserving the health and safety of all who would attend – and all the varying guidelines between states and countries from where our participants arrive – along with the massive commitments needed now for an event to meet EAA's high standards, made cancellation the only option for this year.

"Those of us involved in aviation know very well the importance of information gathering and planning prior to any flight, and I looked at AirVenture in much the same way before reaching this decision," Pelton said. "While no one can see every eventuality, as we looked at the scenarios for holding the event in 2020, it was dependent on a number of important factors where there are currently no definitive answers. That is not the way to commit to an event that welcomes hundreds of thousands of visitors to Oshkosh from more than 90 countries.

"There is no way to describe the disappointment I feel for everyone who sees AirVenture as aviation's family reunion each year. You can be assured that EAA is already eagerly looking forward to gathering along the AirVenture flightline on July 26 through August 1 in 2021."

All pre-sold AirVenture 2020 admissions and camping reservations can be rolled over to the 2021 event or are eligible for refund. Those who have made such purchases will be contacted individually. ❑

AOPA Cancels September Fly-In In Rochester, New York

As the country anticipated the re-opening of most activities following the early COVID-19 stay-at-home orders, AOPA has worked hard to maintain the viability of its Rochester, New York fly-in, September 11-12, 2020, but decided mid-June to cancel it. Earlier this year, AOPA was forced to cancel its fly-ins in San Marcos, Texas, and Casper, Wyoming. AOPA is working with local officials and organizers for all its 2020 fly-ins on potential future dates for those events.


Mark Baker

"This decision was not taken lightly, and it was made in close coordination with all event partners, including Monroe County executives, local and state health departments, and airport/ATC management," said AOPA President Mark Baker.

"A number of factors went into this decision: the continuing constraints that COVID-19 is expected to have on large-scale events in New York State, and staffing issues related to the health crisis and resulting slowdowns," Baker added. "The serious challenges and potential restrictions ahead of us just won't allow us to create the type of member and exhibitor experience that would meet our high standards."

Those who registered for the event will receive a full refund. Registrants do not need to take any action to initiate refunds; AOPA will process credit card refunds. Please expect delays for refunds by check.

For pilots looking to return to the skies in these uncertain times and as states modify social distancing restrictions, AOPA and its Air Safety Institute have created aviation resources. The COVID-19 Flight Operations Guide is designed to help flight schools, flying clubs, FBOs, and other aircraft operators; the Return-to-Flight Proficiency Plan, created in partnership with Hartzell Propeller Inc., helps to ensure that pilots safely return to the air after a period of inactivity. ❑

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HANGAR FOR SALE W23, WILD ROSE, WISCONSIN. 40 x 40. Concrete floor, bifold door, 10 years old. $36K. **dsbarno@yahoo.com 920-344-8890.**

HARTFORD, WISCONSIN (KHXF) - Hangar for Sale: 70 x 70 hangar built in 2014. Higher Power hydraulic door that measures 60 x 16. Hangar is located at the North End of the field: $180,000. Contact **Dana 608-235-9696 or danaosmanski@gmail.com.**

GET THREE MONTHS FREE RENT ON HANGARS at Southern Wisconsin Regional Airport (JVL), Janesville, WI. Available on T-hangar units #25-#44 only (1-year commitment required). Check out our website **www.jvlairport.com** for airport amenities and call **608-757-5768** for current availability. Better yet, fly in and see for yourself. While you're here, enjoy a meal at Bessie's Diner or 18-holes of golf at the Glen Erin Golf Club.

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Dave Weiman
Editor / Publisher

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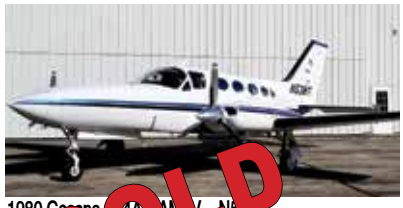

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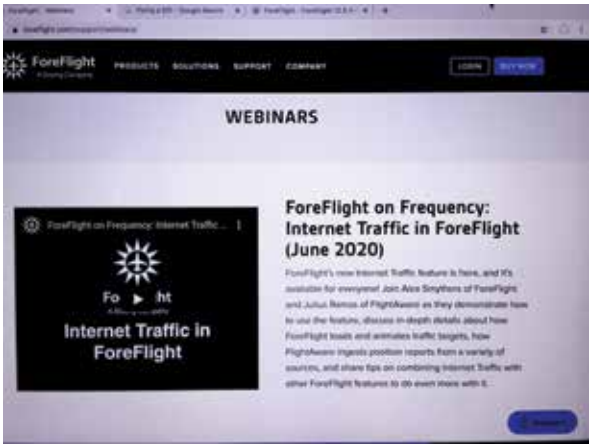
Live Global Traffic Streaming Now Available With ForeFlight

ForeFlight, in partnership with FlightAware, is now providing live global traffic streaming for all customers with its new **Internet Traffic** feature.



Internet Traffic is tied to the same Traffic map layer used to display ADS-B traffic, and that layer is now accessible any time the user has an internet connection on the ground. The layer will automatically switch to showing only ADS-B traffic when the user connects to an external ADS-B In device.

ForeFlight displays both airborne and ground traffic received via the internet, just like it does ADS-B traffic, with the altitude and tail number of aircraft available at a glance, and many other details available with a tap for most traffic targets.

ForeFlight uses the distinct position reports received from FlightAware to interpolate each airborne target's movement and displays it smoothly on the map.

Internet Traffic is included in all ForeFlight subscription plans.

Slide-Out More Menu & Edit Tab Order

Tapping the More tab in the bottom-right area now displays a compact menu on the right side of the screen so users can view it without leaving the page they are on.

Downloads, Settings, and a number of infrequently-used tabs appear as modals that users can quickly dismiss by swiping down from the top. Other tabs, such as Checklist and Logbook, open in full screen, double-column layouts on iPad to better utilize available screen space.

The last tab a user opened from the More menu is always available just to the left of More with the new "Dynamic" tab, allowing the user to quickly jump between that and their other tabs.

Tap "Edit Tab Order" in the More menu to rearrange ForeFlight's tab bar however the user likes, including tabs that were previously only available in More. Tap "Reset To Default Order" to undo changes made.

Tab order does not sync between devices, allowing the user to have different setups on their iPad and iPhone to match how they use them.

Other Notable Enhancements

ForeFlight on the iPhone now supports the FPL "Bubble Editor" on Maps, dedicated Plate and Scratchpad views, and all other previously iPad-only features with the exception of the Profile View.

Airports: The Frequencies, Services, A/FD, and More tabs have been combined into a single "Info" tab; the Forecast Discussion is nested under the TAF section; and the airport popup on Maps now uses the same layout as the Airports view itself, providing faster access to Procedures, Runways, and more.

Maps: The Edit, NavLog, and Profile buttons have moved to the right edge of the FPL editor. The user can hide or show the Aeronautical Map's quick filter buttons on the left side of the screen using the new "Quick Filters" setting in Map Settings.

Support: This is a new tab available just above About in the More menu, with links to support resources on ForeFlight's website and the in-app Pilot's Guide.

Multitasking Support On iPad

ForeFlight on the iPad now supports iOS Multitasking, allowing the user to use ForeFlight in Split Screen or Slide Over with other apps at the same time.

To open ForeFlight in Split Screen with another app that supports it, the user can open either of them, swipe up slowly from the bottom of the screen to show the iOS dock, and drag the other app's icon from the dock to either side of the screen and release it. Drag the separator between the two apps to change their relative sizes, or dismiss one app by dragging the separator all the way to one side of the screen.

Open ForeFlight at the top of any app that doesn't support Split Screen using Slide Over. Drag the ForeFlight icon from the iOS dock to the center of the screen, instead of either side and release it.

Aircraft Type Restrictions In Procedure Advisor

Procedure Advisor displays aircraft type restrictions for standard instrument departures (SIDs) and standard terminal arrival procedures (STARs) so pilots can quickly identify suitable procedures for their aircraft.

Colored tags for Piston, Turboprop, and Jet aircraft appear beneath procedures that are restricted to the aircraft types shown.

Webinars showcasing these features are available for viewing here:

www.foreflight.com/support/webinars
https://foreflight.com/campaigns/on-frequency/
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