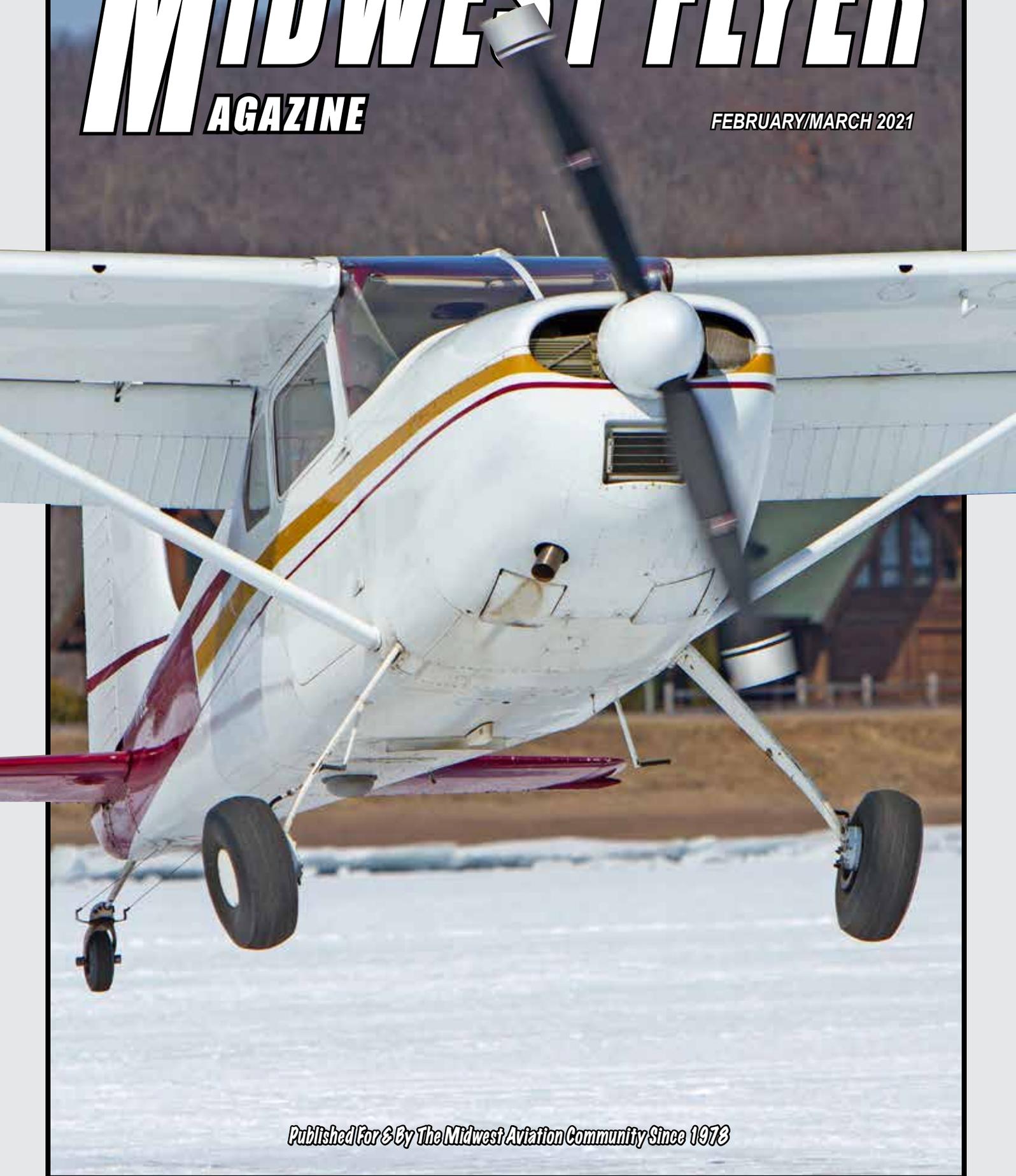


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ON THE COVER: A 1961 Cessna 180D takes off from a frozen Lake Mille Lacs near Garrison, Minnesota. The aircraft is owned by Craig Lieberg of Clear Lake, Minnesota.
Brad Thornberg Photo

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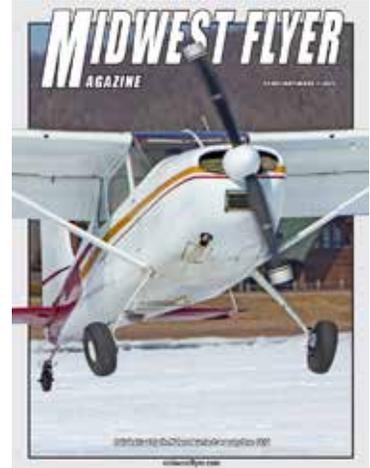
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How Can The Designated Pilot Examiner Program Be Improved?

by Dave Weiman

I am hearing from the aviation community concern that the Designated Pilot Examiner (DPE) program, which is administered by the Federal Aviation Administration (FAA), could be improved to better serve pilot applicants, and flight instructors and flight schools. In fact, the Aircraft Owners & Pilots Association (AOPA) is likewise concerned and has established an advisory board which will be looking at the program and developing recommendations as to how it can be improved. From lapses in examiner availability to provide pilot testing, to oversight of examiners, there may be room for improvement.

The advisory board is composed of highly experienced and respected DPEs who will provide guidance for AOPA's work with the FAA's Designated Pilot Examiner Reforms Working Group. This group was formed under a mandate from Congress in 2018 to review "all regulations and policies related to designated pilot examiners" and focus on "the processes and requirements by which the FAA selects, trains,



and deploys individuals as DPEs." One of the goals of the advisory board will be to ensure transparency and fairness to designees and applicants throughout the examination process.

We have heard over the years that DPE designations can be political, and that there are protected territories. We now hear that FSDOs are limiting the number of DPEs in their districts because they require a certain amount of supervision, and this adds to the FSDO's workload.

While some DPEs work independent of any one flight school, some do not, which then creates a "competitive advantage" over other flight schools in the area. If availability and flight school competition are concerns, this should be addressed.

Another concern are the fees charged by DPEs, which are not regulated by the FAA.

There is a very good article on DPEs by Dan Namowitz in the December 17, 2020 issue of *AOPA ePilot* that describes the advisory board AOPA has put together to make recommendations to the FAA as to how the program can be improved: www.aopa.org/news-and-media/all-news/2020/december/17/experts-to-steer-aopas-proposals-to-improve-dpe-system?utm_source=epilot&utm_medium=email

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DIALOGUE FROM PAGE 5

Meanwhile, *Midwest Flyer Magazine* contributing editor, Harold Green, discusses how the DPE program currently operates beginning on page 13 of this issue.

EDITOR'S NOTE: While there may be areas where the DPE program can be improved, individual DPEs are not to go unrecognized for their service to the aviation community. □

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FAA's Intentional Falsification Settlement Policy: Not Much of An Offer

by Gregory J. Reigel

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As you might imagine, the FAA has a dim view of intentional falsification cases. These situations arise when the FAA believes that a certificate holder (whether airman, mechanic, air carrier, repair station, etc.) has intentionally falsified a required record. They range from airmen who have failed to disclose information on their applications for medical certificates to mechanics who have either omitted information or included incorrect information in aircraft maintenance records.



Greg Reigel

According to the FAA's Compliance and Enforcement program, a certificate holder who intentionally falsifies a record lacks the qualifications to hold any certificates. As a result, FAA's sanction in these cases is revocation of all certificates, usually by emergency order. And after revocation, the certificate holder is generally prohibited from re-applying for new certificates for one year following the effective date of the order of revocation.

However, before the FAA issues a revocation order, it conducts an investigation in which it gathers evidence, sends out a letter of investigation, reviews any response, and analyzes all of the evidence to support its case. This process can take a period of time. But the certificate holder retains all certificates up until the revocation order is issued.

The New Policy

In the case where an airman has allegedly falsified his or her application for medical certificate in violation of 14 CFR 67.403(a)(1)-(4), the FAA recently announced a new "prompt settlement policy." According to the FAA, the new policy will afford an airman "the opportunity to apply for any airman and ground instructor certificate sooner than

had the case proceeded in the absence of the policy."

Under the new policy, the airman would still have to wait one year, but that would happen "sooner than under the current process because much of the investigation and evaluation processes would be abbreviated or eliminated." The policy provides the airman with an opportunity to resolve the alleged violation with a settlement agreement in which the airman (1) accepts an order revoking all of the airman's certificates; (2) immediately surrenders all of his or her certificates; and (3) waives all of his or her appeal rights.

The FAA believes this policy will provide predictability for airmen as to when the revocation order is issued, and accordingly, when the airman would again be able apply for a new certificate. It is also supposed to "promote better resource allocation."



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Who Is Eligible For This Policy?

The policy would be available to an airman who the FAA believes has violated 14 CFR 67.403(a)(1)-(4). However, the policy will not be available to an airman if (1) the FAA believes the airman may lack qualification to hold his or her certificate(s) [other than because the airman allegedly violated 14 CFR 67.403(a)(1) through (4)]; or (2) he or she has a prior violation of 14 CFR 67.403(a)(1) through (4).

How Does It Work?

When the FAA sends a letter of investigation (“LOI”) to an airman for alleged intentional falsification, the LOI will advise the airman that he or she may request consideration for a prompt settlement of the legal enforcement action. If the FAA determines the airman is eligible, an FAA attorney will send the airman a settlement agreement with the following terms:

1. The settlement agreement must be executed by the parties within 10 days after the FAA sends the agreement to the airman;
2. The FAA will issue an emergency order revoking all airman, ground instructor, and unexpired medical certificates the airman holds immediately upon receiving the fully executed settlement agreement;
3. The order of revocation will (a) require the immediate surrender of all airman, ground instructor, and unexpired medical certificates the individual holds to enforcement counsel; (b) notify the airman that the failure to immediately surrender these certificates could subject the airman to further legal enforcement action, including a civil penalty; and (c) inform the airman that the FAA will not accept an application for any new airman or ground instructor certificate for a period of one year from the date of the issuance of the order of revocation;
4. The airman will waive all appeal rights from the order of revocation;
5. The airman acknowledges that the agreement only concerns the legal enforcement action brought by the FAA and does not affect any actions that might be brought by State or other Federal agencies (whether civil or criminal), and that the agreement does not prevent the FAA from providing information about this matter to State or other Federal agencies;
6. The parties will agree to bear their own costs and attorney fees, if any, in connection with the matter;
7. The airman will agree to not initiate any litigation before seeking any costs, damages, or attorney fees, including applications under the Equal Access to Justice Act, incurred as a result of the legal enforcement action; and
8. The airman will agree to waive any and all causes of action against the FAA and its current and/or former officials and employees relating to the legal enforcement action.

Is It Worth It For The Airman?

From my perspective, this policy provides little real benefit to an airman, other than an airman who simply wants to roll over on his or her sword and start the clock ticking on his or her punishment. Here are some of the problems I have with the policy:

- An airman gives up all of his or her rights to have the FAA prove its case. The FAA has the burden of proof in these cases. If the case involves factual issues as to whether the airman intentionally falsified rather than simply made a false statement, forcing the FAA to prove its case could be the difference between revocation of all certificates for intentional falsification versus revocation of just the airman’s medical certificate for making a false statement.
- The policy does not protect the airman from criminal prosecution. An airman who the FAA believes committed intentional falsification could still be referred out to local or federal authorities for prosecution. And the order of revocation and the facts upon which it was based would make it very easy for the prosecution to prove its case. And since the FAA has, in fact, referred these cases out for prosecution, this is not a risk to be taken lightly.
- The airman gives up his or her right to negotiate a reduction in the one-year prohibition on reapplication. If an airman appeals an order of revocation alleging intentional falsification, it is not uncommon for the FAA to agree to a 10-month, or in unusual circumstances a 9-month, prohibition in order to avoid having to litigate its case against the airman before a National Transportation Safety Board (NTSB) administrative law judge.
- The airman must surrender his or her certificates immediately. In the absence of surrender, the airman could have retained his or her certificates while the FAA completes its investigation and until it issues the revocation order. This could be several months in which the airman could continue to exercise the privileges of his or her certificates.

Conclusion

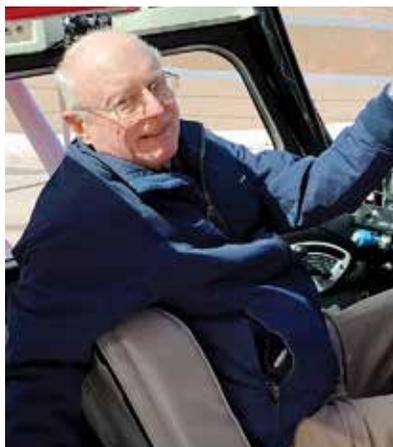
If you find yourself facing an allegation of intentional falsification, you know you made a mistake, and you just want to put the matter behind you, then the new policy may be worth considering. However, you should also consider what you will give up. In most situations, it will likely make more sense to work through the enforcement process to obtain a more favorable resolution. In any event, if you are faced with this situation, you should definitely discuss with a knowledgeable aviation attorney before you make your decision.

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](https://twitter.com/ReigelLaw) (www.shackelford.law). □

What Not To Skip On FAA MedXpress Form 8500-8

by Dr. Bill Blank, MD

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Dr. Bill Blank

FAA form 8500-8 is the form airman complete and submit via MedXpress before every flight physical. The Basic Med form is derived from it. Recently, several questions have come up regarding how to complete this form. The form, itself, is about 19 years old. Modifying it apparently takes about

3 years. Modifications must be approved by several different government agencies. For that reason, the FAA tries to modify it as little as possible and find administrative workarounds.

A frequent question is, how many times do I need to

report an old health condition?

The short answer is: **On Every Medical.** Question 18 asks, HAVE YOU EVER BEEN DIAGNOSED WITH, HAD, OR DO YOU PRESENTLY HAVE ANY OF THE FOLLOWING? That part of the question is all capitalized for emphasis. This means that if you had a tonsillectomy when you were 9 years old, and you are 50 years old today, you still must report it under 18u, "surgery," on every subsequent medical.

Does that leave you puzzled? Here is the government "logic."

The aeromedical division knows what you have previously reported, but your Aviation Medical Examiner (AME) may not. He cannot look up any of your old medicals, unless he, himself, did them. Your AME can look at a history summary sheet which tells him what you checked yes to. He would know that you had surgery in the past, but not what kind. The rationale has something to do with privacy requirements. If you go to a multispecialty clinic for your health care, any physician in the system can look up your electronic records. If your regular family physician is gone, another physician can see your records when he sees you. This would also be true, if you went to the emergency room (ER).



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Why can't the FAA do this? It beats me. AMEs are told that the government lawyers require this. Once you report a condition the first time, you can write PRNC (previously reported, no change) under surgery, for example, on subsequent exams, unless you have had more surgery. *This applies to all of the conditions!* Your AME must comment on every condition you check yes to. He can no longer use PRNC.

Another question is, what do you do if you have several visits for the same condition?

Perhaps you are seeing your physician every two months for the same condition. You could have more than 20 visits for the same condition between flight physicals. Here you can list one visit, a recent one, give the reason and comment "multiple visits."

Question 17b causes many problems. It is poorly worded. I've been crusading to get the wording changed for many years.

What the FAA is asking is, "Do you wear a contact lens in one eye which is only for near vision?" That means that you cannot see far away with that eye. This is called "monovision." The FAA doesn't like this.

If you want to utilize monovision, you have to have adapted for 6 months, then take a Medical Flight Test, and the FAA will issue you a SODA (Statement of Demonstrated Ability). So the answer to Question 17b must be NO. Even if you wear bifocal contact lenses, the correct answer is NO. They are not for near vision only.

Question 17a asks about "medications." The FAA steadfastly refuses to issue a list of approved medications. This is apparently the recommendation of government lawyers. The FAA physicians obviously have a list. The workaround is that AOPA has a list and makes it available to its members. If you have any questions about a medication you are taking, I suggest you refer to this list before seeing your AME. That way, if a change is needed, you can do it ahead of time. Remember, your AME must transmit your exam within 14 days of when he submits your confirmation number.

Some of these FAA policies need changing. I'm passing them on to you so you can deal with the system as it is now.

The previous Federal Air Surgeon, Dr. Michael Berry, has retired. Dr. Susan E. Northrup is the new Federal Air Surgeon, effective January 17, 2021. Dr. Northrup brings a wealth of experience from the FAA regional medical

program, industry, and the military. A private pilot and retired U.S. Air Force Colonel, Dr. Northrup is board certified in aerospace medicine and in occupational medicine. She is an acknowledged expert in aviation having served as the Vice-Chair for Aerospace Medicine on the American Board of Preventive Medicine. She has served as the FAA medical subject matter expert to ICAO's COVID-19 response activities.

Until next time, stay safe and happy flying!

NEWS FLASH: The FAA Aeromedical Certification Division announced December 19, 2020, that holders of Airman Aeromedical Certificates may receive the Pfizer-BioNTech COVID-19 vaccine, or the vaccine produced by Moderna, which are being made available to the American public under an Emergency Use Authorization (EUA) by the Food and Drug Administration (FDA). There is a 48-hour no fly waiting period that must be observed after each dose. There may be changes. Stay tuned!

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. □

LETTERS TO THE EDITOR

Dave:

I just finished reading the Dec/Jan issue (<https://midwestflyer.com>). Excellent, informative articles! I especially liked the insurance article by Victoria Neuville of Aviation Insurance Resources entitled "Despite Experience, Senior Pilots Are Charged Higher Insurance Premiums" (<https://midwestflyer.com/?p=13910>). Good info.

Bob Worthington
Las Cruces, New Mexico

Dave:

I just breezed through your publication. All I can say is WOW! You and your wife are putting out one heck of a good read with columns, great layout design and stories which are sure to be popular among pilots everywhere! Pilots, if you are cooped up with Covid-19, dig into a copy of *Midwest Flyer Magazine*: <https://midwestflyer.com>

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Are You A Child of the Magenta?

by Michael J. "Mick" Kaufman
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Michael Kaufman

It has been said that Steve Job's last words as he passed into his next life were, "OH WOW, OH WOW, OH WOW." Could it be that he had a

vision of what the next generation in technology was going to be?

We have had an explosion in avionics technology in recent years, and it has caused pilots to abandon their memories of procedures of the past.

I have always been a geek for technology. I have been a ham radio operator for close to 50 years, and owned and operated a radio shop for police, fire and business radios for several years.

When cell phones started to appear on the market, I brought cell phones to our county in southwest Wisconsin, even as primitive as they were at that time. In aviation, I have seen great advances as well, going from five-channel "super-homers" and autopilots with vacuum tubes weighing in at over 70 lbs, to the newest technology of Dynon navigation systems. What will the next generation of avionics bring?

Many of the technological advances start at the ham radio level, then transfer to commercial products such as cell phones, computers and avionics. Some of the technology currently used in aviation communications, for example, such as AM modulation, is far from state-of-the-art. Some years back, there was discussion about using FM modulation, which was the format that law enforcement was using at the time. This format never moved forward, and now digital voice communications have become state-of-the-art and are in wide use in both ham radio and public safety

communications.

Imagine receiving your clearance digitally, and after reviewing it, acknowledge and copy it directly to your flight management system (FMS). Many of the larger airports now support digital ATIS (Automatic Terminal Information Service), and the airlines have a data system called ACARS (Aircraft Communications Addressing and Reporting System), which has been around since the late 1970s.

ACARS is a digital datalink system for transmission of short messages between aircraft and ground stations via air band radio or satellite. The protocol was designed



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by ARINC (Aeronautical Radio, Incorporated) and deployed in 1978, using the Telex format.

Many of the high-end avionics systems in corporate aircraft have Controller Pilot Data Link Communications (CPDLC) and can already receive digital clearances and transfer them to their FMS. It is very true that we are making new technology breakthroughs at an accelerated pace, and what is state-of-the-art today, will not be state-of-the-art tomorrow.

I am a long way from state-of-the-art technology in my personal aircraft and may never get caught up with the cost of the high-end equipment now available.

I could ask, "Are you a child of the magenta, having that magenta line as a reference representing the course you should fly?"

I could also ask, "Are you a real pilot or are you an appliance operator?"

In the early days of amateur radio, we built our own radios and talked to other ham radio operators around the world. I built numerous radios in the day and still have and use one from nearly 50 years ago.

As for the pilot of today, can you still fly a cross-country flight and make an approach in IMC (Instrument Meteorological Conditions) and land with no magenta line or the use of an autopilot? Many of us possibly could not, as I have witnessed while instructing and giving Instrument Proficiency Checks (IPC).

Recently, one of my colleagues sent me a link to a YouTube video that someone posted of a training program developed by American Airlines entitled "Children of the Magenta Line." See <https://www.youtube.com/watch?v=5ESJH1NLMLs>

The video should be a must watch for pilots as it deals with the very issue that I have been emphasizing in my column on instrument flying.

The video emphasizes the levels of automation available in many of today's aircraft. The presenter suggests that we have three levels of automation, and this could be disputed to a certain degree; however, after seeing these items while training pilots, I agree with all that was said.

I have mentioned in previous columns that my procedure for departure is not to use high levels of automation during periods of high workloads, such as during an instrument departure. Rather, I prioritize tasks and fly the airplane!

As pointed out, it is not necessary to always use the highest level of automation available when we are task saturated. Pilots always seem to make a task more difficult than it is. I teach this to my instrument students while training them for the rating.

As we progress in our initial training for the instrument rating, I add more levels of automation, so it is understood. As the training progresses, a famous phrase is noted in the video that I have heard many times: "What is it doing now," referring to the automation and the autopilot.

When was the last time an instructor blanked out your multifunction display (MFD) or reconfigured your primary flight display (PFD) to only display the basic instruments? No flight director...no horizontal situation indicator (HSI) – just a six-pack of instruments and a lone VOR/glideslope indicator.

Many of us will need to admit that we are lost without the magenta line and the guidance from our airplane's automation. Don't be embarrassed; get back with a flight instructor for the purpose of learning. A good flight instructor is one who will work with you to teach you something and hone your skills, not try to make you feel inferior or intimidate you. And don't hesitate to ask questions or admit when you don't understand something.

As we begin a new year in 2021, let us all do our part to keep safe, both from the illness of the virus that has plagued us, and diligently work to keep well trained and safe in our aircraft!

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

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An Explanation of the Designated Pilot Examiner Program

by Harold Green

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All of us in civil aviation have either flown with, or will fly with, a Designated Pilot Examiner (DPE). The occasion is usually fraught with tension because our fate as a pilot is in the hands of a person we have probably never met before and about whom we have heard many tales of terrible experiences by others. This raises the question of who and what are these folks? We will take a look at those questions in this article.



Harold Green

The question is why the DPE? The answer is very simple. The Federal Aviation Administration (FAA) is required to certify the qualifications of pilots to safely operate aircraft in order to protect the general population and users of the airspace. To do this, it is necessary to test each pilot applicant applying for a rating, whether for the initial rating or advanced. To do this requires a significant number of people. Rather than hire such examiners, the FAA has designated people who are authorized to conduct pilot evaluations on its behalf. Hence the term "Designated Pilot Examiner." This allows the FAA to merely supervise DPEs, rather than conduct the examinations itself, thereby greatly reducing its workload and personnel requirements. So far, it all makes sense.

DPEs are pilots who have been examined by the FAA and deemed capable of examining applicants for a pilot certificate and determining that the applicant meets the standards the FAA has established for awarding the rating sought. There is a plethora of DPE subdivisions, but our discussion here will only involve airplanes. For detailed information, please refer to Order No. 8900.2c.

Basically, a DPE applicant must be rated for the aircraft in which flight tests are to be conducted and in all respects be qualified to act as Pilot In Command (PIC). Some specific designations are Sport Pilot Examiner, Private Pilot Examiner, Commercial Pilot Examiner, Commercial and Instrument Rating Examiner, Airline Transport Pilot Examiner, and Vintage Experimental and Limited Examiner. In addition, there are separate requirements for those wishing to conduct flight tests for Flight Instructor Renewal or Initial Flight Instructor Certificate.

The DPE must be specifically approved for each designation. Further, each DPE can only conduct tests in the specific aircraft class approved by the FAA. Initial qualifications vary depending on the approval sought and

includes the requirement that the applicant hold a Flight Instructor Certificate. The time required includes total time and time in the last 12 months and varies from Sport Pilot Examiner with 500 hours total and 200 hours as a flight instructor, to Airline Transport Pilot Examiner requiring 2,000 hours total and 500 hours as a flight instructor. There are subdivisions of these and those interested should refer to Flight Standards District Office (FSDO) Order 8900.2c.

Then, given the experience is met, each FSDO must test and approve the applicant to meet the needs of their area. The appropriate FSDO determines how many DPEs are needed, and who is selected. The FSDO must not only approve the applicant, but must also supervise the DPEs in their region. This means the FSDO must conduct a supervised check-ride with each DPE in their region once a year. This requirement may limit the number of DPEs approved by the FSDO, since FSDO manpower is limited. As a result, the FSDO will

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look to potential DPEs for those qualified to conduct check-rides in the greatest number of aircraft and the most rating types, since they need only check the DPE on one check-ride regardless of the type of ratings or aircraft sought.

Then comes the renewal of the DPE. Each DPE has a minimum number of hours required annually. This can be a burden because the flight time accrued by conducting flight tests cannot be counted. For airplane approval, 60 hours of Pilot In Command (PIC) time is required annually with a minimum of 10 hours in each class authorized. This can be a significant cost if, for example, a DPE wishes to give tests in twin or turbo prop aircraft and does not have access to such aircraft. The cost of 10 hours in a twin-engine aircraft can be expensive beyond reason for any reasonable number of tests. This could include 10 hours in a King Air, for example, with obvious economic issues.

The next issue that arises is whether or not the DPE is expected to fail a percentage of applicants. The answer is that if the DPE fail rate is less than 10 percent, the FAA will watch the performance of the DPE and may, at the sole discretion of the FAA, conduct a supervised check-ride. A supervised check-ride means that an FAA representative will ride along on a regular check-ride to ensure the DPE is maintaining the FAA's standards. In addition, the DPE is required to undergo ground training in procedures on a periodic basis. Expenses for this are borne by the DPE.

In conducting a flight test, the DPE is expected to follow the Airman Certification Standards (ACS) appropriate to the rating sought. There is no leeway on this issue. The DPE must use the ACS, or if none exists for the rating sought, the Practical Test Standards (PTS) must be complied with absolutely. The DPE has no leeway on this issue. The DPE is prohibited from instructing the applicant. However, the applicant can be guided to the extent that questions can be used to probe to determine if an error was due to a misunderstanding.

Recently, the FAA has removed geographic limitations on where a DPE may conduct practical tests. Whereas originally the DPE was assigned a region in which to conduct

operations, currently they may conduct operations anywhere within the 50 states, protectorates or possessions. This has provided additional opportunities for many DPEs. One DPE interviewed for this article has professional opportunities to be in different parts of the country for a few days at a time with no work obligations. He calls local flight schools and winds up giving flight tests while he is there.

A significant concern for most applicants is what the flight test will cost. First of all, the FAA does not mandate the cost of a practical test. Price is at the complete discretion of the DPE and the market. Research for this article revealed that the cost for private pilot flight tests is between \$500.00 and – believe it or not – \$1,400.00. The latter fee was for tests given for graduates of a major flight school. Tests for more advanced ratings can be higher and this is particularly true for instructor examinations due to the amount of time required to conduct the test. Re-test costs depend on the amount of time the DPE must put in to conduct it. If there are more than four fail issues, or if the examiner needs to return to the site another day, the cost can be the same as the initial. Otherwise, the cost is usually a small percentage of the original fee.

People wonder how the examiner judges the applicant's performance. The answer is specifically to the standards and tasks specified within the applicable ACS or PTS. There is no reason the examiner cannot ask questions or request performance tasks outside the ACS, but these cannot be used to judge applicant performance. Further, the DPE may ask the applicant questions to explore their knowledge beyond the details of the ACS or to expand the DPE's understanding of the applicant's knowledge.

The DPEs interviewed for this article were asked if there were any areas in which applicants were deficient and which tended to be common among applicants. The answer is yes... deficiencies in instruction. Such deficiencies involve poorly prepared students, both in "flying" and "knowledge."

In flying, the biggest operational concern are "landings." Students tend to be very limited in their ability to accommodate changing landing conditions. Changing flaps or power settings caused all kinds of problems for applicants. Understanding the whys and performance of short and soft-field landings tends to be lacking.

In the area of knowledge preparation, students are often very poorly prepared in the old standbys of "weight and balance" and "flight planning." Some students are unable to perform even the basics and one did not know that the Pilot's Operating Handbook (POH) contains graphs to help determine weight and balance for a given aircraft. Taking 45 minutes to compute the weight and balance for two people in a Cessna 152 and then getting it wrong, was just one example. Additionally, dependence on "electronic tools" has become a drawback.

An example given was the student on a flight test who, when asked which runway to use in an actual crosswind situation, requested permission to use the app on his iPad to determine this.



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Some flight schools have expressed concern that DPEs are hard to schedule, too costly and in some cases, arrogant. In some individual cases, all of these things may be true. But, without excusing anyone, let's look at possible causes.

With respect to availability, the control is in the hands of the local FSDO. Two things, in turn, currently limit this office. First are personnel and pandemic induced limitations. They simply do not have the personnel to supervise even the existing DPEs. Some have gone over 18 months without a supervised check-ride due to the pandemic imposed travel restrictions, and second, even in normal times some FSDOs do not have the capability to supervise more DPEs and that supervision is an absolute requirement imposed by FAA standards. They simply cannot add more workload under these conditions. However, if an operation is hampered by a lack of or performance by DPEs, the appropriate action in both cases is to work with the local FSDO. They might not be in a position to help, but officials can use a complaint as leverage to obtain more resources, if they want to.

Since cost is controlled by the DPE, probably the best approach would be for the flight school to negotiate with the examiner depending on the fees charged and the volume of business provided. However, consideration should be given with respect to today's economy.

An arrogant examiner can be dealt with directly by the flight school or the recommending flight instructor. Friendly discussion may be the only alternative if a different examiner is not available. Of course, a discussion with the governing FSDO inspector would also be in order.

Because DPEs are no longer limited to a specific area, applicants always have the option of seeking a DPE outside their area. Of course, cost should be considered if extensive travel is involved.

Applicants would be well advised to talk to the DPE prior to taking the flight test. Most will be pleased to share their approach and expectations. A suggestion is to remember that the applicant is the Pilot-In-Command (PIC) on the check-ride. Some examiners will attempt to distract an applicant with conversation at times when the applicant should be focusing on the task at hand. Some applicants may be reluctant to exert their authority to maintain a sterile cockpit. While courtesy is always in order, firmness and discipline are as well. It is quite appropriate for the applicant to ask the examiner to hold their discussion until the applicant is able to provide the proper attention the examiner's comments deserve.

In conclusion, the DPE is a fact of life in civil aviation and, in general, things move along with minimal difficulty. That does not mean things couldn't be better. Probably the most effective path to improvement is for those concerned, whether an independent flight instructor or flight school, to develop a working relationship with their responsible FSDO.

As a final note, in preparing for this article, input was sought from three different FSDO offices. Naturally all were operating remotely due to the Coronavirus. While

administrative staff was helpful, telephone response from the individuals responsible for administering DPE programs was totally non-existent.

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).

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Tips On Buying A Used Plane

by Bob Worthington

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Bob Worthington

As you read this, spring is just around the corner. Flying weather will be milder and days longer. Hopefully Covid-19 is

becoming under control. As we entered 2020, aviation forecasts went out the window.

During 2019, GA sales increased by 16%, while in 2020, sales of small single-engine GA aircraft almost came to a halt. But predictions are that by late 2021, new airplane sales will match or rival 2019 with the biggest increases coming from the biz-jet segment, and smaller, used GA aircraft.

In 2020, aircraft operations were reduced drastically, and with the volatility of the airlines, businesses and individuals who could afford it, turned to GA for their travel needs. Additionally, increased interest is noted in the areas of remotely piloted aircraft and the use of electric engines. Overall, the future of GA looks bright. The weather is improving for flying and the time to purchase a small, used GA plane is looking particularly good.

My objective here is to share with you some tips on what to consider when purchasing a used aircraft. In a 40-year career of flying, I have owned nine (9) planes, all used but one. And that plane had a major FAA defect that came about the day after my plane's manufacturer went bankrupt and out of business. Here are my thoughts on how I go about purchasing a used aircraft.

I always begin with the finances. How much money do I have to spend or how much can I borrow? If you have the money, fine. If you need a loan, start this process right away.

Acquiring a plane is all about compromises. Most of us have a finite budget, so that is where we begin. This number sets the start of our compromise practice. This establishes the upper limit of what plane we can consider buying. Once these financial parameters are established, we initiate the process of determining what we want.

Now begins the most interesting part of obtaining a new/different aircraft (at least for me). Deciding on what we want and researching it. A recommended tip... The aircraft should be less expensive to secure the plane we want with all the equipment already aboard, rather than pay less and then have to install what we want. Even if the overall cost is high, in almost all instances, the seller will shoulder most of the actual cost of the equipment.

The amount of money allocated to purchase and the compromise between what we want, what we need, and what we can afford, can make the buy a good deal or unbelievably bad.

Once I had a plane for sale and every potential buyer consistently told me what was wrong with it. To me they were not looking for something that fit their needs, but rather just wanted a plane, cheap. Finally, a certified flight instructor and a certified airframe and powerplant mechanic looked at the plane and said it matched exactly what the buyer needed. He bought the plane and actually paid me more than I asked (we are still good friends).

Here the compromises take their toll, as even if money is of no concern, we probably cannot find in one airplane everything needed or desired.

Simple or complex? Speed versus carrying capacity? VFR or IFR equipped? Engine size versus fuel burn versus speed? Fixed gear versus retractable? Who will be flying with us? Solo or with a spouse or a friend or more family members? An older plane with few hours may be less of a bargain than the same year and model with a lot more hours.

A word of caution... Buying a make and model that has a long and high production rate means that replacement parts are readily available (and cost less). Aircraft that were not in production for long or few planes were produced means various parts are not available or are expensive. I learned this with my Cessna 182 RG that had an accident (mechanical problem, not pilot error). During its eight (8) years in production, 2,000 aircraft were manufactured, so today many parts are not available. To compound this situation, I learned that vendor changes from year to year

A promotional graphic for the book and movie 'One Pilot's Story' by Bob Worthington. The background is green with yellow and red stripes at the bottom. The title 'One Pilot's Story' is in large yellow font. Below it, 'Bob Worthington, Author of "The Left Seat"' is written in white. At the bottom, there are two book covers: 'Under Fire with ARVN Infantry' and 'COMBAT ADVISOR IN VIETNAM'. Below the covers, the text reads 'Find out how to get your copy of the book and movie at www.BobWorthingtonWriter.com'.

meant that certain parts could only be replaced by parts from the same model year.

Aircraft owner organizations, such as for Mooney, Cessna and Piper, typically have tons of data on makes and models to include problems to look for and advantages of the model. Additionally, *Aviation Consumer* publishes books on various aircraft makes and models, providing considerable information on each plane.

Two more pieces of advice... When considering a plane, factor in the cost and ease of operation and maintenance. Also find out how much insurance will cost and requirements for keeping the plane covered.

Another consideration is your age. I was almost 40 when I became a pilot, then I received my Instrument Rating. In my progression as a cross-country traveler, I went from a Cessna 172 to a 182, and then to a turbo-charged Mooney. As I moved into my late 60s, my ability to bend and move became more difficult, so the Mooney was not easy to enter or exit. I needed a roomier cockpit, so I got a Cessna 182 RG. As I moved into my mid-70s, I seldom flew at night, avoided "hard" IFR flights, and flew shorter legs. I wanted a less complex plane, so I went to a fixed gear aircraft. Doing this reduced the pilot workload during flight and made the insurance premiums more reasonable.

Once a specific plane makes the top of my list, I begin the search by asking pilot friends if they know of a specific make, model, and years for sale. Most of my planes were purchased that way. I usually limit my search to no more than 500 to 600 miles from my home. This way distance does not become a problem to personally see a plane. Today, the Internet (and digital aviation periodicals, such as *Midwest Flyer Magazine*) bring dozens of potential buys right to your home or office.

Once a possible purchase is located, I want to look at it, fly it (typically I do little flying, but test out all the navigation, communication, and other equipment the plane has while the owner does the flying). If the plane remains a candidate, I take as long as necessary to read every logbook for the plane. I am looking at the maintenance records, equipment added, and any history of damage. I also do a title search to ensure the seller owns the plane free and clear. I once bought a plane where the title search showed there was a loan on it. Before I wrote a check, I checked with the loan holder. As it turned out, the loan was paid off, and the bank forgot to notify the FAA.

If the plane passes all inspections, I start negotiating the final sales price. This requires considerable research to acquire asking prices for similar planes and if possible, actual sales figures. The agreed-upon price is contingent on a satisfactory pre-

buy inspection. If the plane passes, we have a buy. If problems are found, either the owner fixes them, or we negotiate a reduced price. (Sometimes the seller refuses to do anything and probably the best option then is to say thank you and goodbye).

The best thing a buyer can do is "research." We should become extremely familiar with the make and model of our possible acquisition. We should know what it is selling for and what problems to check. The more information we possess, the more likely we are to get a decent deal. The less we know, the greater the chance of entertaining problems down the road.

This process allowed me to acquire nine planes that met my needs, my desires, my pocketbook, and each was a joy to own and fly. As time passed, my aviation needs changed – children grew and left, increased travel necessitated more speed, and as I aged, I wanted less complexity. Hopefully, what I have learned can help you find what you want this spring, so you can spend the summer enjoying your new aerial steed.

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.borderlandsmmedia.com). Facebook: Bob Worthington Writer (www.BobWorthingtonWriter.com).

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Knowing When Not To Be A Penny-Pincher!

by Pete Schoeninger

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Q: I approached my local flight instructor about getting a tailwheel endorsement. He said he would give me necessary dual in his Citabria, but NOT in my father's Cessna 120 because the 120 does not have brakes on the instructor's side. I learned to fly in an old Cherokee which only had one hand brake (no differential braking) from this same guy. Why would he fear the 120?

A: Brakes are very helpful to correct a swerve that is beginning to get out of control in a tailwheel airplane. Every Citabria I have seen had brakes for both occupants. But not all Cessna 120s do. The Cherokee you learned to fly in is much easier to land and control than any tailwheel airplane, and it pretty much tracks straight by itself, unlike a taildragger.

Q: I saw an old picture of a Cessna 170 with a traditional two-blade wooden propeller. Is that legal? Could I install one on my old (1957) Cessna 172 which has the same C-145 engine the 170s had?

A: When manufactured, Cessna got approval for a wood prop for 170s. Do an internet search for Cessna 170 type certificate A-799 and scroll down to propellers and accessories, paragraph 1b., which allows "Sensenich 73BR-50 or any other fixed pitch wooden propeller with a diameter of 71.5 – 74 inches and allows static rpm of 2230 – 2320 RPMs." I could not find that Cessna ever approved any wooden props on the Cessna 172 type certificate. It would be possible and legal to put a wooden prop on a 172, if you could find a prop manufacturer which had an STC to allow that installation.

Q: My FBO charges \$1.50 per quart more for oil than an oil jobber about 25 miles away from my home airport. I have been buying two cases of oil (24 quarts) at a time from the jobber, and I do my own oil changes. I took used oil to my FBO recently and he refused to accept it. Why not? Doesn't he sell the drain oil to someone?

A: In the "Old Days," folks would come around and pay a few dollars for used oil. But that has changed. Now, a retailer (your FBO) has to pay to have it hauled away. Now let's do the math. If you have to drive 50 miles to save \$36 (\$1.50 X 24 quarts), plus your cost of driving that 50 miles @ 55 cents per mile or \$27.50, and the inconvenience of having to dispose the oil elsewhere, you save time and money if you buy your oil at the local FBO and help support that business.



Pete Schoeninger

Q: What do you hear about the current state of local airport activity, as of this writing?

A: As of December 15, 2020, compared to other years, FBOs tell me that pleasure charter activity is doing reasonably well, but business charter is soft. Other areas like flight training are down somewhat, and fuel sales are down more, which certainly is to be expected in this Covid-affected year. Airplane sales seem modest, but some FBOs have mentioned that used Cessna 152s and 172s continue to rise in value.

Q: Every winter, you go on and on recommending removal of wheel pants. So far this winter, you have been quiet on the subject. Do you now favor leaving wheel pants on for winter use?

A: Nope, I still recommend removing wheel pants for winter operations for most airplanes, unless your airplane's manufacturer or your mechanic prohibits removal. Removing the wheel pants reduces the threat of wet snow and slush freezing to your brakes and tires while departing on a slushy/snowy runway. Do an internet search for "FAA Maintenance Aspects of Owning Your Own Airplane," which allows changing tires, wheel bearings, etc. Be warned that just because it is legal to do some of your own maintenance, make sure you know what you are doing and have an A&P licensed mechanic help you the first time. There are some dangers involved, especially with removing the nose pant which may require the nose strut be extended or deflated, then re-inflated after the nose pant is removed. Nose pant removal is done while the nose wheel is off the ground by lowering the tail of the airplane, which takes knowledge of where to place ballast, and some muscle. You will need to make an airframe log entry of work accomplished. The weight and balance will change a little as well. Legally, weight and balance changes have to be done or approved by an A&P mechanic, although it is a simple calculation. You can have a weight and balance sheet done something like this: Date XXXXXX. Empty Weight as equipped XXXX. C.G. is XXXX. With wheel pants removed, empty weight changes to XXXXX and C.G. is XXXX. Then you make an airframe entry something like "On Date XXXXXX, removed three wheel pants per weight and balance information dated XXXXXX, empty weight changes to XXXX and C.G. changes to XXXX." Sign and date it with your pilot certificate number.

Q: The Aviat Husky appears to be almost a clone of the Piper Super Cub. How different are they in performance?

A: Piper made the Super Cub for decades, ending production in the early 1990s. Aviat came out with their Husky in the late 1980s and it has been in production since then. The airplanes are quite similar, durable, and suitable for reasonable off-airport operations. The general consensus that I hear from people who have flown and owned both is that the

Super Cub may be a little better for short-field work, but the Husky is faster in cruise. The 30-year-old values of used Cubs are in the ballpark of \$100K with Huskys perhaps a bit less, all else being equal. But with any utility airplane that is 30 years old, overall condition is the major determinate of value.

Q: I have owned my Cessna 182 for 37 years. Besides a few dings, engine and prop overhauls, a fuel cell replacement and avionics upgrades, it still seems to be in pretty good shape. When will it wear out, or will I likely wear out before it does?

A: Your Cessna 182 does not have airframe time life limits that some more modern airplanes have. For instance, Cirrus aircraft have a life limit of 12,000 hours. Piper Tomahawk wings are limited to 11,000 hours, etc. As long as your 182 can pass an annual inspection, you can continue flying it. A few things you can do to help it age gracefully, is to maintain it to manufacturer's recommendations, keep it hangared, and fly it frequently. Make sure that you are aware of service bulletins and service letters, which may indicate problems beginning to appear in airplanes similar to yours before they are severe (and sometimes end up as an Airworthiness Directive.) For airplanes in which the manufacturer is out of business, you can often find a "type" club of enthusiastic owners who share info. There are even such groups on social media. I highly recommend you do an internet search for the 25-page report titled "*Best Practices Guide for Maintaining Aging General Aviation Airplanes.*" This report was written with the cooperation of AOPA, EAA, AAA (Antique Airplane Association) and the FAA. The report contains lots of good information.

Q: To keep my medical, I have to submit information from my cardiologist every year. These tests cost over \$1,500. I fly my Bonanza only 20-30 hours per year, so these tests have become a very expensive issue. Any ideas?

A: I worry about both you and your airplane! Flying only 20-30 hours per year is probably not enough to keep your skills sharp, and your engine in good shape. I hate to be blunt, but I think you should consider selling your airplane and on occasion, either rent an airplane and hire a CFI to fly with you, or ride along with a friend in their airplane.

Q: I have seen videos of planes on straight floats launch from a trailer in the spring of the year after wheels are removed and floats installed at an airport, not at a seaplane base. What do owners of those airplanes do in the fall if they do not have a facility on shore to change back to wheels? Surely, they don't land on the same trailer, do they?

A: I have never seen, nor have I ever heard of a float plane landing on a trailer. Often a lightly loaded (pilot only) float plane can land on a wet or frosty grass surface without damage. Or you can change to amphibious floats, and not have these problems, but you do give up maybe 80 lbs. of useful load vs straight floats, and a pretty big lump of cash as

well to buy them.

Q: I just bought a Cessna 172. I understand I can legally change my own oil. Is it as easy as changing the oil on my car, which I routinely do?

A: No. Your airplane engine may have either a screen to clean if it is a 1967 or older model, or an oil filter to change (1968 and newer) in addition to just draining the old oil. Either may have to be safety wired, so it stays in place on reinstallation. Possibly you will have to install a new crush gasket on the oil screen. You'll have to have someone show you how to do those things...also how to inspect the screen for possible problems. Some oil coolers should be drained at oil changes as well. While the oil drains, a few minutes should be taken to look closely at oil return lines and control linkage or wires, for chafing or other minor problems. On a few occasions, I have found a wire beginning to chafe, or other problems, which eventually could become a major problem.

Q: I just received my private pilot certificate, flying a friend's Beech Sundowner. I have only flown it solo, and with my instructor onboard. My friend insists that I get a checkout from my instructor with the airplane loaded to gross weight, including practice flying on a grass runway. This checkout is not a legal requirement, is it?

A: You are correct...it is not a legal requirement. As a new private pilot, you could legally load the airplane and go. But practically speaking, there is a significant difference in performance when at heavier weights, which you can see looking at the airplane's performance charts. But real-world experience is much better, and grass will be another factor affecting takeoff performance, especially if wet. I agree with your friend...get a checkout at heavier weights on a grass runway if possible. You will be surprised at the increased takeoff distance required when heavy; and when landing heavy on pavement, the rollout will be longer to get stopped.

Q: How can I help spread the word about general aviation? So many people know so little about our "little airplanes."

A: I have always urged people not to fly solo unless necessary. Sadly, many airplane owners never even think of how someone would really love a ride and depart solo with one to five empty seats. One of the best passengers you can take along is a reporter or photojournalist who may return the favor and provide general aviation with lots of good publicity. Maybe there is a kid hanging around at the airport who would love a ride, or a student just starting lessons, or a neighbor, or a local politician, police officer or fireman who would love to see their city from the air. The possibilities are endless. Go for it!

Q: I own an old (1972) Piper Arrow and a nearly new Sport Utility Vehicle (SUV). Each is worth about \$65,000. Why is the hull insurance so much higher for the airplane than the car?

A: A front-end smack to the SUV could cost perhaps \$15,000, but a front-end nose gear collapse or porpoising accident on the Arrow could cost \$50,000 by the time you replace a constant speed prop, fix front-end damage, and remove and test (and maybe overhaul) the engine. So, the chance of a more expensive fix for the airplane versus the SUV results in higher premiums for the airplane.

EDITOR'S NOTE: Pete Schoeninger 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. He welcomes questions and comments via email at PeterSchoeningerLLC@gmail.com (peterschoeningerllc.wordpress.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 others, and refer to aircraft owner manuals, manufacturer recommendations, the Federal Aviation Regulations, FAA Aeronautical Information Manual and instructional materials for guidance on aeronautical matters. □

Reno Air Racing Association Announces Commitment For 2021

RENO, NEV. – The Reno Air Racing Association (RARA) has announced that following the successful “Save The Races” fundraising campaign, the National Championship Air Races will be returning for its 57th year September 15–19, 2021 pending COVID-19 restrictions.

“After canceling the 2020 event, we found ourselves with a significant financial loss that we knew would be a tremendous challenge to overcome, but with the support of the air racing community, the RARA Board of Directors and STOL pilot, Trent Palmer, we were able to raise over \$460,000 of our \$500,000 goal,” said Fred Telling, CEO of RARA. “With the evolving health situation, we will continue to follow the guidelines set by officials and are optimistic that by September, we will have the resources needed to ensure the show is both safe to attend and can deliver on the exceptional experience the National Championship Air Races are known for.”

By nearly reaching the \$500,000 goal, RARA will be able to make adjustments and resume the planning process for the event while still moving forward with new fundraising opportunities to make up the difference.

“We are thrilled to bring the air races back to Reno and reunite our September family,” said Tony Logoteta, COO of

RARA. “While we still need to bridge the financial gap and have a lot of work ahead of us, it’s nice to have something to look forward to after such a difficult year. We are incredibly grateful for everyone’s support and are committed, as always, to putting on a spectacular event in 2021.”

As a non-profit organization, RARA relies on donations in addition to ticket sales, sponsorships and other direct income from the annual event and are asking for the community’s continued support. All donations are tax-deductible and can be made online at AirRace.org or by check and mailed to RARA, 14501 Mt. Anderson St., Reno, NV 89506.

Upcoming announcements for ticket sales, performers and more can be found on AirRace.org or on the Reno Air Races Facebook page.

The National Championship Air Races are held every September just north of Reno by the Reno Air Racing Association, a 501(c)(3). The event has become an institution for northern Nevada and aviation enthusiasts from around the world with seven racing classes, a large display of static aircraft and several military and civilian flight demonstrations. Independent economic impact studies show that the event generates as much as \$100 million annually for the local economy. □

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The fear factor... Public perceptions about safety are our business

by Mark Baker
AOPA President & CEO

Pre-Coronavirus, global air travel was at an all-time high. Between 8,000 and 20,000 aircraft could be flying at any given moment. In the United States alone, some 2.7 million passengers passed in and out of our nation's airports every day before the pandemic. Most of us routinely boarded commercial flights, traveled for business, or piloted our own aircraft without blinking an eye. But, for some Americans *aviophobia*—the fear of flying—is a reality (nobody reading this, of course). And that's before the global pandemic added to our general fears.



Mark Baker

Despite commercial aviation being the safest mode of transportation, anxious fliers make up nearly one in three people. But the chances of being in a fatal airplane crash are extremely low—roughly 1 in 5 million, according to reports from such outlets as *The Economist*. Automobiles, lightning strikes, bee stings, and—as we've learned lately—even viruses can be much deadlier than air travel. Even so, many people are plagued by anxiety when it comes to flight, likely propelled by over-sensationalized pop culture.

Because aviation accidents are so rare, they tend to be spotlighted in the media, although not always accurately. In the world of the 24-hour news cycle, ratings-hungry reporters are eager to get the story quickly. Unfortunately, aviation is complex, making it a target for mischaracterization by those who just don't understand everything that's in play. I've seen countless correspondents and aviation "experts" on national news networks delivering exaggerated or misleading information—from comical to downright bizarre. And, sometimes troubling.

For example, a crash involving a student pilot was accompanied by a photo of a downed commercial airliner. Either training aircraft have evolved since I learned to fly, or the media is baiting its audience with a disregard for the facts. All too often, reporters are shocked at the age of an aircraft

involved in a mishap, though the majority of our GA fleet is roughly 40 to 50 years old, and still equipped with required top-notch safety equipment. Another common misconception is that a "stalled" aircraft will just fall out of the sky like a rock. Even nonevents, such as crosswind landings or diversions because of mechanical or onboard medical issues, make headlines with words like "emergency" or "miraculous."

Crashes involving high-profile celebrities usually amplify public perceptions about safety. The helicopter tragedy in January 2020 that killed nine, including basketball great Kobe Bryant, was the lead story for weeks. With that coverage came speculation fueled by emotion, which left many with questions about GA. Such incidents can provoke knee-jerk reactions from legislators and public figures, calling for more regulation on an otherwise safety-conscious industry. In extreme cases, crashes at local airports may incite city leaders to even call for their closure.

Aviation is one of the most regulated industries in the United States. Safety is embedded in our culture. Since 1994, the fatal accident rate for GA has fallen more than 50 percent. Technological advances, pilots consuming more safety materials, and increased flying hours all have contributed to these record safety levels.

Still, skeptics remain unconvinced, and probably always will. Much of that has to do with the alarmism cascading from our news networks and social media in the aftermath of incidents. But there are things we can do as an aviation community and within the industry to address the stigma.

We can do better individually. As we've all seen, sometimes the go/no-go decision is the difference between life and death.



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We should strive to consume as much safety material as possible and learn from tragedy. AOPA's Air Safety Institute has numerous award-winning safety resources including podcasts, online courses, quizzes, videos, and in-person seminars.

We can also study the numbers. The release of ASI's latest *Joseph T. Nall Report* brings positive news to the GA industry with data showing that 2017 saw a decrease in total accidents from 2016. While 2018 saw a slight increase in total accidents, it's important to note that the overall and fatal

accident rates continued downward trends. ASI has completed a major overhaul of the report to provide near-real-time accident data analysis as the data are updated on a rolling 30-day cycle.

Let's focus on what we can do to better improve safety records for general aviation and tune out the rest. When the next big air tragedy strikes, I won't hold my breath waiting for the media to accurately gather the facts—because, as we know, sensationalism sells. □

Aviation Groups Seek Halt To FCC Spectrum Auction

AOPA and 14 other aviation associations, urged the Federal Communications Commission (FCC) to suspend a December 8, 2020 auction of spectrum in the 3.7–3.98 GHz band based on a study that found that some telecommunication services pose a “major risk” of interference with aircraft radar altimeter operations.

The chair of the House Committee on Transportation and Infrastructure, Rep. Peter DeFazio (D-Oregon), also called on the FCC to postpone the auction, citing aviation's concerns. Despite the strong opposition from key leaders in Congress and the aviation industry, the FCC announced December 8 that it had “kicked off” the auction as scheduled.

In a December 7 letter to the FCC, the aviation groups cited a study conducted by the technical standards organization RTCA that “revealed a major risk that 5G telecommunications systems in the 3.7–3.98 GHz band will cause harmful interference to radar altimeters on all types of civil aircraft—including large commercial transport airplanes;

business, regional, and general aviation airplanes; and both transport and general aviation helicopters.”

An FCC licensee that gains access to the spectrum through the auction “may provide any services permitted under terrestrial fixed or mobile allocations” under FCC rules, according to an auction summary on the FCC's website.

In a separate submission to the FCC, the aviation industry offered a variety of potential mitigations to protect radar altimeters from interference from new 5G systems.

Future radar-altimeter technology might complement or supersede some recommended mitigations, they noted—and one way to accelerate deployment of radar altimeters designed to be tolerant of nearby 5G transmissions “would be for the 5G community, as new entrants to the band, to reimburse the affected manufacturers and flight operators in replacing their current radar altimeter systems, once new authorized equipment becomes available.” Specifics, however, were “beyond the scope of this filing.” □

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Recapping COVID-19 2020



by Kyle Lewis
Regional Manager

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

It is nearly mid-December 2020 as I compose this column, and I am sure by the time you read this, the legislative season will be in full swing for 2021. 2020 was a bust for nearly anything significant pertaining to aviation-related causes in the eight (8) states across the Great Lakes Region. Early in 2020, a few bills were positioned to become successful, but COVID-19 became the main concern of statehouses. In many instances, budgets were trimmed to make up for tax revenue losses.

In Ohio, the direct grant program administered by the Ohio Department of Transportation (DOT), Office of Aviation, was put on pause and many of the awarded projects were pushed into 2021. There are similar stories across other states, and I can attest that staff at DOT offices across the region were put in a position to make financially sound decisions, even looking for ways to trim an already thin budget. The new and untested waters of working from home, or a mixed schedule of office and home, became very normal in 2020 for most state offices.

This presented new challenges for state staff as they still had

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to carry out airport inspection programs, known as “5010 inspections.” Depending on the size of the airport, these inspections can take a few hours or even a few days. These inspections occur every three (3) years for a specific airport, and most states have staff on hand qualified to make the inspections. These inspections are very important, as they can shed light on issues to be dealt with like obstructions, lighting problems, pavement quality, operational stats, based aircraft, and services offered by the airport. The data is part of the airport master record that is used by the FAA for planning and funding purposes. If you get a chance to interact with your state DOT staff, they deserve a pat on the back for keeping up with the demanding inspection schedule, and literally being on the front lines of promoting aviation and keeping airports safe in your state.

Aside from the usual business of DOT functions, the CARES Act presented itself with financial relief to employers, small business, large business, and aviation was not left out. General Aviation and commercial service airports were apportioned an amount of relief dollars, based on FAA NPIAS (National Plan of Integrated Airport Systems) categories. Airports worked directly with state DOT offices and FAA District Offices to ensure that the flow of this emergency funding was put to good use. The money was used for payroll, utilities, bulk fuel purchases, debt services, small projects, and maintenance items.

The amount of CARES funding ranged from \$1,000 to millions of dollars based on an airport’s NPIAS designation. The CARES Act monies are still being disbursed. It was a lightning round of communication from the FAA to airport sponsors and many questions were answered. AOPA was available to help answer questions and provide feedback to the FAA on how the funding process was being received.

In conversations with airport managers early in the pandemic, the crunch was felt as business aircraft operations slowed or stopped altogether. Obviously, commercial service airports have taken a big hit with airline service operations nearing all-time lows. On a brighter note, indications of light GA ops tapered at the onset of COVID-19, but as the year progressed, operations remained steady and increased in

certain markets.

As an example, Flying Cloud Municipal Airport (KFCM) operations in the Twin Cities outpaced Minneapolis/St. Paul International Airport (KMSP) operations for several months in the early spring and summer!

Another group of individuals that deserves credit are AOPA’s Airport Support Network (ASN) volunteers. I have mentioned this program before in this column, but I want to take the opportunity to make sure you know what a positive influence these folks can have at the local level. When the COVID-19 restrictions began to roll out across the country, it was a concern that airport sponsors would try and restrict operations. The FAA felt it was necessary to remind airport sponsors (i.e. municipalities) that a federally obligated airport (an airport that has taken federal grant dollars) could not close or restrict operations based on specific aeronautical users. The FAA published a policy memo on March 16, 2020 reaffirming that any closure of a grant obligated public-use airport was not authorized unless approval was granted under Grant Assurance #19, which states that airport sponsors will not cause or permit any activity or action that would interfere with its use as an airport. The AOPA Airport Support Network was key in getting quick and accurate information as to the status of airports across the country. Thanks to our volunteers, AOPA was able to contact and educate the airport sponsors that attempted to close or restrict operations (yes, there were a few). In some cases, FAA offices investigated the restrictions being considered.

In 2020, AOPA was able to recruit well over 250 new volunteers into the ASN program. The Great Lakes Region welcomed 82 new volunteers in the last year. The ranks nationally are approaching 2,000 volunteers and we are still recruiting.

AOPA has enhanced the materials available for ASN volunteers online, rolled out a new training course for volunteers, and monthly webinars are planned for 2021 on a variety of airport advocacy topics. If you are interested in the program and are looking for a way to become involved at your local airport, visit aopa.org/asn for more information.

It is a privilege to serve you! (kyle.lewis@aopa.org) □



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Illinois Aviation Newsletter Goes Digital

SPRINGFIELD, ILL. – Every quarter, the Illinois Division of Aeronautics has printed and mailed over 8,000 copies of its newsletter to professional aviation supporters across the state. Division officials feel that in today’s environment, they can provide much more useful content and detailed information by moving to an all-digital format and urge readers to go to ilaviation.com/safety to update their email address. □



Leaving Kalispell

always, the objectives were to enjoy the area from the air and visit some cool airports.

From Kalispell, we flew over Ashley Lake. Why? Because the water is as clear and beautiful as that of the Bahamas. While it does not look like much from the distance, its beauty really shows from above. So much that my husband, Jared, also saw the lake from his commercial flight when he was coming back from a work trip. So, we decided to visit it via ground as well.

And from one lake to another... from Ashley to Little Bitterroot before landing at Cabin Creek (97MT), the most challenging airport we found because of its interesting approach (considering we had to stick with paved runways per the rental aircraft's rules). 97MT is a privately-owned, private-use airport, but thanks to my companion, Logan Hutchin, we were able to touch down.



Approaching 97MT's Runway 20.

Since the airstrip doesn't have weather on the field, I opted for flying over to see what the windsock was indicating. This also gave me an opportunity to check out the terrain around it. Since it's a Prior Permission Required (PPR) airport, they do not have to follow FAA design standards and, in fact, I could not see the Runway 20 markings until I was almost over them. There is a hill with a house directly under final approach, so I flew left of the centerline until I was passed it, before coming in for a full-stop landing. Because the wind was fairly light, I chose to takeoff in the opposite direction, avoiding the same house again.



From Kalispell, we flew over Ashley Lake. Why? Because its water is as clear and beautiful as that of the Bahamas. While it does not look like much from a distance, its beauty really shows from above. So much so that my husband, Jared, also saw the lake from his commercial flight when he was coming back from a work trip. So, we decided to visit it via ground as well.

The takeoff put us over the highway. I followed it to McGregor Lake and Thompson Lakes and, from there, to Libby (S59). The flight to Libby was very enjoyable and the airport was nice, but there wasn't anything extremely special about it.

Troy (57S) was the next airport to visit and what a beautiful setting it is in! I basically followed the road, railroad track, and river to reach it.

We checked out Lake Koocanusa on our return leg. Its name comes from the damming of the Kootenay River (Koo) and the fact that it crosses the Canada/United States border.

Although Montana is known for its "Big Sky," it could also be known for its "Friendly Sky." Go visit Montana!

For more information about flying around northwest Montana, visit www.airtrails.weebly.com. Fly safe and fly often!

EDITOR'S NOTE: Yasmina Platt has been with the international airport planning and development consulting firm AECOM since 2016. She also writes an aviation travel blog called "Air Trails" (www.airtrails.weebly.com), 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 her name in the search box. □

Flight MH 370 – One More Great “Unsolved Mystery!”



by Allen Penticoff

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I wanted to comment on the article entitled “*Miracle Over Minnesota... Survival After Carbon Monoxide Poisoning*” by Dan Bass, published in the Oct/Nov 2020 issue of *Midwest Flyer Magazine*.

Related to Dan’s accident, I have a theory on what may have happened to Malaysia Airlines Flight 370 (MH 370), when it disappeared on March 8, 2014.

If you recall, the Boeing 777-200 ER disappeared en route from Kuala Lumpur International Airport to Beijing Capital International Airport. Several pieces of debris from the aircraft were found on the African coast and on Indian Ocean islands more than a year later, but the main portion of the aircraft is still missing, and the exact cause of its disappearance is unknown. A total of 227 passengers and 12 crew members were on board.

As a former aircraft insurance adjuster for 19 years, I have investigated other accidents like Dan’s in which the aircraft flew itself to the ground/water and people walked/swam away. Dan was fortunate that the gear on his Mooney M20C Ranger was retracted. Otherwise, had the gear been down, his



Allen Penticoff

aircraft would have more than likely flipped over and he could have been severely injured or killed.

First, I think that after more than six years since Flight 370 went missing, we can rule out some possible causes:

1) Terrorists. If the aircraft had been hijacked, there would be a demand or statement by now by the terrorist organization. There is no point in waiting to state your grievance. Terrorists would have destroyed the aircraft shortly after taking it over, which is much more difficult to do in the wake of 9/11.

2) Mentally Disturbed Pilot. Like the terrorists, what's the point of waiting. Technical data transmitted by the aircraft to maintenance computers via satellite indicates the aircraft flew for about seven hours – until fuel exhaustion.

3) Loss of cabin pressure. While certainly capable of incapacitating the crew, it is hardly an unnoticeable occurrence. There are plenty of warnings to the pilots, and the cure is an immediate descent to below 10,000 feet above sea level where there is plenty of oxygen. Even below 15,000 feet, there is plenty of oxygen for the crew to function essentially normal. Such a deviation would have been reported by the pilots using their mandatory oxygen masks (more on this forthcoming).

4) Nose wheel tire fire. The fly in the ointment of the (online) theory that the tire on the nose wheel caught fire on takeoff, and the fumes overcame the pilots, has two problems. One, it was quite some time after takeoff that the “turn” off course occurred. Two, neither pilot radioed a problem and that they were diverting (a burning tire has a rather distinctive, pungent smell and would be an immediate cause for concern, but it may have taken awhile before the pilots would have smelled it. Additionally, both pilots have quick donning oxygen masks, and would have donned their masks if they smelled anything funny. Was there a simple problem with the pilots' emergency oxygen system? We will likely never know.

But there is a gas that can incapacitate pilots and everyone else aboard an aircraft without anyone being aware of it – carbon monoxide (CO). I am not able to tell you exactly how this could happen, or why the source of the CO would also not generate some detectable smell.

Airliner cabins are pressurized with “bleed air” from the engines. Normally this has nothing to do with the exhaust of the jet engines, since the air being compressed is derived well ahead of where combustion of kerosene takes place in the engine. But, in some way, perhaps due to faulty maintenance (or malice), odorless carbon monoxide could be introduced into the cabin air. The pilots notice there is some problem. Not sure of what it is, they turn for a nearby suitable airport (the turn observed on radar), but are growing steadily groggy and incoherent. The pilots are now oxygen deprived, thus the transponder is turned off, instead of to the emergency code 7700, and other strange statements are made and happenings occur. Normally an airline pilot would report to air traffic control any turn or deviation, so why such a sharp turn and no report, is truly a mystery.

Modern airliners, such as the Boeing 777, are not intended to be flown by hand. They are flown by electronics and the autopilot.

There are five electrical systems on the 777. As long as the engines are running, and power is being generated (which appears to be the case), they fly just fine without any human input. In fact, airplanes in general fly just fine without any human input. They are designed to be stable. Flying is a matter of making small corrections to that stability, unless the pilot is flying in combat or performing aerobatics.

If the pilots had set a new compass heading into the autopilot (a likely case if they were diverting and did not yet have the destination airport programmed into the flight computer) – and they passed out shortly thereafter – the aircraft would continue on its heading and altitude until it ran out of fuel.

Most airliners are flown with enough fuel to complete their flight and have a more-than-adequate supply on reserve, but they generally do not carry full tanks, as keeping all that extra fuel in the air is a waste of speed, power, lifting capacity and money. All indications and preflight records indicate that the aircraft could stay in the air for seven hours and it did.

When outside of the continental United States and Europe, there is not much radar coverage. For instance, a flight to Hawaii is well out of radar range. Pilots make radio position reports to let controllers know where they are until they reappear on someone else's radar screen. There isn't much radar coverage where Flight MH 370 turned off course or anywhere else it went after that. Radar coverage is expensive... most governments can't afford the excellent system we have in the U.S., or simply don't have enough territory for it to be effective beyond their borders. So, once the transponder is turned off, aircraft all but disappear from radar, even in areas where there is good coverage.

Modern airliners transmit performance data to computers at maintenance support locations. This raw data helps airlines with many maintenance issues. This is the system that detected Flight MH 370 in the Indian Ocean – a job it was not designed for. Using signal times, and satellite location, they developed an arc across the (mostly uncharted bottom) Indian Ocean to where the signal from the ill-fated plane could have been. If, as mentioned earlier, the aircraft was on a set heading with the autopilot, the aircraft would have tried to fly a straight line but would have easily been blown in many directions by the very strong winds at high altitude over the course of seven hours. It was, unfortunately, a very long arc over a very deep ocean.

The aircraft was equipped with an “emergency locator transmitter” (ELT). ELTs are set off on impact and will transmit an aircraft's location to satellites. But the part of the world where Flight MH 370 was flying does not have many of these satellites, and the aircraft may have gone down before such a satellite passed over. Or, there was not enough impact to set off the ELT.

I have personally investigated aircraft accidents where the aircraft was flown into the water at fairly high speed, did not break up, and sank intact. This is actually more common than not. The oceans and our Great Lakes are littered with aircraft that landed on the water and sank – intact – without releasing any debris. Even a large aircraft, such as the Boeing 777, will land on water with minimal impact and sink. Remember, the “Miracle on the Hudson” was made possible because it happened in the middle of a metropolis, on flat water, surrounded by people with boats. The airplane eventually sank, intact. It is even possible the same scenario played out in the Indian Ocean, with no rescue boats nearby.

My theory of what happened to Flight MH 370.

On autopilot, having only recently run out of engine electrical generation and now operating on powerful batteries for a short time, the airplane, stable on the “assigned heading,” descended from the altitude where it ran out of fuel in a gentle glide with all aboard already asleep/dead due to carbon monoxide poisoning. In a flat glide (the autopilot would be trying to maintain altitude, but can't due to a lack of power, but it won't “stall,” because it is programmed to

avoid too low of an airspeed), so it slowly impacts the ocean and floats for a bit, then sinks, intact. Since it descends to the depths rather rapidly, it is not affected much by the ocean's currents or wind/waves on the surface.

The southern Indian Ocean is one of the most inhospitable and remote places on Earth. The water is three miles deep. The pinger on the "black box" is not designed to travel through this much water. It is designed to help find the box in an already "identified" location. Even sophisticated military sonar cannot pick up such signals through the deep water (and "inversions"). At one time, I thought some of our fast attack submarines could find this "ping," but apparently not so, and the U.S. Navy would not rightly tell us one way or another. Although it does seem rather odd that we cannot find something trying to tell us where it is, when our Navy is perfectly capable of finding submarines trying to hide from us. Apparently, pinger batteries were not installed.

With this and similar recent incidents (Air France), one must wonder why the ELT has not been mandated to float free of a sinking aircraft (as some yachts are) to mark its location, or that of survivors. If your yacht sinks, you take your marine ELT called an EPIRB with you to help search satellites and aircraft find you quickly.

Even had the ping been located, there is no guarantee they would have ever found this airplane. Only a handful of vessels can go this deep into the dark (as in no light at all) ocean. And even if they could find it among the crags of uncharted, undersea plateaus and mountains, it may prove impossible to wrest the elusive "cockpit voice recorder" from the downed aircraft in a hostile deep ocean. Even if they could, the recording is on a loop and starts over long before this flight ended. So essentially, they would have an orange box with no answers to what happened in the cockpit.

I believe Flight MH 370 will go down in history as one more great "unsolved mystery!"

EDITOR'S NOTE: This article is based on an article Allen Penticoff wrote for the "Mr. Green Car" column in The Rock River Times of Rockford, Illinois, and published on April 8, 2014 – exactly one month after the disappearance of Flight MH 370.

Interested in flying since the age of 6, Allen Penticoff got his Private Pilot Certificate at age 17 in 1971. Today, he has 5,500 hours of flight time, and holds a Commercial Pilot Certificate, Single-Engine Land and Sea, Multi-Engine Land-Instrument, and an Airframe & Powerplant Mechanics Certificate. Over his career, he has been a helicopter crew chief in the U.S. Army, an aircraft mechanic and an aircraft insurance adjuster. He and his wife, Ruth, live in New Milford, Illinois, near Rockford, and base their Cessna 150 at Albertus Airport (KFEP), Freeport, Illinois. He is a member of EAA Chapter 431 in Brodhead, Wisconsin (C37).

DISCLAIMER: The information contained in this article is the expressed opinion of the author only, and in no way intended to place blame on anyone, or any organization or entity. Readers interested in this topic are urged to do their own research and come to their own conclusions. □



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Major Commercial Airport Contends With Pandemic



Minneapolis-St. Paul International Airport (KMSP)

MAC Photo

by Dave Weiman

MINNEAPOLIS-ST. PAUL, MINN. – How does a major commercial airport contend with a pandemic that has all but shut down operations? Answer: Cut any non-essential expenses; temporarily close any non-essential terminal concourses; rely on government bailout money to cover debt service; and invest in infrastructure which will best fight the virus and improve operations at a time when there is less congestion. That’s at Minneapolis-St Paul International Airport (KMSP). As for its six (6) reliever airports, airport improvement projects have continued as well, and overall traffic has actually increased in recent months.

Leading this positive response to the pandemic has been Brian Ryks, 57, Executive Director of the Metropolitan Airports Commission (MAC). Ryks replaced longtime executive director Jeff Hamiel in 2016, who served MAC for 39 years.

Brian Ryks was born in Lakeville, Minnesota, and received a Bachelor of Arts Degree in Criminal Justice Studies with a minor in Aviation at St. Cloud State University in 1990. He first worked at MAC as a noise and operations technician and went on to become a noise abatement manager at Stapleton and Denver International Airports in Colorado (1990-95). He became the manager of Aberdeen Regional Airport in South Dakota (1995-97); and St. Cloud Regional Airport



Brian Ryks

MAC Photo

in Minnesota (1997-2002). In 2002, he was named executive director of the Duluth Airport Authority in Minnesota (2002-12), then executive director and chief executive officer at Gerald R. Ford International Airport in Grand Rapids, Mich. in 2012.

Ryks is an instrument-rated private pilot, which enhances his understanding of the system, and the importance of reliever airports.

KMSP is normally the 16th busiest airport in the United States in terms of passenger traffic, the 13th busiest airport for aircraft operations, and has generated nearly \$16 billion in annual

economic activity in the Twin Cities. The airport supports more than 76,000 area jobs.

“I thought the speedbump in my career would have been 911, but the pandemic has been so much deeper,” says Ryks. “I mean we had the great recession when we saw airlines struggling, but we’ve never seen anything like this.

“We started the year (2020) off with a 6.5% increase in passengers in January and up 9% in February, and that was coming off our all-time high in 2019 with 39.5 million passengers. So, we were expecting to set another record this year.

“In doing joint presentations with Jeff Davidman of Delta at various events, we described how the Highway 5 project



Passengers exercising social distancing and wearing masks at the Delta Airlines ticket counter at Minneapolis-St. Paul International Airport. *MAC Photo*

would impact travelers, TSA staffing, etc., and then things started dropping. In April, we had an all-time low with passengers going through TSA checkpoints, down 95% from 2019 levels. It's been unbelievable, with the airline industry slated to lose \$23 billion in 2020.

“When it comes to bond issues, lenders test us pretty hard. You can support a bond with a 20% decrease in passengers, and we didn't think it would get to that, and that was in early March. But I had to tell our board that we were faced with a 60% decrease in activity from 2019.

“So, a tough year. When we got into it, we had to look at our capital improvement and operating budgets, cut wherever we could cut. We still needed to maintain the asset and remain in compliance from an FAA standpoint...we have to move snow and do all of that stuff, but we don't necessarily have to have all of the terminal concourses open, based on the reduction of activity.

“That's how we went about things. We took about 10-11% in expenditures out of our operating budget of \$213 million. Our revenues were projected at \$409 million, and that will be down \$194 million, which is just unbelievable.

“We were fortunate early on to get in on some Cares Act funding – the \$10 billion that airports got. Our share of that for KMSP and our six reliever airports was about \$125 million, which we are using to pay our debt service. We are also working with the airlines and concessionaires to defer some of their costs, and that's been a long process to put those measures in place.

“We have about 125 food and retail businesses at KMSP. During the deepest part of this past year, there were only approximately 25 businesses even open. As of the end of 2020, we were back to only half of our businesses operating, but most with limited hours.

“We are looking at finishing 2020 at about 60 percent below our 2019 passenger levels. Our projections for 2021 are 30 to 35 percent below our 2019 levels, all dependent on how quickly travel returns.

“Most of the travel has been leisure... not much business travel. It will take longer to get some of our international travel back, especially to Europe and Asia.

“The important thing we did early on was to keep our employees safe, partner employees safe, and our passengers safe, from wearing masks to our award-winning sanitization efforts, including using electrostatic equipment and shields, providing passengers with prebooked parking online which is a no-touch system, and putting together a preparedness plan and travel guide.

“While we cut \$125 million out of our capital improvement program, we actually sped up some of our projects that did not require a federal match, so we could work on them



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AT OUR AIRPORTS

while activity was down. One example of that was work on our inbound roadway. We were able to shut down all but one lane. Another project underway is to add 100,000 square feet to our terminal, so we will be able to accommodate up to 55 million passengers a year. We also need this extra space right now for social distancing. Delta also wants to create another Sky Club, so we are continuing that project, since we are not using that space right now.

“At MAC’s six reliever airports – Airlake (KLVN) in Lakeville, Anoka County-Blaine (KANE), Crystal (KMIC), Flying Cloud (KFCM) in Eden Prairie, Lake Elmo (21D), and St. Paul Downtown (KSTP) – traffic has been pretty good with the exception of St. Paul Downtown Airport which has been down because of a decrease in business jet activity. The traffic at the other five reliever airports has been up as a result of increased flight training, low fuel prices, and people having more free time! At Flying Cloud and Anoka, both flight training and corporate activity has been strong, with more than 22,000 operations combined during July, the busiest month for MAC reliever airports.

At Crystal, a runway extension was underway before the

pandemic hit. The parallel runways, 14/32 L/R, were reduced to one runway, and that runway was extended from 3267 to 3750 feet, and the length of the turf crosswind runway, 06/24, was reduced from 2123 to 1669 feet. Parallel Runway 06/24 is paved and remains unchanged at 2500 feet.

Phase 2 of the Lake Elmo project that got underway in late 2019 has likewise continued. That project involves relocating and extending Runway 14/32 from 2849 to 3500 feet; realigning 30th Street North around the relocated runway protection zone and reconnecting it to the existing intersection with Neal Avenue; reconstructing and extending the crosswind runway, 4/22, from 2496 to 2750 feet, and numerous other projects.

At Airlake, there’s a major hangar development project on the south side of the airport to meet a growing demand.

Ryks said that the commission created a Strategy and Engagement Department to do outreach with its relievers and other stakeholders, and has utilized video conferencing to keep everyone informed and engaged.

For additional information, visit www.metroairports.org. □

OMNNI Associates Completes Transition To Westwood

MINNEAPOLIS, MINN. – Westwood Professional Services, Inc. (Westwood) acquired OMNNI Associates (OMNNI) in June of 2019 and has since been operating as OMNNI Associates, a Westwood company. Beginning January 4, 2021, OMNNI completely transitioned to the Westwood brand. Led by Phil Ramlet, PE, the team will continue to serve their clients in Appleton, Wisconsin, providing civil engineering, architectural, surveying, and environmental services to the public sector.

“Westwood’s clients have benefited from the enhanced services of our combined team, and our people have gained unique project experience. We look forward to completing this final stage of integration into Westwood and the ongoing opportunities to come,” says Ramlet.

The team’s Appleton office address and contact information will remain the same.

Westwood Professional Services, Inc. is a multi-disciplined national surveying and engineering services provider for private development, public infrastructure, wind energy, solar energy, energy storage, and electric transmission projects. Westwood was established in 1972 in Minneapolis,



Phil Ramlet

Minnesota and has grown to serve clients across the nation from multiple U.S. offices.

In 2020, Westwood placed #4 and #9 respectively on Zweig Group’s national Hot Firms’ and Best Firms to Work For lists. Westwood also ranked consistently higher three years in a row on the Engineering News Record (ENR) list as a leading design firm in the country. The firm consistently ranks on industry top 25 lists and receives recognition for its involvement on award-winning projects nationwide. □



New U.S. Customs & Border Protection Facility Being Built At Chicago Executive Airport

PROSPECT HEIGHTS & WHEELING, ILL. – The Chicago Executive Airport (CEA) board of directors and staff held a groundbreaking ceremony November 19, 2020, for the construction of a new 3,400 square foot facility for U. S. Customs and Border Protection (CBP). The \$3 million building will serve as a modern, standalone facility for customs officers to clear incoming aircraft and passengers. Located at the south end of the airfield, the facility will be built on the for-mer site of Hangar 4 which was demolished earlier this year. A new apron is planned for the airside and a new parking lot for the landside. The facility is scheduled to open late-summer 2021.

The construction of the facility demonstrates the airport's ongoing investment in infrastructure which supports Chicago Executive's almost \$400 Million annual economic impact on the Village of Wheeling, the City of Prospect Heights, and the entire community.

U.S. Customs and Border Protection is the largest federal law enforcement agency of the U.S. Department of Homeland Security (DHS) and is the country's primary border control organization. CBP currently clears international passengers from Hangar 41.



Groundbreaking ceremony November 19, 2020 for the construction of a new 3,400 square foot facility for U. S. Customs and Border Protection (CBP) at Chicago Executive Airport. (Front Row): Airport Director Ray Lang, President Pat Horcher (Village of Wheeling), Mayor Nick Helmer (City of Prospect Heights), Airport Board Chairman Court Harris, Airport Director Scott Saewert. (Back Row): Airport Director William Kearns, Airport Director Steve Berman, Airport Director James Kiefer, Airport Director Bill Hellyer, Airport Executive Director Jamie Abbott, and Airport Director of Econ Development George Sakas

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

Muncie Aviation Company Announces The Acquisition of Des Moines Flying Service

MUNCIE, INDIANA – Muncie Aviation Company (MAC) has announced the acquisition of Des Moines Flying Service (DMFS), a step that merges two of the longest-standing business and general aviation sales and service centers in the world.

The transaction was completed on January 1st, 2021. BCC Advisers of Des Moines assisted with this transaction.

Established in 1939 by Howard Gregory, DMFS has evolved into one of the largest general aviation sales and service outlets worldwide. DMFS is an Authorized HondaJet Dealer, and notably has been an Authorized Piper Aircraft Dealer for over 75 years. Collectively DMFS has sold and supported thousands of new and used aircraft to customers all around the globe.

As the longest-ranking Piper dealer in the world, Muncie Aviation Company will be further bolstering its sales and service capabilities with the acquisition of Des Moines Flying Service. The two companies working as one will solidify their legacies for years to come.

Muncie Aviation leadership will fill the executive DMFS

roles, with Steve Thompson acting as President and Martin Ingram as Chairman.

“We would like to thank Don Jay and John Lowe of Des Moines Flying Services for making this win-win acquisition possible. We look forward to taking our common values and business drives and expanding on DMFS’s already considerable abilities,” said Steve Thompson. “The DMFS team has much to be proud of, and my teammates and I look forward to working with them as partners.”

About Muncie Aviation

Founded in 1932 by the Ball Brothers, Muncie Aviation has earned an industry-wide reputation as a leader in aircraft sales, service and avionics maintenance and upgrades. After 73 years of ownership, the Ball family sold the company to its employees in 2004, and the company became, and remains today, an ESOP (Employee Stock Ownership Plan) company.

Muncie Aviation is currently an authorized aircraft sales dealer for two aircraft manufacturers: Daher (TBM) and Piper Aircraft. □

Life Flight Network Gets 70-Foot Bifold Door For New Emergency Response Hangar

FAIRFAX, MINN. – Using state-of-the-art aircraft operated by highly skilled medical and aviation professionals, Life Flight Network (LFN) provides life-saving transport to seriously ill or injured patients from the scene of an emergency or from one hospital to another.

LFN is the nation’s largest not-for-profit air medical service and has provided residents across the Northwest and Intermountain West with the finest air medical transport for nearly four decades.

LFN operates a fleet of 19 Agusta Westland AW 119Kx “Koala” helicopters, with one based at the ever-expanding Lewiston-Nez Perce County Regional Airport in Lewiston, Idaho. The Koala reaches speeds of 175 mph and comes equipped with a state-of-the-art Garmin G-1000H cockpit, night vision goggle capability, satellite weather, synthetic vision and the capacity to transport two patients with unencumbered full-body access.

Mark Hewett General Contractor Company of Clarkston, Wash., was given the bid to construct a new 108-foot by 85-foot hangar to house two aircraft – a helicopter and a fixed-wing turbine aircraft. Within the hangar is a 26-foot by 85-foot dedicated crew quarters. Life Flight Network personnel man the hangar 24 hours a day with pilots and

emergency medical staff. Clarkston is a border city, just across the Snake River west of Lewiston.

“We had a base there for about five years, but we leased space and never really had our own dedicated hangar,” says Justin Dillingham, Chief Customer Officer for Light Flight. “This project is something we’ve been working on for a couple years now and finally completed it. Now we have a beautiful new hangar with crew quarters for all our flight crew and local administrative staff.

“We average 300-400 emergency flights a year, or about one a day,” Dillingham says. “We have a goal of a helicopter getting off the ground in 8 minutes from the time we receive a call. Fixed-wing flights take a little longer because they have to file flight plans, but we try to be off the ground in less than 20 minutes. During inclement weather, the helicopter and plane are stored inside the hangar.”

The inside of the hangar is similar to a fire station where firefighters reside during their shift. It has sleep rooms, TV lounge area, restrooms, showers, a kitchen, maintenance tool area and an office. Portions of these crews alternate staying in the living quarters 24/7.

Attached to the hangar is a Schweiss Doors 70-foot by 17-foot bifold liftstrap door. The custom-made door is equipped



The Life Flight “Koala” helicopter stands ready at the landing pad at Lewiston-Nez Perce County Regional Airport in Lewiston, Idaho. Behind it is the new 108-foot by 85-foot hangar that sports a Schweiss Doors 70-foot by 17-foot bifold liftstrap door.



The Life Flight liftstrap door is well insulated. Inside the hangar are 24/7 crew quarters for flight crews and administrative staff.



The Schweiss bifold 70-foot by 17-foot liftstrap door is equipped with autolatches and is wind-rated at 120 mph.



The bifold hangar door is mostly kept closed. Aircraft are usually kept outside during good weather for faster response times which average about one a day.

with autolatches and was framed for four 4-foot square windows which allow a considerable amount of natural light into the hangar. It is also wind-rated at 120 mph. The well-insulated door was clad with 26-gauge metal sheeting.

“The bifold door works great,” Dillingham says. “It’s heavy-duty and easy to operate. A small amount of education is required so staff know not to leave it open during windy days, but the door is exactly what we needed. We had windows installed to let light into the building and make sure the area outside is free from obstructions. It works great for us.”

Chance Chacon, Senior Project Manager for Mark Hewett General Contractor Company, was in charge of ordering and coordinating the installation of the Schweiss bifold door. He

said his company is familiar with Schweiss Doors, as they have previously ordered and installed five other doors.

“In a nutshell, what I like best about Schweiss Doors is that they have it figured out. Schweiss knows how to build a bifold door and not trying to figure it out on the fly,” Chacon says. Just knowing in the end that we had good partners to work with makes a big difference to us.

“The install went well without any issues and we were pleased with how everything came together,” Chacon says.

Schweiss Doors is the premier manufacturer of hydraulic and bifold liftstrap doors. Doors are custom made to any size for any type of new or existing building. Schweiss also offers a cable-to-liftstrap conversion package. For more information, visit www.bifold.com. □

Avflight Breaks Ground On Ypsilanti Hangar & Office Complex

YPSILANTI, MICH. – Avflight Corporation has announced that ground has officially been broken for its hangar and office complex at Willow Run Airport (KYIP).

The development, adjacent to Avflight's FBO on the east side of the airport, includes a 41,745 square foot complex with two hangars totaling 30,000 square feet, more than 7,000 square feet of premier office space, and an indoor parking garage. The complex will be able to house corporate jets of any size. Avflight expects the project to be completed by mid-August 2021.

Avflight operates a network of strategically located, full-service FBOs across North America and Europe.



Avfuel & Neste Create Strategic Partnership For Sustainable Aviation Fuel

ANN ARBOR, MICH. – Effective January 11, 2021, Avfuel Corporation and Neste have formed a strategic partnership to create an efficient, continuous supply of sustainable aviation fuel (SAF) in the United States.

Neste will provide Avfuel with SAF in enough volume to be able to meet the growing demands of Avfuel's customers. Avfuel will be a branded SAF distributor for Neste and will sell it under the brand name Neste MY Sustainable Aviation Fuel™.

The partnership positions Avfuel as one of the first United States companies able to supply its customers with SAF on a continuous basis. Monterey Jet Center (KMRY) – an Avfuel-branded FBO in Monterey, Calif. – will be the first customer to receive a consistent supply of SAF. With the first delivery scheduled for the first quarter of 2021, Neste and Avfuel will work with Monterey Jet Center to ensure that the supply chain, from production through invoicing, functions smoothly before rolling the program out to a larger customer base.

“Avfuel is proud to partner with the Neste



team, who demonstrate a deep commitment to aviation and sustainability efforts for a brighter, cleaner world,” says Craig Sincock, President and CEO of Avfuel.

Neste has been at the vanguard of sustainable aviation fuel production for nearly a decade and the company expects to have the capacity to produce some 1.5 million tons (515 million gallons) of SAF annually by 2023.



Canada's Privatized System Facing Further Staffing Cuts & Safety Concerns

WASHINGTON, DC – NAV Canada, the Canadian privatized air traffic control system, is in the process of downsizing as a result of budget shortfalls, many of which have been exacerbated by the Covid-19 pandemic. This has already resulted in the elimination of hundreds of jobs, with more layoffs and potential air traffic control tower closures may be on the way. There is concern that once air traffic returns to normal that trained personnel will no longer be available to fill the vacancies.

NAV Canada has repeatedly been held up as a model that

should be emulated by privatization proponents in the U.S. in spite of the funding challenges that it and other foreign privatized systems have faced. By contrast, the U.S. system has remained stable and continues to be the largest, most complex and diverse system in the world in spite of enormous challenges posed by the global pandemic.

Nav Canada reported a net loss of \$584 million in FY2020, and a \$100 million net loss in FY2019, and has already eliminated 900 jobs, or 17.5 percent of its workforce. □

NASA ASRS Reports – Practical Considerations

Any situation that could affect safety in the National Airspace System (NAS), other than criminal activities and accidents, may be confidentially reported to the National Aeronautics and Space Administration (NASA) through the Aviation and Safety Reporting System (ASRS) program.

This program was implemented by the FAA after the investigation of an airline crash in 1974 revealed a lack of information sharing among various parties in the NAS. FAA Advisory Circular 00-46E explains the procedures for, and protections available from, ASRS.

While there are many reasons to file an ASRS report, pilots often file a report to avail themselves of the waiver of sanction in FAA enforcement cases. One of the requirements to be eligible for the waiver of sanction is that the report is filed

within 10 days from the date of the (possible) violation or the date when the person became aware or should have been aware of a (possible) violation. However, even though the waiver of imposition of sanction prevents the FAA's proposed penalty (for example, a certificate suspension) from taking effect, the finding of violation from the enforcement action will still go on the airman's record.

All information that might help identify persons filing ASRS reports and parties named within are deleted by NASA, and 14 CFR 91.25 prohibits the FAA from using ASRS reports in any enforcement action, except accidents or criminal actions.

EDITOR'S NOTE: The above information was obtained from a more in-depth article on the subject by Cristina Zambrana of AOPA. □

Pilot Makes Emergency Landing On I-35W In Twin Cities Metro

ARDEN HILLS, MINN. – The pilot of a Bellanca Viking made an emergency landing on I-35W at approximately 9:30 p.m. on December 2, 2020 in the Twin Cities suburb of Arden Hills, when the aircraft apparently experienced engine problems. There were no injuries reported, and the aircraft and one vehicle were damaged in the incident.

The pilot was Craig Gifford, 52, of Minneapolis. Gifford

holds a commercial pilot certificate, has 4500 hours of flight experience, and was a member of the U.S. Unlimited Aerobatic Team in 2017 and 2019. There was one passenger onboard the aircraft with Gifford.

The emergency landing was captured on a Minnesota Department of Transportation camera as seen here: <https://www.youtube.com/watch?v=-3fR04K-474> □

Minnesota Seaplane Pilots Association To Hold Annual Safety Seminar In September

The Minnesota Seaplane Pilots Association (MSPA) will hold its 2021 Safety Seminar, September 17-19, at Madden's on Gull Lake near Brainerd, Minnesota (<https://www.maddens.com/>). The fly-in seminar has traditionally been held in May, but with ever-changing

restrictions on gatherings and dining due to the pandemic, the MSPA board selected the fall date. The association's other big event of the year is its "pig roast" to be held August 8 at Surfside Seaplane Base in Lino Lakes, Minnesota. (<http://www.mnseaplanes.com/>) □

Amazing Flyer & Aircraft Restorer

William M. "Bill" Amundson

December 24, 1928 - December 21, 2020

On December 21, 2020, one of the nation's premier vintage aircraft restorers, William M. "Bill" Amundson of Stoughton, Wisconsin, died three days short of his 92nd birthday.

Bill Amundson was born in Stoughton on Christmas eve, and lived his entire adult life in the house where he grew up. As a boy, with brothers Art, Jr. and Dick, and sisters Gloria and Louise, Bill spent summers on Lake Kegonsa. His parents, Art, Sr. and Mabel, owned a dance hall and store on the south shore of the lake, where the family would live during the summer, and where the boys ran free, barefoot and shirtless. The site is now a state-owned park and boat landing known as "Amundson Landing."

Maybe it was Bill Amundson's love of water that encouraged him to join the U.S. Navy at the end of World War II. Following the service, he took advantage of the G.I. Bill and attended the University of Wisconsin, graduating with multiple degrees, including a Master of Business Administration (MBA). Bill then spent several years working at a fishing lodge on Lake of the Woods in Canada and used to joke that he was the only dock boy with an MBA. His fish camp experiences became stories he would tell the rest of his life.

Bill Amundson settled on a career in the insurance industry, but his passion was airplanes. He was an early member of the Stoughton Aviation Club, and would buy and restore damaged vintage aircraft, oftentimes biplanes. His skill was recognized with an EAA Grand Champion Award for a Piper Vagabond he and fellow club member, Dick Peterson, restored in 1976, but Bill was best known for flying his 1940 Waco with a 220 hp Continental engine, which he also restored.

The Waco project was featured in the July 1979 issue of *Wisconsin Flyer*, the predecessor to *Midwest Flyer Magazine*. The article states that the aircraft would be displayed at the EAA Fly-In in Oshkosh, Wisconsin that year and it was. Bill Amundson and Dick Peterson won a "runner-up" award for that aircraft, and it was definitely a showstopper! A photo of Bill and his Waco was featured on the cover of the November 1979 issue of *Wisconsin Flyer*, which remains an all-time favorite photo to this day.



William M. "Bill" Amundson featured on the cover of the November 1979 issue of *Wisconsin Flyer Magazine*.
Dave Weiman Photo

The old Amundson Auto Garage on East Main Street in Stoughton became the workshop and clearing house for airplane parts, including parts for a replica of the "Spirit of St. Louis" that was touring the country at the time. The aircraft was grounded in Madison, Wisconsin, and of course Bill had the parts to fix it. Bill Amundson's camper was a fixture at EAA AirVenture in Oshkosh, Wisconsin, parked beneath a Norwegian flag, surrounded by his extended aviation family.

Bill Amundson was a generous supporter of all things Stoughton. He is survived by his brother Richard (Dick), sister Louise Schmoll, and numerous nieces and nephews. He was preceded in death by his parents, and siblings Arthur, Jr. and Gloria Chadbourn. A memorial celebration at Matson Airport in Stoughton will be held once the country gets passed the pandemic.

Please share your memories of Bill Amundson at www.cressfuneralservice.com.

The First Pilot To Break The Sound Barrier, Chuck Yeager, Dies At 97

GRASS VALLEY, CALIF. – The first pilot to fly faster than the speed of sound, Chuck Yeager, died December 7, 2020 at the age of 97.

As a captain in the Air Force, Yeager broke the sound barrier on October 14, 1947 at the age 24 flying the Bell X-1 rocket plane beyond 660 mph. Yeager nicknamed the Bell X-1 – and all of his other aircraft – “Glamorous Glennis,” after his first wife, who died in 1990.



Chuck Yeager



Chuck Yeager became the second chairman of the EAA Young Eagles program in 1994, succeeding the late Cliff Robertson, pilot, aircraft owner, and actor. Yeager personally flew more than 250 Young Eagles during his time as chairman. He also flew the 1 millionth Young Eagle, Illinois resident Andrew Grant, pictured here with Yeager on an honorary flight in early 2004.

EAA Photo



Chuck Yeager with the Bell X-1 he named “Glamorous Glennis” in which he broke the sound barrier with on October 14, 1947. U.S. Air Force Photo

Yeager married Glennis Dickhouse of Oroville, California in 1945, and they had four children: Donald, Michael, Sharon and Susan. Yeager then married Victoria Scott D’Angelo in 2003.

Yeager grew up in the hills of West Virginia, and stayed active flying military aircraft, including the F-15 at nearly 1,000 mph at Edwards Air Force Base in Edwards, California in October 2002 at age 79.

Yeager was a familiar personality at EAA AirVenture in Oshkosh, Wisconsin, and could often be seen walking the flight-line with his lifelong friend and wingman for his

supersonic flight, Bob Hoover. Yeager admired Hoover greatly for his aerobatic ability and airshowmanship. Like Yeager, Hoover was a World War II fighter pilot and test pilot.

Yeager was awarded the Silver Star, the Distinguished Flying Cross, the Bronze Star, the Air Medal and the Purple Heart. President Harry S. Truman awarded him the Collier Air Trophy in December 1948 for having broken the sound barrier. He also received the Presidential Medal of Freedom in 1985.

Yeager retired from the Air Force in 1975 as a Brigadier General and moved to a ranch in Cedar Ridge in northern California where he continued working as a consultant to the Air Force and Northrop Corp, and flew, promoted and demonstrated the Piper Cheyenne III around the country in the 1980s.

Yeager said in his book *Yeager: An Autobiography*, “Living to a ripe old age is not an end in itself. The trick is to enjoy the years remaining.” □

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Missouri Native & NATA Past President, Lawrence L. “Larry” Burian

March 29, 1935 - December 23, 2020

The long-time president of the National Air Transportation Association (NATA), Lawrence L. “Larry” Burian of Williamsburg, Va., passed away on December 23, 2020. He was 85.

From his first solo flight at age 14 in his Missouri hometown, Burian was on his path to becoming a pivotal leader of NATA. In 1976, he was named President of NATA during a time when the association’s membership had become fragmented and needed focus. Burian stepped in believing in the vital importance of the association and attracted leaders who understood general aviation businesses and were effective team builders. That year, NATA officially became known as the National Air Transportation Association and under his

leadership, flourished and proved its efficacy by resolving a long conflict with the FAA over fuel prices and allocation controls.

In December 1976, NATA brokered a 5-cent-per gallon pass-through on retail fuel sales, allowing fixed base operators to recover some overhead costs – returning an estimated \$70 million to the industry. By February 1979, federal price and allocation controls on aviation fuels were ended. Given this success, NATA reaffirmed its role as a formidable industry advocate among its members, Congress, federal agencies, and the broader aviation community. Larry Burian retired from NATA in 1994. □

French “Jetman” Killed In Training Accident In Dubai

Frenchman Vince Reffet, part of the “Jetman” team which has performed groundbreaking stunts above Dubai using jetpacks and carbon-fibre wings, was killed in a training accident on November 17, 2020.

The Jetmen have pulled off a series of dramatic flights over the Gulf city, soaring in tandem above the world’s tallest building, Burj Khalifa, and alongside an Emirates Airbus A380, the world’s largest commercial airliner. Stunts

elsewhere in the world, including swooping into an airplane through a small door in mid-flight, and flying through China’s famed “Heaven’s Gate” archway in the mountains of Hunan Province, drew huge audiences on social media.

The accident occurred at the 36-year-old’s base in the desert outside the city of Dubai.

The Jetman team also includes fellow Frenchman, Fred Fugen, and Emirati pilot, Ahmed Alshehhi. □

GAMA Applauds Creation of Kansas Supersonic Transportation Corridor

WASHINGTON, D.C. – The General Aviation Manufacturers Association (GAMA) has expressed its strong support for the newly established “Kansas Supersonic Transportation Corridor” (SSTC) for testing non-military supersonic aircraft. The SSTC was made possible by an agreement between the Kansas Department of Transportation (KDOT) and the Federal Aviation Administration (FAA).

“We applaud the work done by the State of Kansas and appreciate the leadership shown by Governor Kelly, Senator Moran, KDOT Secretary Lorenz and KDOT Director of Aviation Brock to proactively establish the infrastructure needed for manufacturers, as well as federal entities such as NASA and the FAA, to test and analyze the significant technological advancements being made in supersonic flight,” said Pete Bunce, GAMA President and CEO.

“The Kansas Supersonic Transportation Corridor will

assist in the assessment of sound mitigating structural and engine designs, as well as state of the art atmospheric acoustic modeling that eliminates the sonic boom and shapes the noise signature of an aircraft traveling faster than the speed of sound to a very low volume rumble. The validation of these technological breakthroughs through the use of sophisticated ground acoustic and telemetry sensors will provide the necessary data to assist global regulators and policymakers in modernizing supersonic flight policies. We look forward to participating in the re-birth of civil supersonic air travel that will take place through an environmentally sensitive and sustainable process.”

For more information about the Kansas Supersonic Transportation Corridor, view Governor Kelly’s announcement at governor.kansas.gov/newsroom. □

Here Comes The Bride & Groom Aviation-Style!



The wedding party!



Ivy Lannigan and Brandon Bielefeldt tied the knot at "The Farm Airport," Gilmanton, Wisconsin.

The couple took off from Doug Ward's Log Cabin Airport in Mondovi, Wisconsin. Ward was a highly decorated belly-gunner on a B-17 Flying Fortress during World War II and is featured in the book "Turret Tales" by Judith Ohm (judith.ohm@ntec.net). Ward passed away in 2018, but before he died, he helped mentor Bielefeldt to get into flying and helped him buy his airplane in 2017. Bielefeldt received his private pilot certificate when he was 17 years old.

Brandon and Ivy gave their guests a mini airshow before landing and the ceremony took place right next to the airstrip.

Brandon is a semi-truck driver with Winfield United and Ivy is a registered nurse through Hiawatha Homecare. Brandon's goal is to build more flight time and obtain additional ratings. Ivy will continue her education to become a nurse practitioner. □

Brandon Bielefeldt and Ivy Lannigan were married October 10th, 2020 in a very unique and special way by flying to their wedding. Bielefeldt owns a 1968 Cessna 150 Commuter and the couple thought it would be an awesome way to arrive at their wedding which occurred on a beautiful fall day at the groom's parents' farm in Gilmanton, Wisconsin, where they have an airstrip called "The Farm Airport."

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How Close Is Too Close?

by Levi Eastlick
WisDOT Bureau of Aeronautics

At a time when shaking hands or seeing a stranger's smile might be as rare as an airworthy SBD Dauntless, there is no better escape from the strange than to fire up the flat engine and get some fresh air under our feet. Flying provides a sense of freedom and peacefulness, not to mention some incredible views that only other aviators and our feathered friends (or foes, depending) can experience. The stunning perspective from above can get us in trouble though if we aren't careful. Federal Aviation Regulation (FAR) §91.119 establishes the "Minimum Safe Altitudes" that we are permitted to fly. But just because we can, doesn't mean we necessarily should.

Before we go any further, let's look at what's in the regulation itself. It may come in handy during your next flight review or WINGS activity!

§91.119 Minimum safe altitudes: General.

Except when necessary for takeoff or landing, no person may operate an aircraft below the following altitudes:

- (a) *Anywhere.* An altitude allowing, if a power unit fails, an emergency landing without undue hazard to persons or property on the surface.
- (b) *Over congested areas.* Over any congested area of a city, town, or settlement, or over any open air assembly of persons, an altitude of 1,000 feet above the highest obstacle within a horizontal radius of 2,000 feet of the aircraft.
- (c) *Over other than congested areas.* An altitude of 500 feet above the surface, except over open water or sparsely populated areas. In those cases, the aircraft may not be operated closer than 500 feet to any person, vessel, vehicle, or structure.

Digging a little deeper into this regulation, it's important to first note it excludes takeoff and landing. Next, it outlines three general situations. The first, and arguably most important requirement, applies anywhere and everywhere. At all times, an aircraft must be flown at a high enough

altitude that if the aircraft loses power, it can glide to make an emergency landing where only the aircraft has the potential of being damaged.



The other two situations identified are over congested areas and over other than congested areas, including open water and sparsely populated areas. How the Federal Aviation Administration (FAA) defines these areas depends on a variety of factors. Feel free to look at FAA legal interpretation letters and past court cases if you're curious about what exactly it depends on. As you fly, the key question to ask here is: "How many people and structures are below me?" Then fly at the appropriate altitude. Over open water or sparsely populated areas, minimum altitude no longer applies, but a minimum distance from people and things does. Keep in mind, unmanned aircraft systems (UAS) are legally allowed to operate 400 feet above the ground and are a relatively new risk to consider should you choose to fly low.

Situational awareness is critical for safety of flight and is tremendously pertinent to minimum safe altitude regulations. Flying low requires additional attentiveness to identify all obstacles, buildings, people and vehicles in order to determine the appropriate flight altitude and distance, all while remembering to preserve the ability to glide to a safe emergency landing area.

Exceptions

Of course, like most regulations, there are exceptions to the rule. Besides during takeoff or landing, helicopters, powered parachutes and weight shift control aircraft have slightly different legal minimums than conventional aircraft. Agricultural aircraft operating under FAR Part 137 and military aircraft may be allowed to fly lower as well. Finally, pilots may also receive a waiver from all or specific parts of this rule if they're willing to complete the paperwork and provide adequate justification.

Additionally, there are some locations where we legally should fly higher than the minimums prescribed in §91.119. Altitude restrictions exist for Temporary Flight Restrictions (TFRs), especially stadiums and powerplants, as well as prohibited areas like the Boundary Waters Canoe Wilderness Area in northern Minnesota. The airspace above national parks, wildlife areas and forests is also protected to some extent. These areas can be identified on a sectional chart by

on a sectional chart or listed in the Aeronautical Information Manual (AIM). Local and state parks, tourist attractions and national historic landmarks certainly draw airborne visitors. While there are no additional rules we need to remember when flying over these places, always try to enjoy the view as safely and quietly as possible.

Enforcement

So, what happens if someone breaks the rules? If an FAA investigation determines that a pilot was flying too low or too close to somebody or something, one or more penalties could be coming their way. The good news is that if it truly was an accident, and the pilot is honest about what happened, most likely they'll be assigned remedial knowledge and flight training with an instructor and the event never goes on their record. If the rules are broken on purpose, however, the FAA can temporarily suspend or even permanently revoke a certificate.

Tips For Low-Level Flight

I've been fortunate enough to fly dozens of missions across the Midwest that have required a significant amount of low-level flight time. There are several tips I want to share that hopefully will help you stay safe and legal.

1. **Plan.** Prolific planning is paramount to low-level flight preparations. Know exactly where you are going. Think about who and what else may be nearby and below by thoroughly reviewing sectional charts and NOTAMS. I often use services like Google Earth and the topographic map website sartopo.com to evaluate the terrain and potential safe landing areas. Skyvector.com is a good free source for UAS NOTAMS (aka DROTAMs). Just keep in mind most UAS operators never file a DROTAM. Know and monitor radio frequencies for the airspace you are flying in and don't be afraid to announce your location and altitude periodically if you are near an airport or busy airspace. Knowing the winds aloft is important for low-level photo missions to help plan the amount of wind correction and bank angle that will be needed. If winds are too strong aloft, the wind correction inputs needed to stay on track may make a good shot from the camera

REGULATIONS REGARDING FLIGHTS OVER CHARTED NATIONAL PARK SERVICE AREAS, U.S. FISH AND WILDLIFE SERVICE AREAS, AND U.S. FOREST SERVICE AREAS

The landing of aircraft is prohibited on lands or waters administered by the National Park Service, U.S. Fish and Wildlife Service or U.S. Forest Service without authorization from the respective agency. Exceptions include: 1) when forced to land due to an emergency beyond the control of the operator, 2) at officially designated landing sites, or 3) on approved official business of the Federal Government. All aircraft are requested to maintain a minimum altitude of 2,000 feet above the surface of the following: National Parks, Monuments, Seashores, Lakeshores, Recreation Areas and Scenic Riverways administered by the National Park Service; National Wildlife Refuges, Big Game Refuges, Game Ranges and Wildlife Ranges administered by the U.S. Fish and Wildlife Service; and Wilderness and Primitive areas administered by the U.S. Forest Service. FAA Advisory Circular (AC) 91-36, "Visual Flight Rules (VFR) Flight Near Noise-Sensitive Areas," defines the surface as: the highest terrain within 2,000 feet laterally of the route of flight, or the upper-most rim of a canyon or valley. Federal regulations also prohibit airdrops by parachute or other means of persons, cargo, or objects from aircraft on lands administered by the three agencies without authorization from the respective agency. Exceptions include: 1) emergencies involving the safety of human life, or 2) threat of serious property loss.

..... Boundary of National Park Service areas, U.S. Fish and Wildlife Service areas, and U.S. Forest Service Wilderness and Primitive areas.

name and an associated thin blue line with adjacent blue dots. Here's what it says on the sectional.

Although it says requested, not required, these areas commonly have heavy concentrations of birds, so higher is certainly safer. Furthermore, if we want to continue to enjoy these places from above, we should strive to be good citizens and reduce our impact by staying both high and quiet. For more information about these noise sensitive areas, check out FAA Advisory Circular 91-36D.

Of course, there are a lot of interesting places that are not found specifically



impossible. When flying below 3,000 feet MSL, one of the best sources for winds aloft can be UAS weather apps, but good old-fashioned interpolation works okay too. A GPS can also give you the information needed to determine winds aloft, but flying low at the site is a less-than-ideal time to do so.

2. **Overfly the field.** Just like we would at a non-towered airport, it is important to overfly your location of interest at a higher altitude. This gives us the opportunity to identify obstacles, people, structures and safe landing areas. Once I feel good about the situation and the plan, we'll descend to a specific minimum altitude while continuing to scan for unseen hazards. Remember, situational awareness saves lives.

3. **Eyes up and moving.** Avoid staring down at a target on the ground. We obviously want to enjoy the view – that's the whole point of the flight, but I constantly remind myself to look up and out. Collision avoidance systems are great, but some other aircraft, UAS, clouds, towers, terrain, and the aforementioned feathered foe might not show up on the screen. If we don't remain vigilant, they could end up in our windscreen! Looking outside also helps keep the airplane under control and allows us to always keep an eye on an emergency landing site. Determine a minimum maneuvering airspeed (1.404 times VS1) prior to flying and don't go below it. On the other hand, don't stare at the instruments either. Once again, be constantly aware of and evaluating your situation.

4. **Use the buddy system.** For photography missions, I always have somebody else take the photos so I can focus on flying. This makes it especially important to brief the plan of action, including potential hazards and emergency plans with the photographer. It's great if they are a pilot too, but it's not necessary. A second set of eyes can be very helpful to see and avoid other traffic. While on the ground, make sure to rehearse where the photographer will sit and shoot, determine if windows/doors will be opened, and how to unplug their mic cable, etc. I also request VFR Flight Following from air traffic control whenever it is available, but at low altitudes, it can be difficult to be picked up on radar. Another good reason to stay higher than the legal minimum if you can.

5. **Practice.** Those ground reference maneuvers we were forced to master actually do have a purpose. Either go alone or better yet, take a CFI and really strive to perfect those maneuvers. The same goes for maneuvering in slow flight. Make sure to focus on coordination and pay attention to the details of altitude, airspeed, bank angle, pitch angles, etc. The goal is to be precise and accurate while keeping eyes outside almost entirely. I highly recommend learning eights on pylons and commercial standard accelerated stalls, and if you haven't done them before, just take an instructor and be safe.

Flying low can provide a wonderful and unique vantage point for the world around us. Whether on a low-level mission or just sightseeing, make sure to fly safely and avoid disturbing others as best you can. □

Iowa Creating A Business Aviation Association

Iowa businesses that own or operate aircraft are in the process of starting a new trade group, modeled after the National Business Aviation Association (NBAA). Organizers are working closely with NBAA to create the statewide association that will represent business aviation in

Iowa and give it a platform to inform, educate, promote and represent its membership (<https://www.iowabusinessaviation.org/>). Neighboring states Minnesota and Wisconsin already have such organizations. □

YOUTH PROGRAMS

Fargo Air Museum Gives Area Youth An Introduction To Aviation

FARGO, N.D. – The Fargo Air Museum (FAM) is partnering with local aviation businesses to offer “Introduction to Aviation” camps for area youth. These camps provide an opportunity for participants to learn about different areas of aviation through exciting interactive experiences. This comes as part of the museum's efforts to expand educational programming for kids and teens in the community.

The first Introduction to Aviation camp was held January 23, 2021 and was focused on interactive drones. The museum is partnering with iSight RPV to explain the fundamentals of unmanned aircraft systems and allow campers to experience

a live drone flight. During the March camp, participants will get the opportunity to take to the air when volunteer pilots from EAA Chapter 317 will teach the principles of flight and offer 20-minute EAA Young Eagles flights over the Fargo/Moorhead area.

The Introduction to Aviation camps are being offered on an alternating monthly schedule opposite the “Turn It, Build It” advanced STEM (Science, Technology, Engineering, Math) camps which were introduced at the end of 2020. For additional information and registration, go to www.fargoairmuseum.org/education. □

Piper Aircraft Launches Brand Ambassador Program With UND Aerospace

VERO BEACH, FLA. – Piper Aircraft and the University of North Dakota (UND) Aerospace announced November 9, 2020, the launch of a new brand ambassador program. The platform is designed to increase awareness of the programs offered by UND Aerospace, as well as showcase the Piper training product line in use at one of the largest collegiate flight schools in the world. The collaborative initiative is expected to create a community of like-minded aviation enthusiasts with a career interest in aviation.

Together, Piper Aircraft and UND Aerospace recruited ambassadors based on their enthusiasm, versatility and passion. The team of ambassadors will have the opportunity to speak about their UND program and campus life experience, as well as share their personal training journey using social media channels like Instagram. Ambassadors will be able to provide future students with valuable insight into life at UND Aerospace and will be positioned to inspire future aviators. In return, ambassadors are able to gain valuable communication skills, build industry connections and have the opportunity to participate in Piper and UND Aerospace events.

“With Piper’s strong presence in the flight training market and our large social media follower base, we are in a unique position to launch and support an ambassador program. Our intent with the program is to promote our industry while supporting one of our customers through the development of micro influencers who are actively flight training with the goal of becoming a professional pilot,” said Jackie Carlon, Senior Director of Marketing and Corporate Communications. “Ultimately we believe this initiative serves many motives, the most important of which is promoting the aviation industry and the opportunities that exist.”

“The students, faculty and staff at UND Aerospace are some of the most enthusiastic and grounded individuals in



the industry. We continually strive to improve our programs and wish to showcase them through means more vivid than traditional media. We appreciate our relationship with Piper Aircraft and look forward to partnering in this creative outreach. Aviation is a globally strong and uniquely supportive team and the social platforms today bring us closer together than ever imagined,” said Chad Martin, Fleet Manager for UND Aerospace. “Our ambassadors are creative, and they will provide a flight line reminiscence for alumni and a real-life experience for aspiring pilots.”

University of North Dakota (UND) Aerospace is located in Grand Forks, North Dakota. □

Piper Aircraft Opens Application Period For 2021 Apprenticeship Program

VERO BEACH, FLA. – Piper Aircraft has opened the application period for its 2021 Apprenticeship Program. The 2021 group, which will begin in August, will be the third apprenticeship class to begin at Piper Aircraft’s world headquarters in Vero Beach, Fla. The two-year program includes a combination of on-the-job training and classroom instruction designed to qualify participants as journeymen in aircraft assembly. Each apprentice is a paid employee of Piper Aircraft and receives a full benefits package.

The accredited apprenticeship program, which is conducted in cooperation with Indian River State College, began in August 2019 and was created in response to the increasing demand for high quality manufacturing candidates at Piper Aircraft. The first group of apprentices will graduate in the summer of 2021. The second class is currently

completing their first semester of the program and are continuing to shadow skilled aircraft assembly workers and learn all aspects of fabrication and assembly of aircraft during the two-year initiative.

Piper Aircraft will be hosting several informational sessions for prospective apprentices, their parents/guardians and significant others during the coming months. Interested persons are asked to e-mail: apprentice@piper.com or visit Piper.com for available dates and details. The 2021 application can be found on the website under the “careers” tab at www.piper.com.

Piper Aircraft manufactures efficient and reliable single- and twin-engine aircraft and is the first general aviation aircraft manufacturer in the world to certify Garmin Autoland. □



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

Cassandra Isackson, Director

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What's a hangar for, anyway?

by Tim Jarvis

When asked recently to write about hangar usage, I immediately thought back to my manager days at a local FBO in the early 2000s. Even then, understanding what was allowed to be stored in a hangar, was a regular question raised by myself and others.



Tim Jarvis

To answer that question of proper and allowed hangar use, what I first needed to understand were the rules that govern airports. What I discovered then – and still holds true today – is that if an airport is receiving federal funds, the airport manager must follow the FAA's interpretation of what hangar compliance means. I also learned that the FAA provides guidance through their Airport Compliance Program.

Under the FAA's Airport Compliance Program, airport sponsors who have received federal grant money must use airport facilities exclusively for aviation purposes. These guidelines are intended to make sure that money spent at an airport stays at the airport. The FAA is trying to protect the aviation community so that airport funds are not spent for non-aviation purposes.

The FAA deems the primary purpose of a public airport hangar is to store aircraft. However, that does not mean only aircraft are allowed inside a hangar. If most of the hangar use is dedicated to aeronautical activity, other items may also be stored inside the hangar, so long as those items do not interfere with the storage of aircraft. Some examples of other items may include maintenance items and tools for the building, items for maintaining or repairing aircraft, and office equipment and furnishings.

So, what about the non-commercial building of aircraft and non-flying aircraft? Are they considered aeronautical activities?

I did a little digging and learned that the FAA has given these topics a lot of consideration. The non-commercial building of aircraft has been deemed an aeronautical activity, and as long as a reasonable timeframe is respected, an aircraft can be in a hangar in non-flying status.

Each year the FAA conducts land use inspections at



What is stored in a hangar can affect airport funding.

Dave Weiman Photo

selected airports. These inspections ensure that airport sponsors are using the land designated for aeronautical purposes as intended. It is the responsibility of each local airport sponsor to implement the requirements necessary to maintain a standardized national airport system.

Federally funded airports may set up an advance notice with hangar owners for an onsite inspection. This inspection includes some of the following items:

- The hangar holds an airworthy aircraft, or if the aircraft is not airworthy, progress should be noted.
- Items such as boats, campers, and other personal recreation vehicles must not impede the main use of the hangar.
- Combustible materials are properly stored, and fire extinguishers are available.
- A way for the airport sponsor to access the hangar quickly, in case there is a fire, missing aircraft or other emergency.

If an airport is not receiving federal funds, discretion is left up to the airport owner. All owners and operators may want to follow the FAA's guidance and enforce its rules through lease structure, regulation and enforcement.

Non-flying aircraft, and other non-aviation equipment stored in hangars, can negatively affect an airport through lost fuel sales and potential maintenance income. Those lost dollars typically have a direct impact on the airport, as they can help provide local pilots and hangar owners with essential services. When hangars are full of other "stuff," it often hurts

everyone in the airport community.

Maintaining proper hangar use by all airport tenants ensures that the demands of the airport can be met. This involves the entire aviation community. From fuel to aircraft sales, repair shops, and other service centers, reserving hangar use for aeronautical activity just makes “plane sense.” Failure to keep hangar use focused squarely on aviation activity may result in the loss of federal dollars, along with a vibrant and potentially expanding aviation community.

Local pilots are the heart and soul in any aviation community. Pilots and local hangar owners should work with airport sponsors to help all involved understand the needs of their local airport community. By working as a group, sponsors can enact hangar use programs that meet specific,

local needs. This can include a waitlist should hangar demand require it. It’s also important to note that the FAA does allow some flexibility, recognizing each airport has its own conditions.

By owning or building a hangar on federally funded airport land, you are accepting the FAA’s conditions through the airport. When an airport sponsor accepts federal funds, the FAA conveys obligations by regulation and adherence to federal law. In the case of noncompliance, the FAA may deny the airport federal money for new hangar construction.

For more information on FAA rules, policy and guidance for hangars, visit www.faa.gov/airports/airport_compliance/hangar_use. For hangar information at your local airport, contact the local airport manager or city manager. □

Statewide Automated Weather Observation Systems: Weather Services Available To Pilots & Non-Pilots Alike

by Michael Hartell

Navigation Systems Supervisor
MnDOT Office of Aeronautics

I started learning how to fly back in 1981–82. One of the things I remember most was trying to understand weather. I had to understand my personal limits and how weather could determine a decision to fly or not.

I recall struggling with the weather information available during flight prep. Back in those days, there were only a few Flight Service Stations (FSS) across the state of Minnesota. Pilots had widespread coverage gaps and had to guesstimate the weather conditions they were going to be flying through.

Forty years ago, we had less than a half dozen Automated Weather Observation Systems, commonly known as AWOS stations. Today, there are 80 AWOS stations owned and operated by MnDOT, and there are an additional 20 federal AWOS/ASOS (Automated Surface Observation System) stations. There is now a fantastic weather network out there for all of us pilots to draw on 24 hours a day, to get accurate weather conditions. This weather network allows pilots to truly build their own weather picture and make great decisions for go-no-go.

The safety that this weather network has added to our state is invaluable.

Enhanced AWOS Features

I would like to shed some light on some enhanced features that many may not know exist, and how to leverage our

weather network for even better real-time information.

Most pilots know you can call by land line phone directly to any AWOS/ASOS that is commissioned and receive the current weather conditions that were reported one-minute past. Your other option would be to look at any popular flight planning tool and read the current weather posted as a Meteorological Terminal Air Report (METAR).

The only drawback to METARs is that they are only updated every 20 to 60 minutes, and when there is changing weather and winds moving around the area, this information can feel quite old when you are prepping at the airport wanting to depart.

To add a new tool to the toolbox, I would like to introduce an online weather service made available by MnDOT Aeronautics, with support from our vendor “any AWOS.” This new online tool provides near-real-time weather reports for 80 local airports in Minnesota. The weather reports are available to everyone, for free, through any popular mobile device with a standard web browser. Best of all, it’s simple to use.

You can view the current online weather reports in different ways:

- Launch MnDOT’s online AWOS site directly using this URL: www.mndot.gov/aero/navigationssystem/awos-map-online.html. We suggest you bookmark that site in your browser or add a shortcut to your device’s desktop or home screen.

- Click the “any AWOS” link on MnDOT’s Aviation Weather page.

- Go directly to an airport of interest by entering [https://anyawos.com/K\(3 letter airport FAA identifier here\)](https://anyawos.com/K(3\letter\airport\FAA\identifier\here)) into your browser. For example: <https://anyawos.com/KDTL> will bring up the current AWOS information for Detroit Lakes (DTL). If the airport has a number in the FAA ID, you must



Michael Hartell

still enter the (K) before the identifier to bring up the site. For example, enter <https://anyawos.com/K14Y> for Long Prairie/Todd County Airport. I've found typing the URL directly into the browser works well on my iPad.

The great part about this online service is that the information presented is typically only 1 to 3 minutes old, so long as the internet is working at the airport.

You can also have multiple windows open on your desktop, so you can look at the information of many AWOS locations to help determine a better weather picture or identify weather changes that may impact your planned travels. There are also some limitations to any AWOS that one should be aware of.

- The data presented within the any AWOS tool is for informational purposes only and has not been scrubbed through METAR's publishing process.

- Only Minnesota state owned AWOS systems are streaming data through any AWOS. This means that all the federally owned and operated sites will not be available

through this tool. Sites like MKT, GPZ, OTG, BRD, just to name a few, are not going to come up for you to view.

- On occasion, internet issues may make the timing of the updates longer than planned. That means you should always check the time stamp published on the screen to ensure the timing meets your requirements.

Any AWOS works on most smart phones, tablets and laptops. The tool lets you access current weather data for departure, enroute and arrival, and it is free of charge. It's a great way to compare current conditions to forecasts, and to see how the weather models are tracking with your desired flight times.

When I look at all the weather tools we have today versus when I started flying, it is absolutely amazing. Weather information available to a pilot today compared to 40 years ago is extensive.

For all of you starting out your flying careers today, enjoy the new AWOS technology. I hope you find new and effective ways to utilize it in your aviation endeavors. □

AIR RACING

BERINGER & Air Race E Partner Up!

TALLARD, FRANCE – Because aviation and motorsport racing is one of the foundations of BERINGER AERO, it seemed natural for the company to partner up with the new world-class racing teams from Air Race E.

BERINGER indeed started its business with the manufacture of racing side-cars, promoted by the company's founders Gilbert and Veronique Beringer, French Rally Champion in 1981.

Since then, BERINGER focused its business on high-end and high-performance brakes for racing bikes and cars, and in 2009, the company split into two different companies to form BERINGER AERO. Naturally going in the same direction, BERINGER AERO is partnering up with the best airplane pilots in the world, including Nicolas Ivanoff, Mike Goulian, Aude Lemordant, Andrew Findlay, Kirby Chambliss, Skip Stewart, Luca Bertossio, and many others.

Air Race E will become the world's first all-electric airplane race when it launches its inaugural series of international races in 2021.

Run by Air Race Events and led by world-leading air racing promoter, Jeff Zaltman, the man behind the globally successful Air Race 1 World Cup, the race is set to revolutionize air racing and pioneer innovations in electric aviation.



One of the racers of Air Race E.

Air Race E will see electric airplanes race directly against each other on a tight 5km circuit just 10m above the ground at speeds of up to 450 kph, faster than any land-based motorsport. The demand for speed, performance and power management under the rigors of a competitive race environment, provide the perfect platform for the development and promotion of cleaner, faster and more technologically-advanced electric engines.

The Light Aircraft Association (LAA) has committed its support in developing the technical regulations and providing design oversight for the sport. The series is sanctioned

by the Formula Air Racing Association (FARA). So far, there are 12 registered teams from the U.S., Canada, U.K., France, Switzerland, Norway, Ukraine, Germany and the Netherlands, although the series remains open for other teams with the necessary qualifications to take part.

With the Air Race E partnership, BERINGER is offering a high-performance and light wheel and brake setup to each of the teams competing in the race to help them save weight and land safe on the short motorsport land lanes.

Since 2002, BERINGER AERO has manufactured wheels and brakes for a wide range of aircraft from ultralights to the Pilatus PC-6, Cirrus SR22 and Vision Jet, Piper PA46/28, and Diamond DA42. □

Academy College Announces 2020 Sherm Booen Legacy Scholarship Recipients

BLOOMINGTON, MINN. – Established in 2016 to celebrate Academy College’s 80th Anniversary, two \$5,000 scholarships are awarded to degree-seeking students pursuing a professional pilot career in honor of the late, Sherm Booen, pilot, publisher and broadcaster.

Known as the “Voice of Aviation in Minnesota,” Sherm Booen was born on a farm near Glenville, Minnesota, and was a civilian B-17 test pilot during World War II. Following the war, he moved to Richfield, Minn. with his wife, Mavis, and



Maria Manos



Mark Mihalovic

daughter, Boni.

While working in radio and television, Booen produced and emceed the “World of Aviation” television program on WCCO TV every Sunday morning for over 28 years. He also published “The Minnesota Flyer.” Booen was inducted into the Minnesota Aviation Hall of Fame in 1995.

This year’s recipients of the Sherm Booen Scholarships are Maria Manos of Coon Rapids, Minn., and Mark Mihalovic of Bloomington, Minn.

Contact Academy College at 952-851-0066 or email scholarship@academycollege.edu for scholarship details. □

Scholarship Applications Now Available At Minnesota Pilots Association

MAPLE GROVE, MINN. – The MN Pilots Association has opened its application period for its three \$2,000.00 aviation scholarships. The eligibility requirements are available on the MN Pilots Association website:

<https://www.mnpilots.org/>

Two of the three scholarships are for pilots – the Captain Edward L. Erickson Scholarship and Janette Strathy

Scholarship. The third scholarship is for maintenance – the MN Pilots Association Aviation Maintenance/Avionics Technician Scholarship.

Applications are due April 1, 2021. For additional information email Patrick Halligan at flyinghooligan@gmail.com □

EAA Teams Up With Microsoft Flight Simulator To Provide Scholarships, Education Resources

OSHKOSH, WIS. – The Experimental Aircraft Association and Microsoft are teaming up to provide flight training scholarships and education resources throughout the country in conjunction with the release of the new edition of the legendary Microsoft Flight Simulator software.

EAA and Microsoft have committed to establishing three Microsoft Flight Simulator Scholarships for each of the next three years, giving young aviation enthusiasts the opportunity to move from virtual flight via simulators to the real thing. In addition, Microsoft will provide copies of the new Microsoft Flight Simulator to EAA’s current youth flight training

scholarship recipients, including Ray Aviation Scholarship students, for the next three years, as well as offer discounts on the new edition of Microsoft Flight Simulator to all EAA members.

Along with the youth outreach, Microsoft will be supplying a limited number of Microsoft Flight Simulator copies to EAA chapters that have facilities to use it as part of pilot training and proficiency.

For more information, visit <https://www.flightsimulator.com/> □

Piper Certifies & Delivers First Pilot 100i Trainer Aircraft



Piper Pilot 100i
Jim Barrett Photography

VERO BEACH, FLA. – Piper Aircraft announced December 15, 2020 that it has received type certification from the Federal Aviation Administration (FAA) for the “Pilot 100i.” The Pilot 100i, which was announced during Sun-n-Fun in 2019, is the value priced addition to Piper’s trainer-class line. Following certification, Piper began deliveries to its launch customer, American Flyers, which will be taking delivery of eight (8) Pilot 100i aircraft.

“We are excited to add the Pilot 100 series to our training

product line at a price point that provides optimal economics for all operators,” said Piper President and CEO, Simon Caldecott. “During these uncertain times, our team has continued to remain focused and has worked diligently to bring to market an aggressively priced, proven trainer that offers the advanced systems and performance that flight schools and airline programs of all sizes desire.”

Piper Aircraft Inc., headquartered in Vero Beach, Fla., offers aviators throughout the world efficient and reliable single- and twin-engine aircraft and is the first general aviation aircraft manufacturer in the world to certify Garmin Autoland. The single-engine M-Class series – the M600SLS, M500, and M350 – offers businesses and individuals elegant performance, value and a superior ownership experience. The Personal Class Seneca V, Archer LX and Archer DLX balance proven performance, efficiency, and simplicity in a piston-powered aircraft. The new Piper Pilot 100i rounds off Piper’s portfolio of training aircraft products: Pilot 100i, Archer TX, Archer DX, Arrow, and Seminole. For 2021, flight schools now have an option for a factory new, robust trainer that is priced under \$300,000 and is IFR equipped with digital autopilot. (<https://www.piper.com/>). □

Minnesota Pilots Association Welcomes New & Returning Board Members

MAPLE GROVE, MINN. – The Minnesota Pilots Association has reelected current board members, Steve Thibault and Patrick Halligan, and elected new board member, Grant Wallace, to its board of directors. Randy Corfman is President.

About 90% of those members who responded to a recent survey would prefer to see the **2021 Great MN Aviation**

Gathering take place May 14-15, 2021: <https://www.mnpilots.org/> for updates.

The mission of the Minnesota Pilots Association is to promote and protect aviation in Minnesota through advocacy, education, outreach and social activities. The association firmly believes that a healthy aviation community is an invaluable asset to the state. □

NGPA Announces New Directors & Officers

ST. LOUIS PARK, MINN. – The National Gay Pilots Association (NGPA) has announced its new board of directors and officers following its annual meeting in late October 2020. New directors include Ryan Lynch, an ERJ 170/175 Captain for Republic Airways, who resides in Indianapolis, Indiana. Lynch assumed the unexpired term of a vacated board seat immediately after being named. Beginning January 1, 2021, the following members will serve two-year terms as directors: Travis Johnston, an inspector for Transport Canada, who resides in Vancouver, British Columbia; Andi Sue Phillips, a corporate pilot in Colorado; and Ari Sarmento, who flies and leads as the system chief pilot for Jet Linx based in Omaha, Nebraska. The NGPA board also elected new officers with terms also starting January 1: Steve Tustin, Chair;

Scott Konzem, Vice Chair; Kris Krie, Secretary and Education Fund Officer; and Alan Miles, Treasurer. Brian Gambino was named President in February 2020.

Founded in 1990, NGPA is an international organization of Lesbian, Gay, Bisexual, Transgender, and Queer (LGBTQ) aviation enthusiasts and professionals from around the world. Through education, outreach programs, and events, the organization encourages members of the LGBTQ community to begin aviation careers, fosters equal treatment of the LGBTQ aviation community through advocacy and outreach, promotes aviation safety, and provides an affirming social and professional network for the LGBTQ aviation community (www.ngpa.org). □

Aeronautics & Astronautics Contributors Honored At FAI Awards Ceremony 2020

LAUSANNE, SWITZERLAND – On December 2, 2020, the Fédération Aéronautique Internationale (FAI) - the World Air Sports Federation - honored the greatest contributions to aeronautics and astronautics. A total of 44 women and men from around the world were announced as the recipients of FAI diplomas or medals. All of them are air sports and space personalities, who have distinguished themselves in the various air sports and activities governed by FAI. Due to the pandemic, the ceremony took place online in the format of an “awards announcement.” The video of the event is available on YouTube.

FAI President Bob Henderson stated: “...it is interesting to see how the history of aviation and space exploration is told through the names of our awards: the Lilienthal Gliding Medal, the Paul Tissandier Diploma and the Charles Lindbergh General Aviation Diploma, to name a few. These

prestigious pioneers shaped history...they inspired, and continue to inspire, generations of pilots. The awardees, both people and organizations, honored by FAI this year, follow in their illustrious footsteps. I warmly congratulate them for their well-deserved FAI medals and diplomas.”

The FAI Awards Ceremony is part of the federation’s General Conference, which was held online over four days, December 2-5, 2020.

For a list of the recipients with the descriptions of their achievements, go to: bit.ly/GC2020_awards2020.

To watch the ceremony, go to: www.fai.org/gc2020-awards or <https://youtu.be/3l9dJHYCy9M>.

FAI was founded in 1905 and is a non-governmental and non-profit-making organization recognized by the International Olympic Committee (IOC). □

Aircraft Spruce Midwest Store Now Open Saturdays

WEST CHICAGO, ILL. – Aircraft Spruce Midwest in West Chicago, Illinois, is now open on Saturdays for will-call business from 8:00 a.m. to 4:00 p.m. CT. The store is located near the DuPage airport (KDPA). The company is still operating under the guidelines of the local government as it

relates to the current pandemic. This includes limited capacity in store, mask requirements, and social distancing protocols. The company hopes to resume full service soon when it is appropriate to do so (www.aircraftspruce.com). □

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Readership: Each issue is distributed online at no charge to maximize circulation to aircraft owners (single-engine piston thru corporate jets), pilots (Private thru ATP), aircraft technicians, fixed base operators, flight schools, technical colleges and universities, airports and airport officials.

Midwest Flyer Magazine publishes five (5) issues online, and one (1) issue (April/May) online *and in print*, and has expanded its print distribution from 10,000 to over 15,000 copies!

To reserve space or discuss advertising options,
Contact Dave Weiman 608-772-1776
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www.MidwestFlyer.com

ORBIS Flying Eye Hospital To Return To AirVenture 2021

OSHKOSH, WIS. – The Orbis Flying Eye Hospital, which has been saving sight and training eye care professionals in more than 95 countries around the world, will return to the world's largest fly-in convention in 2021 as part of EAA AirVenture Oshkosh. The Orbis MD-10 jet aircraft will be part of a salute to humanitarian aviation at the 68th edition of the Experimental Aircraft Association's annual fly-in convention, which runs July 26-August 1 at Wittman Regional Airport in Oshkosh.



Orbis MD-10

EAA Recommendations Included In FAA Remote ID Rule

OSHKOSH, WIS. – Many provisions that the Experimental Aircraft Association (EAA) recommended to proposals to integrate Unmanned Aerial Systems (UAS), commonly known as drones, into the national airspace system, were included in the final Remote ID rule that was unveiled in December 2020 by the Federal Aviation Administration. EAA-recommended provisions were designed to protect EAA members engaged in both manned aircraft and traditional model aircraft operations.

The Remote ID rule will formally begin on February 28, 2021, with many aspects that do not become effective for as long as 18 to 30 months after the February 28 effective date. EAA feels that the rule is far more workable as a result of the FAA's consideration of the more than 50,000 comments it received. This includes EAA's foundational principles that any Remote ID rule ensured that manned aircraft continue to have unfettered access to the airspace system, no new regulatory burdens would be placed on manned aircraft operations, and no new equipment would be mandated for manned aircraft as part of this rule.

For those involved in model aircraft and UAS operations,

there are provisions that require identification to meet national security and law enforcement requirements as mandated by Congress. Those include:

1) Standard Remote ID – This includes a transponder in new products, installed by the manufacturer, beginning no later than February 28, 2022. The signal will include the serial number of the product.

2) Broadcast Module – This option, likely to be used by many individuals, allows a small, inexpensive module to be moved between aircraft and UAS, with a single registration required by the owner for all of the units that may use the module.

3) Flying at an approved, registered flying site – For traditional model aircraft operators who fly only at a single site, such as a club flying field, no transponder would be required, although registration is still mandated.

EAA says that the Academy of Model Aeronautics (AMA) deserves a great deal of credit for its tremendous work over the past year on this issue, and EAA was pleased to work with them in many areas where it made a difference in the final rule.

Bourke Elected President of IAC

OSHKOSH, WIS. – Jim Bourke of Corvallis, Oregon, has been elected president of the International Aerobatic Club (IAC), a division of the Experimental Aircraft Association (EAA), which is dedicated to the safety and promotion of aerobatics.

Bourke succeeds Robert Armstrong, who served as president since March 2018. Bourke is currently the second-ranked freestyle aerobatic pilot in the U.S. and sixth-ranked in the world.

A member of the U.S. Aerobatic Team, Bourke represented the U.S. in the World Aerobatic Championships in 2017 and 2019. He is also a professional airshow performer.



Jim Bourke
EAA Photo

Experimental, Amateur-Built Fatal Accident Total Drops Again, Below FAA Not-To-Exceed Goal

OSHKOSH, WIS. – Safety totals for experimental amateur-built aircraft continued the decade-long improvement trend in 2020, as fatal accident totals finished below the Federal Aviation Administration not-to-exceed number for the 12 months ending September 30, 2020.

Over the 12-month period from October 1, 2019, through September 30, 2020, which mirrors the federal government fiscal year, total fatal accidents in experimental aircraft dropped more than 15 percent from the previous year, to 44 total fatal accidents, including 32 in amateur-built aircraft – an 18 percent drop. The 44 fatal accidents were 8 percent below the FAA's not-to-exceed number of 48 for Fiscal Year 2020.

Sunglasses – Which Ones To Buy?



“AV2” Sunglasses by Dual Eyewear

by Dave Weiman

Most aviators know that they should not wear “polarized” sunglasses, and “Sporty’s Pilot Shop,” being a leader in pilot supplies, sells a wide variety of high-quality sunglasses that do an excellent job of reducing glare, but without polarization.

According to Doug Ranly, catalog manager at Sporty’s, when sunglasses are polarized, they use an optical filter to reduce glare. While this may be fine for fishing or driving, he says that it is generally not a good idea for flying because many cockpit instruments and glass panels have polarized faces, and polarized sunglasses will render these instruments unreadable. In addition, an iPad screen will be blacked out in portrait orientation when wearing polarized sunglasses.

If you wear “contact lenses,” or otherwise only need “readers” to see objects close up, you can buy sunglasses with readers built in, or you can purchase “stick-on” reading lenses that you can easily install yourself. The problem with prescription sunglasses is that if you break or lose them, you are generally out more money than if you buy a pair of off-the-shelf sunglasses.

One non-prescription pair of sunglasses we found intriguing are the “AV2” by Dual Eyewear. They feature your choice of available built-in readers and weigh a mere 1 ounce, so you may forget you even have them on. These non-polarized nylon lenses offer higher definition and

outstanding optical clarity, and are available in grey or bronze tint, and until recently, were available in gradient lenses in bronze, meaning the lenses are less tinted towards the bottom for better illumination of a generally dark instrument panel. Unfortunately, the gradient lenses tint is no longer available at Dual Eyewear, but the solid tint is. Dual Eyewear AV2 sunglasses are available through Sporty’s for \$99.95.

Also advertised in Sporty’s is the Serengeti Eyewear line of sunglasses, which are available in your choice of aviator or modugno frames, and driver’s gradient lenses in bronze. Serengeti Eyewear sunglasses are also available through Sporty’s and sell for between \$119.95 and \$159.95, depending on your preference of frames.

I have long been a Ray-Ban fan, and they too are available through Sporty’s, but apparently Ray-Bans are only available in Green Classic G-15 lenses and not bronze, and do not appear to offer a gradient lens. But I will have to admit, Ray-Bans are great-looking sunglasses!

If you prefer the “Clark Kent,” dark rim look, Sporty’s offers “Cloudbase Optics” sunglasses that feature Carl Zeiss lenses to provide high contrast, outstanding optical clarity, and excellent UV protection. When looking outside the cockpit, these sunglasses appear to limit brightness, so you can distinguish clouds from the sky more distinctly.

For a complete selection of aviator sunglasses, go to Sportys.com. □

Tips That Could Save Your Life & Make Surviving An Accident A Little Bit Easier

by Dave Weiman

The article entitled “*Miracle Over Minnesota... Survival After Carbon Monoxide Poisoning*,” featured in the October/November 2020 issue of *Midwest Flyer Magazine* (<https://midwestflyer.com/?p=13674>), has attracted a lot of attention nationwide! Dan Bass of Winona, Minnesota, experienced carbon monoxide poisoning while flying his Mooney M20C Ranger in the winter, survived a crash-landing while unconscious, and shared his experience with us. Hopefully we can learn from his experience and avoid what happened to him by being better prepared.

First, it was determined that the carbon monoxide poisoning was caused by a crack in the muffler of his aircraft, beneath the heat shroud. While running the cabin heat, exhaust rich carbon monoxide was being pumped into the cabin. The cause of the crack is unknown and was not discovered during the aircraft’s annual inspection.

Second, Dan Bass did not have a carbon monoxide (CO) detector onboard his aircraft at the time. Immediately after publishing his article, we were getting reports from readers who were buying either the **Sensorcon** (sensorcon.com) CO detector and taking advantage of a 20% discount using Dan’s special coupon code **Aircraft2020**, or other detectors available through Sporty’s Pilot Shop (sportys.com).

There are apparently hundreds of CO detectors on the market, however, most of them are not well suited for aviation. They may not alert the pilot until CO concentrations reach over 100 ppm, or they may not have an alarm that is audible in a noisy cockpit. Prices range from \$129.00 to \$170.00, depending on desired features and personal preference.

Third, Dan Bass urges his fellow pilots to use a “pulse oximeter” to monitor their oxygen saturation levels on every flight. One would assume that CO poisoning would show up with a lower oxygen saturation reading, but it is the opposite. The pulse oximeter uses the color of your blood to determine oxygen saturation. If CO is present in your blood, the pulse oximeter will actually display a higher saturation level.

Fourth, equip your aircraft with shoulder harnesses! Bass had harnesses in his Mooney, but many legacy airplanes do not have anything more than a lap belt. The diagonal bruise Bass experienced across his chest proved that it saved his life.

Fifth, keep needed survival gear with you or fixed to a part of the airframe within easy reach. Dan Bass now flies with a “*utility vest*” and carries with him such items as his cell phone and backup battery, personal location beacon (PLB), portable strobe, flashlight and extra batteries, signal whistle, and signal mirror. Other emergency tools could include a small egress hammer to break the glass, a knife, some rations,

a first aid kit, and a bottle of water. Bass also keeps a handheld VHF radio charged and positioned near his left leg. Pilots might also consider stowing their radio in their utility vest or clipping it to their belt, depending on the size and weight of the radio. A VHF radio can be used to alert other pilots in the area of your emergency, even while on the ground, using the emergency frequency 121.5 Mhz or your last known air traffic control frequency.



Q.U.E.S.T. Vest by SCOTTTeVEST

A search on the Internet revealed a number of utility vests available, such as the Q.U.E.S.T. Vest by SCOTTTeVEST, which is very durable and has 42 pockets. “Q.U.E.S.T. is the embodiment of their design philosophy – a tribute to functional fashion with no detail left behind.” When not wearing the vest while flying, either in your airplane or on the airlines, tech lovers and gadget freaks will have sufficient space for all their essentials. The SCOTTTeVEST retails for \$199.00 (scottevest.com).

True North/Dragonwear has a fire-resistant (FR) vest called “Super Fleece™” (*picture on following page*), which has zippered chest and hand warmer pockets and two large inner pockets that retails for \$214.95. The Super Fleece™ vest offers permanent FR protection inherent in a lightweight, breathable, wind-resistant and water-repellent garment. With a CAT 4 protection rating, certified to meet NFPA 70E and NFPA 2112 ratings, it is also durable, UV fade resistant, washable, and made in the USA (<https://www.truenorthgear.com/catalog/product/products/outerwear/alpha-vest>). When ordering, make sure you order the Super Fleece™ vest, as the manufacturer recently changed product lines. Call 800-873-5725, if in doubt.

The Duluth Trading Company also offers several vests you may wish to consider, such as the “Men’s Working Man’s Vest.” The ripstop 4.3-oz. nylon fabric is Teflon® treated for



Super Fleece vest by True North/Dragonwear



Alpha CWU NOMEX Flight Jacket

supreme ruggedness, but it is still lightweight enough for hot summer days. Full-length mesh side vents and back panels provide central air you wear! And it has the hardest-working pocket combo yet, with zip napoleon pockets, flap chest pockets and large bellowed cargo pockets for gear. Thirteen (13) pockets in all. This vest retails for \$89.50, on sale at press time for \$49.99 (<https://www.duluthtrading.com/men/outerwear/vests/>).

Another economical utility vest is the “M-Tech Tactical Utility Vest,” regularly \$109.99, on sale at press time for \$54.99 (giv-official.com). This vest is durable and features breathable, mesh-tech construction of cotton and polyester, which makes it especially suitable for all seasons, and can easily be worn inside a flight jacket. Other features include dual panel utility pockets, and a front buckle-zip closure for styling and versatility (clubgiv.com).

Alpha Industries offers a utility vest called the “ALS Utility Vest” that retails for \$100.00. This vest is designed to carry everything you need, with large exterior pockets, contrasted with an onion-quilted shell, and a button-down placket for a secure fit. Made of 100% nylon for the lining and shell, with a 100% polyester fill, this vest is recommended for light weather.

If you are looking for a quality *flight jacket* to wear over one of the lightweight utility vests mentioned here, you might want to consider the Alpha Industries NOMEX (fire-resistant) “CWU 36/P NOMEX” flight jacket.

Comfortable and fire-resistant, and available in military sage green, the Alpha CWU 36/P NOMEX is a summer weight military flight jacket which is made to help ward off harsh climates. Whether you are facing dry desert heat or pouring rain, the Alpha CWU 36/P NOMEX flight jacket is your best choice for staying comfortable.

Manufactured in the USA and in current contract with

the Defense Department, the MSRP of the Alpha CWU 36/P NOMEX flight jacket is \$850.00 (<https://www.alphaindustries.com/products/mmc10015u1-mens-cwu-36-p-nomex-mil-spec-lightweight-flight-jacket>).

The cold weather version of the Alpha NOMEX flight jacket is the CWU 45/P with non-removable lining (<https://www.alphaindustries.com/>). The MSRP for this jacket is also \$850.00.

Both Alpha Industries flight jackets feature NOMEX fire resistant fabric, zipper tape, knit cuffs and waistband, tonal Velcro patch, front zipper closure with storm flap, double-stitched cargo pockets with Velcro closure, and are made to military specifications.

Sixth, Dan Bass recommends that you not fly if you don't feel well. All pilots are required by the FAA to ground themselves should they feel medically unfit to fly for any reason, and this is good common sense. Just because we want to be somewhere at a given time, or we want to get home (i.e. get-home-itis), is not a sufficient enough reason to fly when we are sick.

EDITOR'S NOTE: Regardless of the utility vest you may purchase, they are not sold as flight vests. These vests can be worn as the owner wishes and at the owner's own risk, and we make no claims or warranty as to their quality, protection, or effectiveness, nor do we endorse any one manufacturer or distributor.

Dan Bass lives in Winona, Minnesota, with his wife, Deanna, and two children. He owns and operates Mec-Pro Mfg, a custom equipment manufacturing company founded by his father in 1975, who was also a pilot and aircraft owner. Dan soloed on his 16th birthday and received his Private Pilot Certificate on his 17th birthday. He is currently a Certified Flight Instructor with 2500 hours. Dan Bass has since replaced his Mooney M20C Ranger with a Mooney M20K 231.

Tanis Offers New Android Application & Updates For Its Preheat Remote



BLAINE, MINN. – When Tanis Aircraft Products purchased FST LLC, it announced that it would be making updates and improvements. Tanis now has an Android application and an IOS update available for your use on its Regal line of Preheat Remote products. Note: This app will also work for the U-Phone-iT, but clock operations will not work as they are not included on those units. You can continue to use your U-Phone-iT app.

Get it here or go to your Google-Play store and search for “**PreheatRemote.com.**” Tanis also updated its iOS app. If you already own a FST LLC or Preheat Remote system from Tanis, the app should auto update or you can find it at the Apple iOS App store or at PreheatRemote.com.

Additional information about all Tanis Aircraft Products can be found at **TanisAircraft.com.** □

Purdue University To Make Airport Improvements

WEST LAFAYETTE, IND. – Purdue University will commence a five-year project to rehabilitate its runways, build new taxiways, upgrade its fire and rescue operations, and update its navigation equipment at Purdue University Airport. The planned safety enhancements are intended to ease the flow of air traffic at the airport, which is also home to the busiest runway in the state.

There are 1,000 Purdue Polytechnic School of Aviation and Transportation Technology students who attend classes daily at the airport. A second Part 141 certified flight school, which is operated by Purdue Aviation (the airport’s fixed-base operator), provides thousands of hours of flight instruction annually to hundreds of additional students. The airport also has commercial charter, and corporate and cargo flights that support the air transportation needs of Tippecanoe County.

In addition, Lafayette has an expanding economy, which includes world-renowned companies like Subaru, Caterpillar, GE Aviation, Rolls Royce and Wabash National.

SAAB is the newest company to begin operations in the area. Its factory is located adjacent to the airport and will build fuselages for the United States Air Force’s next-generation advanced trainer, the Boeing T-7 “Red Hawk,” also known as the Boeing T-X.

Purdue University Airport Director Adam Baxmeyer said the university selected the architecture, engineering and consulting firm Woolpert of Dayton, Ohio for the project.

Purdue University Airport is a Part 139 public-use facility. It was the first university-owned airport in the country and is the second busiest airport in Indiana. □

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CALENDAR

Include the DATE, TIMES, LOCATION (INCLUDE 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: dave@midwestflyer.com - Or Mail To - Midwest Flyer Magazine, 6031 Lawry Court, Oregon, WI 53575

NOTAM: Pilots, be sure to call events in advance to confirm dates and for traffic advisories and NOTAMs.

Also, use only current aeronautical charts, etc., for navigation and not calendar listing information.

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

DUE TO THE CORONAVIRUS PANDEMIC, A NUMBER OF THE EVENTS LISTED BELOW HAVE EITHER BEEN CANCELED OR POSTPONED, SO CALL AHEAD BEFORE GOING!

FEBRUARY 2021

- 1-5** **WI & MN Aircraft Maintenance Technician & IA Renewal Conference** will be holding a series of free, live, online webinars through www.FAASafety.gov to provide at least 8 hours of credit towards IA renewal. Partnership between the Minneapolis and Milwaukee FSDO's, MnDOT Aeronautics and WisDOT Bureau of Aeronautics. Check out website www.mndot.gov/aero or read more go to <https://midwestflyer.com/?p=13929>
- 6*** **FRANKSVILLE, Wis.** - MAAC meeting at Niemyjski's home (hangar) at 11711 4 1/4 Mile Road 11am with lunch at noon.

MARCH 2021

- 6*** **ISLE, MINN.** - ICEPORT 2021 Fly-In Brunch, 10:00am-3pm p.m. Drawings @ 1:00 p.m. Mac's Twin Bay (www.macstwinbay.com/da-boathouse-restaurant on Lake Mille Lacs (43469 Vista Road, Isle, Minnesota 56342). Plowed iceway. Planes on skis and wheels welcomed, but check ahead for conditions: 320-200-8050. Mark Priglmeier createlift@gmail.com. www.facebook.com/CreateLift. Pilots, please monitor Unicom 122.9 Mhz.
- 8-9*** **NORTH DAKOTA** - NDAA will be hosting the FLY-ND Conference (formerly UMAS) virtually. <https://www.fly-nd.com/events/Conference>
- 11*** **32ND ANNUAL INTERNATIONAL WOMEN IN AVIATION CONFERENCE.** Attend virtually from your couch or office! For more information, visit www.wai.org

APRIL 2021

- 17** **MINNEAPOLIS/ST. PAUL, MINN.** - Minnesota Aviation Hall of Fame. MAHOFBanquetReservations@gmail.com or call 952-906-2833.
- 13-14** **IOWA CITY, IOWA** - Iowa Public Airports Association (IPAA) Conference. iowaairports.org 515-272-0687 or sheath@iowaairports.org
- 13-18** **LAKELAND, FLA.** - Sun n Fun Aerospace Expo. flsfnf.org
- 21*** **WATERTOWN (WRYV), Wis.** - Hamburger Social Fly-In 5pm.
- 24*** **WESTFIELD (I72), IND.** - "Indy Flyers Aircraft Walkaround" Pancake Breakfast.
- 28-30** **MINNESOTA AIRPORT CONFERENCE** - Reserve the dates. For more information contact Katherine Stanley at sell0146@umn.edu or 612-626-1023.

MAY 2021

- 19*** **WATERTOWN (WRYV), Wis.** - Hamburger Social Fly-In 5pm.
- 19-20** **ST. CHARLES, ILL.** - Illinois Aviation Conference at the Hilton Garden Inn. 217-789-6252.
- 21-23** **BRAINERD, MINN.** - Minnesota Seaplane Pilots Association (MSPA) will hold its 2021 Annual Safety Seminar at Madden's Resort on Gull Lake (mnseaplanes.com)

JUNE 2021

- 12*** **FRIENDSHIP (63C), Wis.** - Young Eagles Rally "Free Airplane Rides for Kids" & Bike Rodeo 9am - 1pm. Registration Link: <https://youngeaglesday.org?1479>

- 12-13** **LA CROSSE, Wis.** - Deke Slayton Airfest. airfest.com
- 16*** **WATERTOWN (WRYV), Wis.** - Hamburger Social Fly-In 5pm.
- 19** **GRAND RAPIDS (MI93), MICH.** - Burger Fry Fly-In 11am-3pm at the new Galloway Landings. Additional Information: Pattern 1,800 MSL, tower on south side 1,600 MSL. **Approach/Departure runway heading 1 mile with no turns. No flying over horse ranch buildings or wooden fence areas on West end, fly straight out.** Frequency 123.45 Mhz for air and ground communications. For more information contact Clark Galloway at cgalloway9@gmail.com or 616-309-8182.

- 26-27** **DULUTH, MINN.** - Duluth Air and Aviation Expo. duluthairshow.com
- 29-6/5** **BATTLE CREEK, MICH.** - Battle Creek Field of Flight Air Show and Balloon Festival. bcballoons.com

JULY 2021

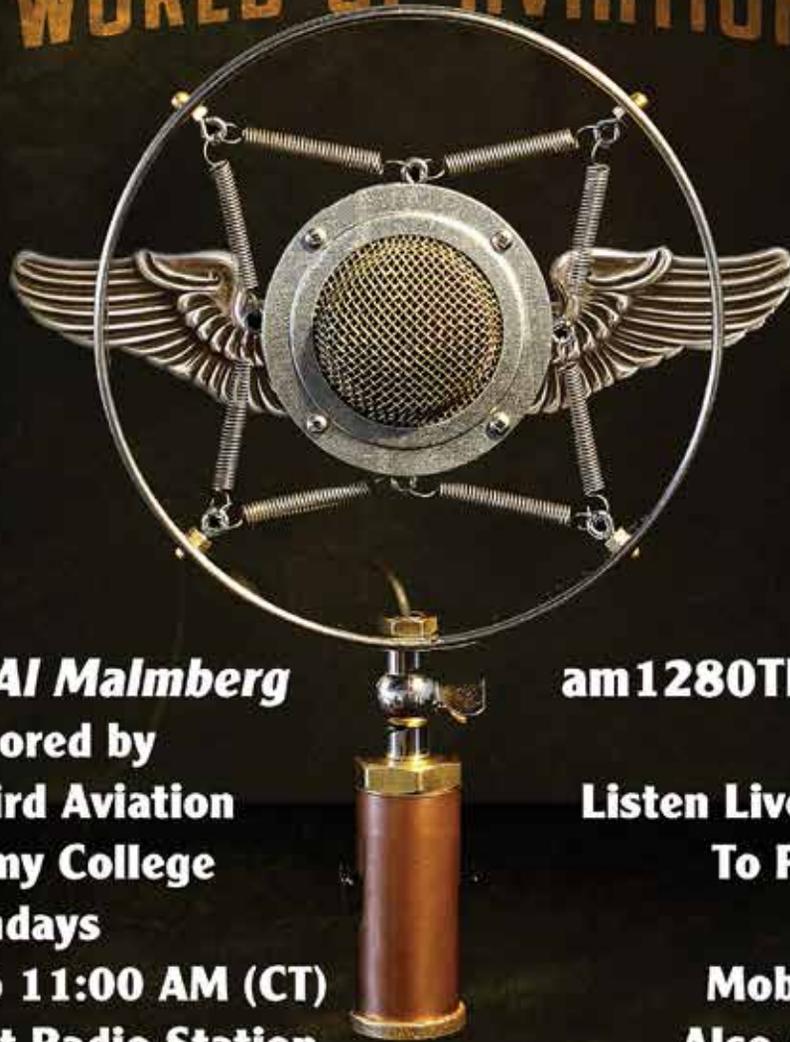
- 1-5** **BATTLE CREEK, MICH.** - Battle Creek Field of Flight Air Show and Balloon Festival. bcballoons.com
- 3-4** **KANSAS CITY, Mo.** - KC Air Show. kcairshow.org
- 10-11** **DAYTON, OHIO** - Vectren Dayton Air Show. daytonairshow.com
- 11** **EAST TAWAS (6D9), MICH.** - Pancakes, sausage, eggs, coffee, juice breakfast 7am-Noon at Iosco County Airport. For more information contact Fred Hupert at fhupert@aol.com or 989-820-0296.
- 16** **ST. PAUL, MINN.** - 133d Airlift Wing Commemorative Hangar Dance. falconheights.org
- 17-18** **ST. PAUL, MINN.** - 133d Airlift Wing Centennial Airshow. falconheights.org
- 21*** **WATERTOWN (WRYV), Wis.** - Hamburger Social Fly-In 5pm.
- 23-25** **JANESVILLE, Wis.** - Janesville Warbird Weekend 2021 at Southern Wisconsin Regional Airport. jvl20.splashthat.com
- 26-8/1** **OSHKOSH, Wis.** - EAA AirVenture Oshkosh 2021 (68th Experimental Aircraft Association Fly-In Convention) coincides with EAA's Spirit of Aviation Week. eaa.org

AUGUST 2021

- 1** **OSHKOSH, Wis.** - EAA AirVenture Oshkosh 2021 (68th Experimental Aircraft Association Fly-In Convention) coincides with EAA's Spirit of Aviation Week. eaa.org
- 7-8** **YPSILANTI, MICH.** - Thunder Over Michigan Air Show at the Willow Run Airport. yankeeamuseum.org
- 8*** **LINO LAKES (8Y4), MINN.** - Minnesota Seaplane Pilots Association (MSPA) Pig Roast Fly-In. Noon-4pm at Surfside Seaplane Base. www.mnseaplanes.com
- 18*** **WATERTOWN (WRYV), Wis.** - Hamburger Social Fly-In 5pm.
- 23-25** **KANSAS CITY, Mo.** - 4 States Airport Conference at Kansas City Marriott Downtown. www.4statesairportconference.com
- 28*** **WESTFIELD (I72), IND.** - Westfield Airport Aviation Day, 11am-3pm. Lunch will be served and there will be all sorts of aviation activities.

CONTINUED ON PAGE 60

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HANGAR IN DOOR COUNTY, WIS. (3D2). FOR SALE – \$42,000. Metal w/ bifold door and windows, 42x32x10. Concrete floor, power, lighting, workbench and shelving. Contact **Larry Wickter**, ldwickterjr@gmail.com, **630-962-9208**.

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EAA CHAPTER 234 MEETINGS every second Thursday at 7pm at 1220 Airport Access Road, Traverse City, Michigan. Currently meeting via zoom. **269-924-7300**.

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CALENDAR FROM PAGE 58

SEPTEMBER 2021

- 11 **WAUKEGAN, ILL.** - Northern Illinois Air Show at the Waukegan National Airport. northernillinoisairshow.com
- 15* **WATERTOWN (WRYV), Wis.** - Hamburger Social Fly-In 5pm.
- 18-20* **BRAINERD, MINN.** - Minnesota Seaplane Pilots Association (MSPA) Safety Seminar, Madden's on Gull Lake, Brainerd, Minnesota (<https://www.maddens.com/>). For details: <http://www.mnseaplanes.com/>

OCTOBER 2021

- 12-14 **LAS VEGAS, NEV.** - National Business Aviation Association (NBAA) announced its 2021 Business Aviation Convention Exhibition (NBAA-BACE). nbaa.org
- 20* **WATERTOWN (WRYV), Wis.** - Hamburger Social Fly-In 5pm



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Pilot Donates Airplane To Save Lives



Julie Kiricoples and Joe Michallyszyn with Joe's 1969 Cessna 150k.

CANTON, MASS. – 83-year-old, retired police captain, Joe Michallyszyn, spent 50 years looking down on Massachusetts from his airplane. When he soloed in 1973, he was the youngest pilot flying into Beverly Airport that day. A few years later, he purchased his 1969 Cessna 150k, the plane that would carry him through New England skies for the next 40 years. At age 83, when he took his last flight at the beginning of 2020, he was the oldest pilot flying into Beverly Airport and is now a proud member of “UFO” (United Flying Octogenarians), an elite group of pilots-in-command who are over 80 years of age. There are only 1500 members in this exclusive club in the world and Joe is very proud to be one of them.

When Joe decided that it was time to quit flying, he wanted to take his last flight with someone who had never flown before. So, he asked an acquaintance of his, Julie Kiricoples, to go with him.

On that day, Joe and Julie had a perfect flight: a flawless takeoff, effortless flying up and down the coast, and a landing

so smooth they couldn't even tell when they had touched down. Joe couldn't have imagined a better way to end his journey as a pilot and begin his journey with his now life-partner, Julie.

Back on the ground, Joe started looking for someone to buy his airplane when he saw an advertisement by MatchingDonors.com. The organization accepts donations of cars, boats, real estate, and sure enough, airplanes, to raise money to help people who need lifesaving organ transplants.

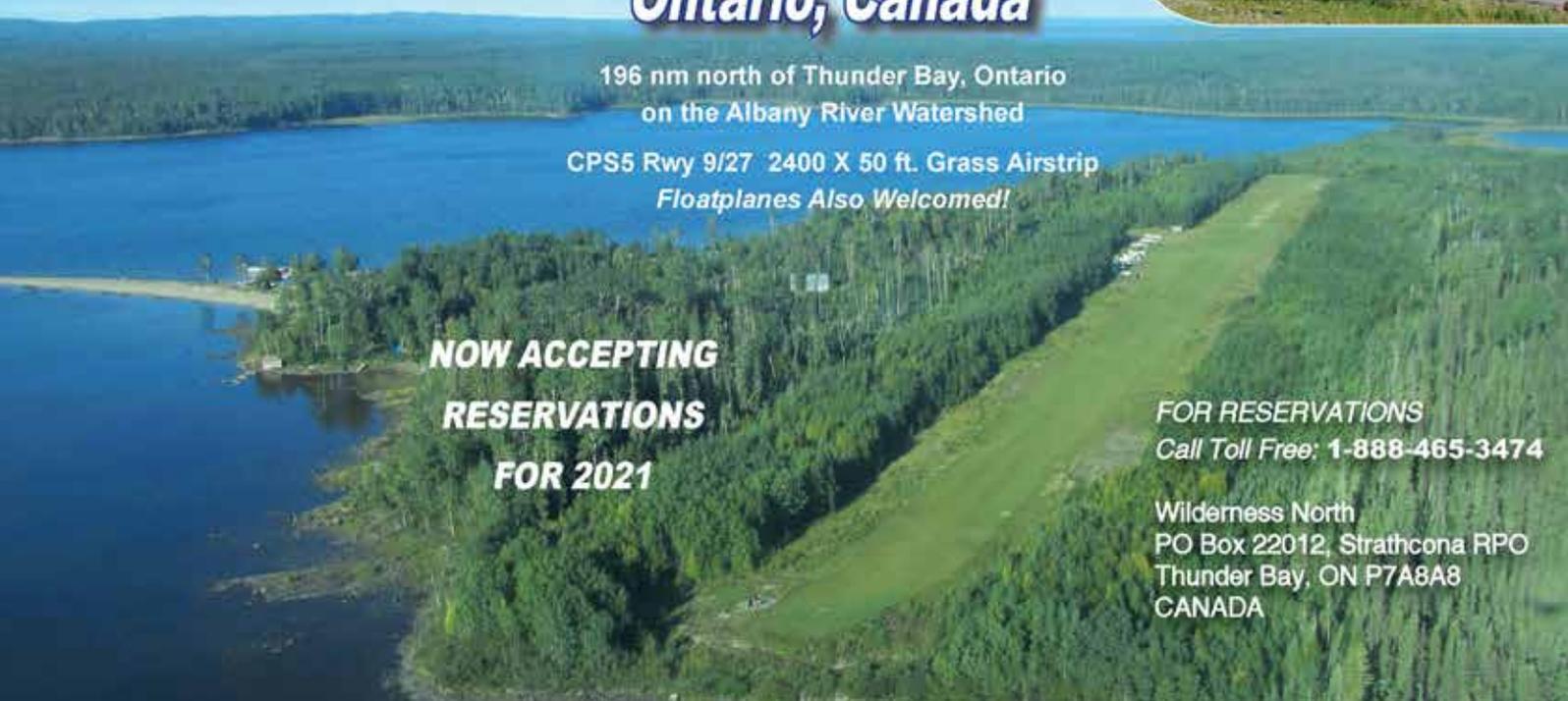
Twenty-two (22) people die every day in the United States waiting for a kidney transplant, most waiting 7 to 9 years on the government's organ donor list. Many patients get their transplant through MatchingDonors.com within six (6) months, or less, of signing up on their website.

Joe recalled a member of his church who had needed a kidney transplant to save his life, so he decided that donating his airplane to MatchingDonors.com would do more good than selling it himself.

For additional information, go to: [MatchingDonors.com](https://www.matchingdonors.com). □



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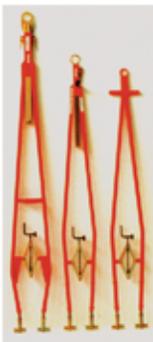
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